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"Accessibility in built environment"	
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Draft Joint Report - CEN/BT WG 207 (PT A and PT B)

Phase I: Inventory, analysis and feasibility of European and International accessibility standards in the built environment

- **Team A: Inventory and feasibility of existing European and International standards, building codes, technical regulations and guidance documents for accessibility in the built environment**
- **Team B: Analysis of European and International accessibility requirements and assessment of existing testing and conformity schemes**

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1 Executive Summary

Accessibility to the built environment is an essential and fundamental right for all members of society. Providing accessible places and spaces empowers people to enjoy the everyday activities and opportunities taking place or being offered there and enables them to participate safely, conveniently, with confidence, with dignity and, wherever possible, independently. This is so for all users but especially for people with disabilities.

Whilst such benefits are known there are many examples in the current built environment where completed buildings or spaces do not offer an appropriate level of accessibility. The existing building stock is where the vast majority of access barriers are found but *new buildings and facilities* continue to be built where there is less than satisfactory access. Whilst this is true for both public and privately funded projects, it is of particular concern for those that are funded through the public purse.

The lack of delivery of appropriate standards of accessibility has been blamed on a poor understanding by designers of the needs of people when using buildings, inadequacies in the education and knowledge of those designing, constructing or managing the built environment: There may well be a fundamental flaw in the whole procurement, construction and delivery process, or possibly a combination of them all.

This report addresses the effectiveness of national regulations and standards amongst EU member States and internationally, and how their presence and enforcement assists or hinders the delivery of accessibility.

Using data gathered from EU Member States, the recently completed ISO/FDIS 21542 and international countries including the US, Canada, the study has identified that there is a substantial amount of regulations, standards and guidance currently available to assist in the design and delivery of an accessible built environment. Whilst gaps do exist, (and in some cases that is apparent across several Member States), there are very few accessibility requirements and building elements that are not appropriately covered by a regulation, standard or guidance somewhere in the EU or internationally.

The study shows that the level and scope of guidance available on issues related to the needs of people with learning difficulties and sensory impairments is much less than that available for people with mobility impairments.

How compliance with regulations and standards is monitored and enforced is much more inconsistent amongst EU Member States. This is, in part, due to the different legislative practices and policies adopted amongst EU Member States, but it is also affected by differing cultural views and expectations of the roles which regulations and standards play within the construction process of individual Member States.

In general terms the frameworks for conformity assessment in EU Member States have been found to be weak, with poor consideration for accessibility matters. While this study has not investigated *specific cases* of public tendering and conformity assessment, it is clear that the system of enforcement of legislation, regulation and guidance could be improved considerably in many countries, so as to ensure better building control practices.

It should be noted that simply introducing more regulations, mandates or directives or providing additional guidance documents without also addressing the widespread inadequate and ineffective conformity assessment and enforcement processes currently in place is unlikely to improve the current situation.

The report makes reference to studies that have identified a wide variation in the experience, qualifications and professional expertise in accessibility and inclusion of those responsible for ensuring compliance or conformity with regulations and standards across EU Member States. In most cases training and levels of experience in such issues is inadequate and contributes to the lack of accessibility of the finished project.

The study has found that there are many instances of good laws, standards and guidance covering different aspects of accessibility in many countries, reflecting different practices and priorities. For EU public procurement a common approach should draw on good examples and establish common references and procedures, which all countries can refer to and follow. This will provide, for the first time, a shared language and common tools for developing accessible built environments through public procurement.

The study concludes that to combat the weaknesses regarding accessibility in building legislation, guidance and conformity systems in Europe, a common EU-level approach should be introduced, including:

1. An EU reference document (EN standard) for basic functional requirements for accessibility of the built environment,
2. An EU reference document (EN standard) of minimum technical specifications, related to the functional requirements,
3. An EU model for tendering and conformity assessment designed to address accessibility throughout the public procurement process.

EU-wide basic requirements and specifications should be designed, taking into account current existing guidance world-wide. EU legislation should also be considered to enforce the requirements throughout all member states, for all public procurements and in the framework of Construction Product Regulation.

Tools and procedures should be developed to assist public procurers on how to clearly identify legal requirements for equality and inclusion, how they should be addressed in developing accessible, inclusive built environments, who should be involved in the process and who is responsible for ensuring delivery.

It is also necessary to consider the introduction of effective enforcement measures to deal with non-compliance.

The study also recommends that consideration should be given to:

- developing an EU wide scheme of accreditation of persons competent in accessibility; and
4. Improved training for students, design professionals.

It is important to note that the proposed EU-level documents and conformity assessment procedures would not replace existing systems of legislation, guidance and control in the EU Member States, but would serve as basic, minimum requirements and specifications. It must be decided by EU and national lawmakers whether these should be enforced by EU legislation or possibly, with respect to Community-funded projects, as a requirement in all cases where funding is granted for built environment design and construction works.

2 Introduction

Additionally to this introduction more comprehensive background information is summarized in the Annexes.

2.1 Background

Accessibility to the built environment and infrastructure is essential for people with disabilities to participate fully in society and to be able to exercise their rights.

As full citizens, people with disabilities have equal rights and are entitled to dignity, equal treatment, independent living and full participation in society. Enabling people with disabilities to enjoy these rights is a fundamental long-term strategic aim of the EU.

Currently, many Europeans with disabilities are unable to participate in important areas of society because the policies adopted and the design and management of the built environments they use are not designed to meet their needs (Council of Europe, 2009). In addition, whilst not all elderly people have disabilities, there is a higher prevalence for disability as people grow older. Therefore with a rapidly growing number of elderly people within EU Member countries, there will be an increasingly urgent need for societies to consider and accommodate the needs of people with disabilities.

In 2010 the Commission adopted the European Disability Strategy 2010-2020 to break down the barriers that prevent persons with disabilities from participating in society on an equal basis. The strategy outlines how the EU and national governments can empower people with disabilities so that they can fully enjoy their rights. Specific measures over the next decade include improving accessibility to goods and services, health care, employment and education.

Under the 2010-2020 Strategy disability is clearly regarded as an issue of rights rather than one of discretion. This approach is also at the core of the UN Convention on the Rights of People with Disabilities, to which the European Community is a signatory.

2.2 Universal Design and the UN Convention on the Rights of Persons with Disabilities

Within the UN Convention on the Rights of Persons with Disabilities (UNCPD), there are several clear references to the importance of Universal Design and the requirement to fully consider the needs of people with disabilities.

For example, in the Preamble of UNCPD the importance of mainstreaming disability issues as an integral part of sustainable development strategies is highlighted. This also applies to the importance of accessibility to the physical, social, economic and cultural environment, health, education, access to information and communication. This enables persons with disabilities to fully enjoy their human rights and fundamental freedoms.

Article 2 of the UNCPD defines “Universal Design” as:

“the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. “Universal design” shall not exclude assistive devices for particular groups of persons with disabilities where this is needed.”

as “Universal Design” is also referred to in the ‘general obligations’ in Article 4 which identifies that:

“States Parties undertake to ensure and promote the full realization of all human rights and fundamental freedoms for all persons with disabilities without discrimination of any kind on the basis of disability. To this end, States Parties....:

(f) undertake or promote research and development of universally designed goods, services, equipment and facilities, as defined in article 2 of the present Convention, which should require the minimum possible adaptation and the least cost to meet the specific needs of a person with

disabilities, to promote their availability and use, and to promote universal design in the development of standards and guidelines;”

UNCPD Article 9 “Accessibility” provides comprehensive guidance on how to enable persons with disabilities to live independently and fully participate in all aspects of life. This includes the identification and removal by State Parties of obstacles and barriers to accessibility in several areas including the built environment, the provision of medical facilities and the provision and use of electronic and emergency services. Article 9 also identifies the importance of promoting, monitoring, training and maintaining accessibility to ensure ongoing suitability for people with disabilities.

UNCPD has been signed by all Member Countries and ratified by both the EU and 16 Member Countries. It is a legally binding instrument intended for better implementation of Universal Design and Accessibility within a sustainable environment.

Within the UNCPD the role for national governments is clearly described to pursue the development of products, services and environments that are universally designed.

2.3 Key Element: Accessibility of the built environment in Standards

These 4 priorities – equal rights, equal treatment, independent living and full participation in society – show a high level of awareness regarding accessibility of the built environment. For example one of the main key issues of independent living and equal rights is to have access to, all public amenities. Services, information and communication systems are also other important areas to be considered for all users.

More than ten years after the publication of Mandate 283¹, and eight years since the adoption of CEN/CENELEC Guide 6, European standards should reflect the needs of older people and people with disabilities² but as the results of CEN 2006 questionnaire pointed out clearly less awareness and activities in CEN/TCs can be seen to implement accessibility in their standards.

The missing legal approach on inclusion of “accessibility in use” in the former *Construction Product Directive* within the *Essential Requirement* No. 4 “Safety in use” is another important fact. In future the new “*Construction Product Regulation*”³ with ‘accessibility’ added in basic requirement No. 4 to “*Safety and Accessibility in use*” will have an impact within CEN Standardization. More information about recent development will be included after the Open Meeting in cooperation with EC DG ENTR.

3 Team A – Production of an inventory, comparing the existing European and International standards, building codes, technical regulations and guidance documents for accessibility in the built environment

3.1 Approach and methodology

The challenge for this comprehensive inventory was to create a data collection spreadsheet structure that identified important elements of the built environment and to identify and assess the different legislation, building regulations standards, guides and conformity assessment schemes that covered these areas in various EU and non-EU countries

ISO/FDIS 21542 “*Accessibility and usability of the built environment*” was used as a benchmark against which to identify the level of coverage in technical guidance in the various countries considered.

¹M/283 Mandate to the European Standard Bodies for a guidance document in the field of safety and usability of products by people with special needs (e.g. elderly and disabled)

²Results of CEN 2006 Questionnaire on the use of Guide 6, CEN BT N7671

³<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:088:0005:0043:EN:PDF>

CEN/CENELEC Guide 6 “*Guidelines for standards developers to address the needs of older persons and persons with disabilities*” is the appropriate benchmark for products and services including factors to be considered with functional requirements.

The process adopted has also enabled the identification of gaps in the guidance available and the usefulness of regulations, standards and guidance in the public procurement process. The spreadsheet indicates also if the respective legislation, regulation, standard, guide has functional or technical requirements included.

In the spreadsheet, the first columns include assessments of the general coverage of information in documents such as ISO, CEN or other standards and guidance documents.

The country-specific data columns provide information on the national coverage (and gaps) of building elements and/or user requirements either on the state or on the country’s level. Several European Member States have federal constitutions where the country/province/canton is responsible for building regulations. In some fields as in public procurement and equal treatment of employees the state is the responsible authority.

The data collection spreadsheet consists of different sheets:

1. Instructions with explanation about the content of the data collection
2. Inventory for ISO/CEN and other standards and guidance documents, ISO/FDIS 21542 with comments column, country columns (state and different countries / regions / cantons if necessary) (see [Annex F](#))
3. Coverage of user needs in European and EFTA countries and International (see [table G.5.1](#))
4. List of countries/states in EU/EFTA/International for the Inventory and PT A and PT B members responsible and all country reports (see [Annex G](#))
5. Bibliography with full details of documents, abbreviations used and an indication of whether the document being considered is general legislation, a building code, a regulation (statutory), a standard (requirement) or guidance (best practice). It also identifies the level of functional or technical requirement provided by the documents. Initial evaluation of suitability for public procurement has also been entered (see [section 5](#)).
6. Schemes: Conformity assessment schemes (further explanation in PT B report) (see [Annex H](#))
7. “Access for All” CEBC Report 2007 basic Datacollection and updated 2011 where information was available(see [Annex I](#)).

A traffic light model is introduced with three types of possibilities to answer the question if the specific requirement covers ISO 21542 requirement (which is the benchmark).

- c ... comprehensive (green background)
- p ... partly (yellow background) with a “comment column” why coverage is insufficient
- n ... not (red background)

An additional “**Country Report Form**” was developed (see [Annex G.1](#)) to identify against each country considered the relevant building regulation, standards, building codes, guidance documents and conformity assessment schemes available in that country and their use or effectiveness in the process of public procurement. Additional information about education of architects, best practices, funds and awards on accessibility is also included.

It was considered appropriate that concerning construction products for the built environment the new *Construction Products Regulation (CPR)* also formed part of this review as accessibility is now included in basic requirement No.4 “**Safety and accessibility** in use”. It will be interesting how accessibility will be further explained and described in support documents and how it is going to affect CEN standardization work. More information about recent development in the framework of CPR will be included after the Open Meeting.

In the review we pointed out which CEN/TCs should cover accessibility requirements in their work.

It was also considered appropriate to review the equality of safety requirements for users between Lift Directive and Machinery Directive.

Additional information about building design and product standards within ISO where accessibility should be considered are added although not very many exist.

The inventory of relevant areas of construction works and products within CEN/TCs where accessibility is insufficient incorporated according to CEN/CENELEC Guide 6 are also part of this report. In Phase I of the project an overview of existing CEN/TCs and their standards is provided (see [Annex E.5](#)). Issues concerning CEN Standardization and the relevant CEN/TCs (which should include accessibility requirements in some of their relevant product standards) are described in an inventory table where some EN standards are already indicated as a first step to be observed.

Whilst individual construction products, such as taps and lifts, may in themselves be designed to maximise accessibility, it is only by considering how they will, in practice, be incorporated into a design and how they will actually be used and maintained that will determine how accessible they are to the people who use them.

3.1.1 Steps for developing this report

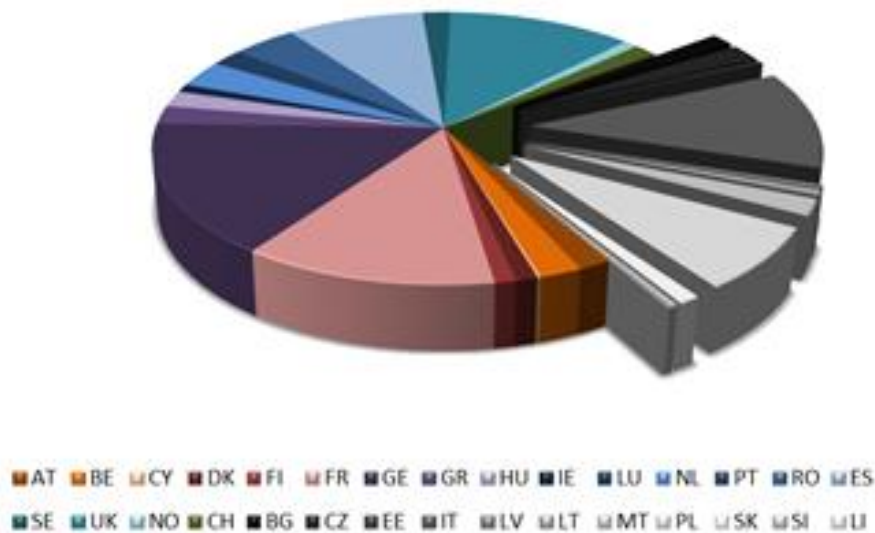
It was agreed that members of Project Team A (PT A) and Project Team B (PT B) would cooperate in the first round of inventory and collection of all relevant data. Each team member took on the responsibility collecting relevant data from their own country and to contact different rapporteurs/informants from other relevant European and International countries.

A spread sheet was developed on which to record all of the collected data. Additional forms were also developed, one to record other relevant information about individual countries (Country Report Form) and one to record conformity assessment schemes pertinent to each country.

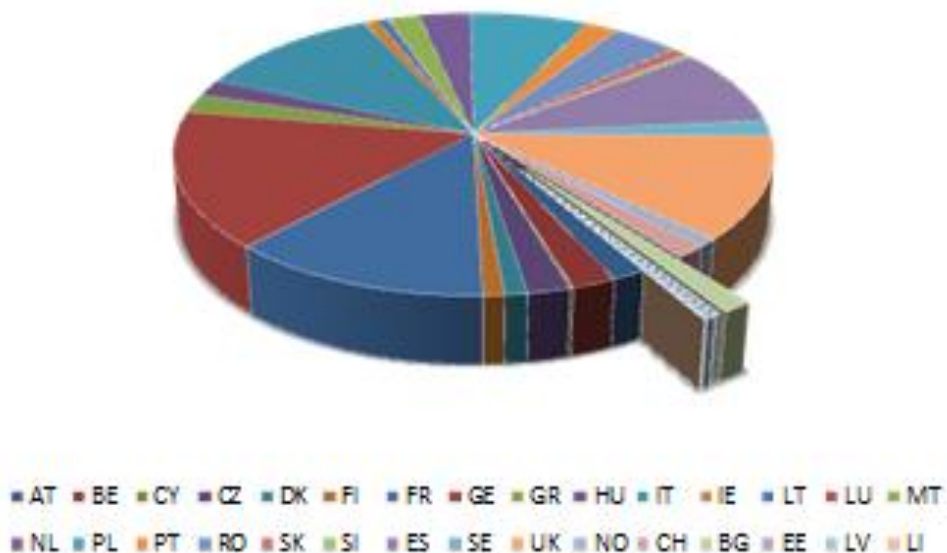
Data was collected from EU Member Countries, 3 EFTA countries and 6 International countries (USA, Australia, Canada, New Zealand, Singapore and South Africa). See overview table in [Annex G.1](#).

For this report we collected data derived from the common spreadsheet of 23 countries (73 % of total inhabitants of European Member States):

- 17 EU countries (Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Luxembourg, Netherlands, Portugal, Romania, Spain, Sweden, UK)
- 2 EFTA countries (Norway, Switzerland)
- 4 International countries (Australia, Canada, Singapore, USA)



**Figure 1 – Totality of countries – Spreadsheets Inventory
(73,02 % of European inhabitants covered)**



**Figure 2 – Totality of countries – Country Reports Inventory
(97,91 % of European inhabitants covered)**

29 country reports (97,91 % of European inhabitants are covered) have been sent by accessibility experts which provides an overview in their country reports about all accessibility related legislation, standards, best practices, education etc.:

- 24 EU countries (Austria, Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, UK)
- 2 EFTA countries (Norway, Switzerland)
- 4 International countries (Canada, South Africa, USA, Australia)

In phase II the other countries data should be included in the inventory and report if contacts can be established in the public consultative period.

The data from the CECB study on “Access for All in Europe” (2007) have been updated 2011 and are included in this study. The previous study from 2007 can be seen here.

http://www.cebc.eu/files/reports/access_for_all_-_cebc_final_-_june_2008.pdf

This CEBC study provides very useful information about access to the built environment in Europe based on building legislation for non-domestic buildings and for dwellings. It refers also to accessibility standards and if they are referenced in any legislation. The data show the level of accessibility with a range of minimum basic accessibility requirements and are a very comprehensive information to our inventory. It shows clearly what level of accessibility is achieved in each European member state with the data updated for most countries in 2011. During the public consultative period this updating process should be continued to provide the full overview.

Models of the data collection spreadsheet and of the country report form are included in [Annex F](#) and [G](#). An excel table with all inventory data will be delivered with the report to the European Commission.

3.1.2 Context of the use and user roles (common chapter)

To identify the accessibility requirements for the design and planning of the built environment, for construction products and services, the following human abilities and the consequences for impairments were taken into consideration:

- People using a wheelchair
- People with walking difficulties
- People with vision impairments / blind
- People with hearing impairments / deaf
- People with reduced manual dexterity / arm function / strength
- People with diversities in age and stature
- People with intellectual / cognitive / mental impairments
- People with allergies

The effects of ageing, and the relevance of appropriate design in creating or eliminating risks and hazards in the built environment were also considered in each of these areas (see [table 3](#), [figure 4](#))

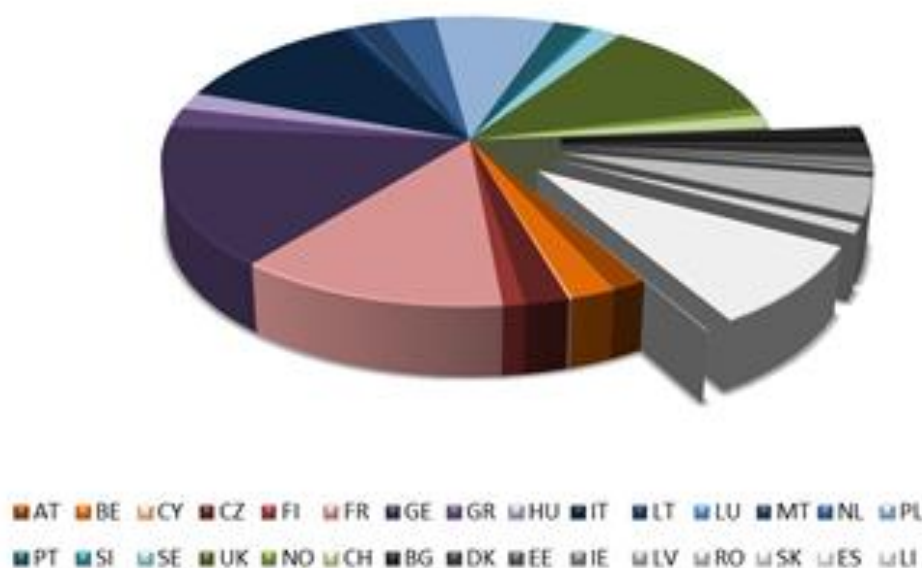


Figure 3 – Totality of countries – User needs Inventory 81,98 % of European inhabitants covered)

3.2 Inventory

3.2.1 European Standardization Mandates for Accessibility in the built environment

M/283 Safety and usability of products by people with special needs (e.g. elderly and disabled)

M/292 Safety for consumers and children – Product Information

M/293 Safety for consumers and children – Child Safety

M/273 Information and Communications Technologies – ITC for disabled and elderly people

M/350 Sustainability of Construction Works

M/376 Accessibility requirements for public procurement in the ICT Domain

M/420 Accessibility requirements for public procurement in the built environment in co-ordination with M/376

M/473 Standardization mandate to CEN, CENELEC and ETSI to include “Design for All” in relevant standardization initiatives (NEW)

3.2.2 Legislation supported by Accessibility Standardization in Europe: Functional and Technical Requirements in CEN standards

3.2.2.1 CEN/TCs considering accessibility in the built environment

In 2006 the PT A leader has made a study about the implementation of CEN/CENELEC Guide 6 within relevant CEN/TCs and their draft standards for ANEC (European voice of consumers in Standardization). The study shows that very less standards are considering accessibility requirements within their development. Although the study is now outdated it could be a basis for further research to study all these relevant standards in detail.

3.2.2.1.1 Inventory on design standards within CEN

The inventory shows very less standards on the design of buildings within CEN/TCs:

CEN/TC 136 “Sports, playground and other recreational facilities and equipment”

there is one work item under discussion “***Play for all***”.

CEN/TC 315 “Spectator facilities”

With these relevant standards:

- prEN 13200-1 rev. *Spectator facilities - Part 1: General characteristics for spectator viewing area* (dav 2013-01)
- CEN/TR 13200-2:2005 *Spectator facilities - Layout criteria of service area - Part 2: Characteristics and national situations*
- CEN/TR 15913:2009 *Spectator facilities - Layout criteria for viewing area for spectators with special needs*
- EN 13200-3:2005 *Spectator facilities - Part 4: Seats - Product characteristics*

The other standards and technical reports have to be checked in phase II.

CEN/TC 325 “Prevention of crime in urban planning and building design”

several standards, technical specifications have been already published about building design. In the past PT A leader has made some efforts to raise more awareness on implementation of CEN/CENELEC Guide 6 requirements which was also stated in a resolution but not followed by further actions by TC 325.

Findings:The published standards (published as technical specifications) from CEN/TC 325 have no requirements according accessibility included, These are:

- CEN/TR 14383-2 “Prevention of crime – urban planning and building design”
- CEN/TS 14383-3 “Prevention of crime – Dwellings”
- CEN/TS 14383-4 “Prevention of crime – Shops and offices”
- CEN/TS 14383-7 “Prevention of crime – Design and management of public transport facilities”
(compare with TSI PRM legislation!)

Recommendations

Should be checked further in phase II.

CEN/TC 350 “Sustainability of construction works”⁴

WG 5 is focusing on “*Social Performance assessment of buildings*”.

The standards of CEN/TC 350 will describe a harmonised methodology for assessment of environmental performance of buildings and life cycle cost performance of buildings as well as the quantifiable **performance aspects of health and comfort of buildings** for new and existing construction works. It is important to consider that people are spending 90 % of their times within buildings.

The standards will be generally applicable (horizontal) and relevant for the assessment of integrated performance of buildings over its life cycle.

In order to assess the integrated performance of buildings it is necessary to regard a building as a whole with required performance and functions to fulfil. Consequently, during its life cycle, from raw material supply of building products to the final disposal of building components, a building has environmental and economic impacts as well as impacts on the health & comfort of the users.

To get an overall picture on the integrated performance of a building, these impacts must be analysed with the building as an object of the assessment of environmental performance, economic performance and health & comfort performance of building.

Findings:

Accessibility is indicated in the following draft standards:

- prEN 15643-1 *Sustainability of Construction Works - Part 1; General Framework* and also in
- prEN 15643-3 *Sustainability of Construction Works - Part 3: Framework for the assessment of social performance*.
- prEN 16309 *Sustainability of construction works - Assessment of social performance of buildings - Methods*

Recommendation:

According an integral approach on sustainability not only environmental and or energy related declarations of the construction works or products should be considered to be important. An integral building declaration (building passport) focusing on the intended-use of construction works including life-cycle costs, performance aspects on health and comfort including accessibility could be developed within this CEN/TC 350.

Consider also [Annex E.1.1](#) where more information about the goals of CEN/TC 350 are described.

3.2.2.1.2 Inventory on product standards within CEN

In general implementation of accessibility in the built environment is more a design issue than use of

⁴More information on www.cenorm.be and BSI-Website: <http://www.bsigroup.com/Standards-and-Publications/Committee-Members/Construction-committee-members-area/M350-Standards/?id=158921>

specific accessible products with some exceptions mentioned below.

More detailed information about relevant CEN/TCs on products can be seen in [Annex E.1.2](#). Here only the most relevant CEN/TCs are listed. In phase II further guidance should be developed on missing areas where standards with accessibility requirements are needed.

It's a fact that accessibility requirements based on CEN/CENELEC Guide 6 "**factors to consider**" have been more or less ignored within CEN Standardization on building products until now due to missing inclusion in the former *Construction Product Directive*. Only very few committees had sufficient awareness e.g. lifts, doors, walking surface guiding lines, ergonomics. A questionnaire from ANEC shows that only 5 % of all CEN/TCs even know CEN/CENELEC Guide 6.

CEN/TC 10 "Lifts, escalators and moving walks"

EN 81-70 "Safety rules for the construction and installations of lifts - Particular applications for passenger and good passengers lifts - Part 70: Accessibility to lifts for persons including persons with disability"

- application various across Europe: EN 81-70 is not used for all lifts for passengers including persons with disabilities
- the lift requirements for mobility impaired persons are considered frequently but less awareness about requirements for sensory disabilities
- lift car type 1 should be deleted in next revision or be restricted for refurbishment in existing buildings only with minor public frequency

A questionnaire will be started soon about the use of this lift type within Europe. This will give the starting point for the future revision process in autumn 2011.

- EN 81-41 "Vertical platform lifts": usability for all wheelchair users or only restricted use? (hold to run control is not usable for electrical wheelchair users)
- EN 81-40 "Safety rules for the construction and installation of lifts - Special lifts for the transport of persons and goods - Part 40: Stairlifts and inclined lifting platforms intended for persons with impaired mobility"
- CEN/TS 81-76 "Safety rules for the construction and installation of lifts - Particular applications for passengers and goods passenger lifts - Part 76: Evacuation of disabled persons using lifts"
- CEN/TS 81-82 "Safety rules for the construction and installation of lifts - Existing lifts - Part 82: Improvement of the accessibility of existing lifts for persons including persons with disability"

CEN/TC 33 "Doors, windows, shutters and building hardware"

- Different classes of operating forces for doors are already included in EN 12217 and could be referenced in national building regulation, guidance documents or standards.

CEN/TC 72 "Fire detection and fire alarm systems" + CEN/TC 192 "Fire service equipment"

- Fire alarms via the 2 sense-principle, visual alarms, voice alarm control mobile fire extinguisher usable for all, etc.

CEN/TC 163 "Sanitary appliances" + CEN/TC 67 "Ceramic tiles"

- aspects of surface finish and slippery resistance, ease of handling, usability of washbasins,

CEN/TC 183 "Waste management"

- ease of handling of waste containers

CEN/TC 207 "Furniture"

- standards on different kind of furniture: tables, chairs, desks etc. – usable also for wheelchair users

CEN/TC 169 “Lighting”

- performance requirements for lighting for vision impaired persons, emergency lighting, lighting for signposting, wayfinding and orientation.

etc.

3.2.3 ISO Standardisation relevant for accessibility of the built environment

Considering the procedure according the Vienna agreement between CEN and ISO, where ISO standards can become CEN Standards it should be noted that this procedure has been already failed some years ago on ISO 21542. One of the main reasons was the lack of development of the draft. In addition, European Member States who had higher requirements than those identified in the ISO standard where not in agreement with the implementation of the Vienna agreement for an EN standard which was connected with an obligation to withdraw their national standard in the same area.

The Vienna agreement could be used to implement ISO 21542 as a technical report or technical specification within CEN. This creates no obligation to withdraw existing national accessibility standards. In the meantime, work on a common European accessibility standard could be started immediately based on ISO 21542 and incorporating missing areas from other good reference documents.

ISO/TC 59 “Buildings and civil engineers works”

- ISO/TC 59 SC 16 “Accessibility and usability of the built environment” is developing the standard ISO/FDIS 21542 “Accessibility and usability of the built environment”. This standard covers not the whole built environment. It covers buildings and their immediate surroundings only. Considering a future European standard the ISO 21542 could be a good starting point and basis with comprehensive requirements (see more analysis in 3.2.4.5). It should also be noted that the Vienna agreement procedure has been failed some years ago on ISO 21542/CD when the standard was not far developed. Within the enquiry stage only one country voted negative (Japan). This demonstrates the world-wide acceptance of this draft. Japan argued only that they wanted to have a technical report or guidance document and not a standard. The final draft voting procedure has been started now.

ISO/TC 178 “Lifts, escalators and moving walks”

- This ISO/TC acts in close co-operation with CEN/TC 10 standards development.

3.2.4 Comparison of ISO/FDIS 21542 with some leading non-EU standards

In this chapter a comparison of ISO/FDIS 21542 with some leading non-EU standards as indicated below is provided. The goal is a selection of a baseline accessibility standard focusing on content and scope comparison.

- Americans with Disabilities Standards for Accessible Design 2010 (ADASAD 2110) and
- ISO/FDIS 21542 Accessibility and Usability of the Built Environment (ISO)
- Australian Standards
- National Building Code of Canada

Background of the Review

The CEN/BTWG 207 project has considered the guidance currently available in a considerable number of countries in both the EU and internationally.

At the meeting in Brussels in January 2011, consideration was given to the setting-up or selection of a base-line standard guidance document which could be identified in the procurement process as the minimum acceptable level of accessibility required for any publicly funded built environment project in EU member countries.

Such a base-line standard would not take precedence over national standards available in EU member countries but could be used by procurers to ensure that a minimum standard of accessibility could be set where none currently exists.

The discussions centred on adopting the guidance or regulations associated with several international countries such as the US, Australia and Canada or that contained ISO/FDIS 21542.

This Review considers the documents available for each of these countries and the ISO and makes recommendations as to which of them is considered more appropriate to be considered as a base-line accessibility standard for use in the EU.

3.2.4.1 Americans with Disabilities Act Standards for Accessible Design (ADASAD 2010)

Generally

With regard to scope of the legislation and guidance the ADASAD 2010 states that:

“The 1991 Standards and the 2010 Standards apply to fixed or built-in elements of buildings, structures, site improvements, and pedestrian routes or vehicular ways located on a site.”

The 2010 Standards set minimum requirements – both scoping and technical – for newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by disabled people. All State and local government facilities must follow the requirements of the standards described in the ADASAD 2010.

The ADASAD identifies the applicability of the requirements for a range of building uses. In general terms however, the comments made focus more on addressing accessibility issues associated with the provision of the physical environment and the requirements and rights of people with restricted mobility and wheelchair users. No substantial comments are made regarding the needs of other potential users including, for example, people with sensory impairments (vision or hearing), those with learning disabilities or learning difficulties, cognitive impairments, children or older people.

In certain situations exemptions are permitted. These relate to the provision of physical features within an environment such as lifts and for reasons of structural impracticability.

However, there appears to be no parallel requirement or guidance for the providers of those services or opportunities that cannot be reached because of the exemption to consider alternative ways of delivering them to disabled people. Such interventions could include for example altering their management policies, practices and procedures to ensure that discrimination against disabled people does not occur.

This illustrates an emphasis within the guidance on the provision of physical accessibility rather than on increasing the opportunities and involvement of disabled people by removing discrimination.

The use of terminology such as ‘disproportionality’ with regard to costs, the identification of a financial limit, and the list of priority actions (Section 36. 403 (e and f)) could also be counterproductive in ensuring that designers and developers address their primary anti-discrimination responsibility. This responsibility is to ensure that the final built environment they produce does not discriminate against any individual.

To some extent such issues segregate the ADASAD from other accessibility guidance and anti-discrimination legislation found in other countries and in supporting documents such as ISO/FDIS 21542.

3.2.4.1.1 Scope of the detailed Guidance

Generally

ADASAD contains guidance on many of the issues associated with the design of buildings and spaces to meet the needs of disabled people. It covers access standards for many of the main areas including the approach to a building, entrances and doors, lifts, stairs, sanitary facilities,

communication systems (equipment and signage), as well as different building uses such as residential, health education and leisure.

A positive aspect of the ADASAD guidance is the extent to which it clarifies for designers and others what it applies to and where it is mandatory. Guidance for alterations of existing and historic buildings is also useful as are the inclusion of ranges of data and dimensions which allow the designer to select the best fit.

On the downside, the format and style of presentation of the ADASAD guidance is not particularly user friendly.

There are also several areas that are either not covered or sparsely covered in the ADASAD of which the following are examples.

Designing for children and people of short stature

In addition to identifying how to address the needs of disabled adults when using the built environment, the guidance within the ADASAD also includes some anthropometric data and guidance on addressing the needs of children and people of short stature. Whilst the inclusion of this data is very useful, unfortunately the way the guidance is presented suggests that consideration is only necessary for the design of environments and facilities that are intended to be used; or might frequently be used by them rather than for the built environment generally.

For children, this includes play areas, toilets and dining facilities and for people of short stature in the provision of toilets and ATM machines. As an example, guidance is given on the need to provide a second handrail suitable for children on staircases, but goes on to suggest that this need only be considered for buildings “When children are the principal users in a building (e.g. elementary schools)”.

There is no requirement to address the needs of adults with short stature or children regarding the provision of handrails on stairs in the general everyday environments they use. In addition, the needs of children or people of short stature are not considered in the general provision of the built environment, for example, vision panels in doors.

Environmental contributors to inclusive, accessible design

Whilst the ADASAD covers most of the issues related to accessibility for wheelchair users or people with restricted mobility, guidance related to the needs of people with sensory impairments, learning difficulties or other impairments, is limited. In terms of hearing impairments the guidance covers the installation of technical interventions such as the provision of induction loops, but does not offer any guidance on the environmental factors that affect communication for deaf people such as the use of colour, contrast, lighting and acoustics. Indeed there is a dearth of general guidance on how to enhance the usability of a space for disabled and non-disabled people by the appropriate design of such environmental factors.

In terms of colour and visual contrast, comment is restricted in the main to their use on signage, tactile surfaces and keypads. For stairs, it is only a requirement to ‘consider’ the use of contrasted nosings on steps.

No mention is made on the importance of colour, light, contrast and acoustics in creating inclusive, accessible places and spaces for all users (especially for those with sensory, mental and cognitive impairments). Also, no guidance is given on how to enhance a design by incorporating their appropriate use. For example, whilst the term ‘visual contrast’ is used in the guidance it does not say how it may be specified or measured.

Lighting, in terms of a measured value (lux), is not mentioned except insofar as it relates to recommended illuminance within a lift car. Most comments relating to the lighting, which is a major factor in the usability and accessibility of an environment for all users, are confined to issues around signage and the external transport and pedestrian environment.

Management

In general, the ADASAD considers accessibility and the usability of environments for disabled people in terms of the provision of the actual physical environment.

It does not consider or offer advice on the use of non-physical interventions such as changes in management practices, policies and procedures, or in staff training to reduce or remove discrimination and enhance accessibility.

This is of particular importance to existing situations such as those related to historic buildings where permission to improve access can be refused by the relevant authorities if the alteration work may affect the historic integrity of the building. Without a parallel requirement in such situations to also consider the development of alternative management interventions, for example virtual walkthroughs or spoken descriptions, disabled people not only lose out on physical access, they also miss out on enjoying the 'experience' of historic environment as well.

Other Issues

There are accessibility issues identified in the ADASAD that may not be relevant to a general base-line European wide standard. These include for example the design and provision of recreational facilities such as shooting facilities, amusement rides and recreational boating facilities.

The ADASAD incorporates many 'Advisory' notes throughout the document to give additional information to designers. In the main however, 'Advisory' notes are used simply to explain or reinforce the requirement of the regulation. They give examples of how it can be met rather than offer an explanation to the design team of the reasoning behind it.

Whilst using 'Advisory' notes in this way may increase the clarity of what is required it does nothing to inform the design team of the 'why' the regulation exists.

In that respect the general thrust of the ADASAD guidance appears to be one of specification rather than the laying down of performance objectives, illustrating how they can be met, and providing sufficient additional background information to encourage or enable design teams to develop alternative, equally acceptable, solutions.

Whilst the ADASAD is based on credible information, its scope in terms of providing guidance on the design of environments and spaces for people other than those with mobility impairments is much more limited than ISO/FDIS 21542.

For use as an EU wide base-line guidance standard, the lack of informative information and in-depth comments on human abilities, behavioural characteristics of users and management interventions in documents like the ADASAD may restrict the opportunities for designers to develop innovative yet perfectly acceptable alternative solutions.

3.2.4.2 Australian Standards

Generally

The Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards) sets performance requirements and provides references to technical specifications to ensure dignified access to and use of buildings for disabled people. The Premises Standards clarify the non-discrimination provisions of the 1992 Australian Disability Discrimination Act (ADDA) in relation to the design and management of the built environment. Complying with the Premises Standard satisfies the ADDA for those issues that the Standards cover.

It is proposed that the Premises Standard will come into effect on the 1 May 2011, in line with the adoption of the Building Code of Australia in each State and Territory. This will allow States and Territories time to adopt the Premises Standards within their building law frameworks.

The Premises standards will introduce some major changes from the building code access requirements currently in place in Australia. For example there will be increased requirements for

leisure activities, such as access to public swimming pools and facilities, and places of accommodation such as hotels, motels and holiday lets.

Horizontal and vertical circulation within buildings will also see increased requirements for lifts, accessible entrances, circulation spaces, turning spaces etc as well as improved requirements for signage, accessible spaces in cinemas and theatres, and the provision of facilities for hearing aid users. There will also be significant increases in the numbers and locations of uni-sex accessible toilet facilities.

Scope of Detailed Guidance

A detailed suite of standards currently exists under the title AS/NZ 1428 to give detailed guidance to designers of the provision of accessible buildings. In the main however, the individual documents within this suite are not stand alone and a considerable amount of cross referencing is required to achieve guidance on particular issues. For example the guidance given in AS 1482.1 “General requirements for access – new building work” relating to lifts, is to refer the reader to another standard AS 1735.12. Obtaining guidance therefore requires the availability of more than one standard, all of which must be purchased individually.

Whilst a good level and scope of guidance exists within the Australian standards, the fact that the new Premises Standard is not in applicable until mid 2011 has made an accurate comparison difficult to undertake. However, there is evidence of good practice in the standards adopted in Australian that would positively inform the formation of text for a new EU wide standard should one be developed in the future.

3.2.4.3 The National Building Code of Canada 2010 (NBC)

Generally

The NBC is a model building code that is not enforceable unless a province or territory adopts it. Some jurisdictions in Canada create their own code based on the NBC whilst other jurisdictions have adopted the NBC and added additional laws or regulations to supplement the requirements contained in it.

For most construction undertaken under federal jurisdiction the NBC is the applicable Code. The property under federal jurisdiction includes for example, military bases, federal government land, first nation reserves and airports.

Scope of Guidance

The 2010 edition of the National Building Code of Canada incorporates significant technical changes from the 2005 edition. It sets out technical provisions for the design and construction of new buildings and also applies to the alteration, change of use and demolition of existing buildings.

The NBC is in two volumes. Volume 1 contains Division A (compliance options, objectives, functional statements) and its appendix, Division C (administrative provisions) and its appendix as well as a new section containing the attributions to the acceptable solutions. Volume 2 contains Division B (acceptable solutions) and its appendices as well as the index.

In terms of Accessibility, the NBC Objectives on Accessibility (OA) identify their main aim as being to minimise the risk of the design and construction of a building unacceptably restricting a person with physical or sensory impairments from gaining access to and using both the building and its facilities.

It also introduces the concept of creating “barrier-free path of travel” and “barrier-free facilities to ensure this main objective is met.

3.2.4.4 Accessibility Design Standards – City of Toronto 2004

There is a considerable source of good practice guidance available in the documents set up by various territories. In 2011, Ontario will see the publication of a new ‘Integrated Accessibility Standard’ which builds on and extends the 2004 standard.

Whilst shortly to be superseded the 2004 Standard itself contains excellent guidance both in terms of content and presentation for those involved in the design and delivery of accessible buildings and spaces.

Advice on addressing the needs of most users is given in the guidance and applies across all elements of the physical environment and a comprehensive range of different building use classes. There is clear and comprehensive information on issues such as environmental factors including acoustics, colour, contrast, and both exterior and interior lighting. It also considers and advises on longer-term issues such as the importance of management and staff training in the on-going process of delivering accessibility.

Whilst simply adopting the document as an EU wide standard would not be possible due to some differences in its contents with the internationally developed ISO/FDIS 21542, the document is very easy to follow. It is succinct and well illustrated and would be an excellent model to be considered for informing the preparation and presentation of an EU wide standard.

3.2.4.5 ISO/FDIS 21542 Accessibility and Usability of the Built Environment (ISO)

Generally

The ISO/FDIS 21542 Standard is the result of collaboration or involvement of some 28 countries (EU and Non-EU) world-wide. It has been prepared to provide recommendations and guidance on the creation and management of inclusive, accessible buildings and spaces. It is intended to assist design and construction professionals, building owners, users, and those who will manage the built environment when in use.

ISO/FDIS 21542 not only provides guidance on how to design the physical features of an environment to provide accessibility, it also identifies the influence of effective management interventions in creating fully accessible, inclusive and usable places for people to use.

Foremost in deciding the level of accessibility that is appropriate is the aim to ensure that wherever possible everyone using a building or space should be able to do so conveniently, with dignity, safely and, wherever possible, independently.

ISO/FDIS 21542 identifies the objectives, design considerations, requirements and recommendations necessary to produce accessible and usable buildings.

“This International Standard should lead to continuous improvement in the built environment. Whilst the objectives always remain unchanged, the means of achieving them is part of a continuing process of change, i.e. as human knowledge and building technology improve and as the relationship between generally accepted building practice and technology alters.”

ISO/FDIS 21542

Whilst ISO/FDIS 21542 is applicable to both new and existing built environments, the guidance specifically related to existing buildings is more limited.

Scope and Detailed Guidance

In addition to covering most of the technical requirements included in ADASAD in terms of addressing the needs of people with restricted mobility, the guidance within ISO/FDIS 21542 is more comprehensive with respect to addressing the needs disabled and non-disabled people in general.

For example, ISO/FDIS 21542 offers guidance on how to provide environments and spaces that address the needs of people with sensory impairments (vision and hearing) and people with mental, cognitive and psychological impairments. Practical guidance to address the needs of non-disabled groups including older people and children is also more detailed and informative.

As an example, with regard to the use of colour (58 references), lighting (75 references) and contrast (102 references), the guidance clearly identifies the importance of such issues to the overall accessibility of the built environment. For lighting, the ADASAD has only one reference for minimum

specified illuminance (for lift cars), whereas ISO/FDIS 21542 has some 15 references to recommended illuminance covering many aspects of the built environment.

The importance of appropriately designing the acoustical properties of a space to enhance communication and wayfinding is also addressed in ISO/FDIS 21542 but is not referred to in ADASAD.

ISO/FDIS 21542 also makes some 7 specific detailed references for addressing the needs of children when using the general built environment.

As it current stands, there are gaps in the guidance contained in ISO/FDIS 21542, which will require further research or the adoption of guidance from other recognised standards. These include for example external audible signage and wayfinding systems, children's play areas, public external spaces, bus facilities, cycle parking, and accessible beaches. However, the CEN/BTWG 207 project has identified several reliable sources from which guidance can be gathered to close these gaps.

Management

ISO/FDIS 21542 incorporates a group of comprehensive set of Annexes that contain informative information about human abilities, management and behaviour characteristics of users in certain situations, for example when egressing in an emergency.

Such information is of vital importance to those designers who wish to meet the performance objectives of published good practice guidance on accessibility (either in the ISO/FDIS 21542 or other national standards) but who may also wish to enjoy the freedom to explore and develop creative alternatives without compromising accessibility. These Annexes are an invaluable source of information to designers, which is not covered as comprehensively in the ADASAD.

3.2.4.6 Conclusion on comparison of ISO/FDIS 21542 with other leading non-EU standards

ISO/FDIS 21542 is a document that has been prepared with input by 28 countries worldwide and represents a broad understanding and acceptance of what constitutes good practice in terms of access to the built environment and how that can be achieved.

In preparing the ISO/FDIS 21542, guidance was drawn from a wide range of national standards and this is accompanied by a comprehensive set of references and Annexes to support and give credibility to the guidance given.

It is important to note here that Australia, Canada and the US were all participating countries in the development of ISO/FDIS 21542. In the adoption ballot of all participating countries following the development of the ISO both Canada and the US voted in favour of its adoption although some conditions were attached to the vote from Canada. Australia abstained.

However, whilst ISO/FDIS 21542 enjoyed input from a broad range of countries worldwide, not all EU member countries were represented. It is also subject to a final acceptance vote by participating countries and discussion is still ongoing about some of the final detail.

In light of the technical review and the comments given above, it is recommended that there is no single document which can serve as a complete EU reference document for the design and procurement of an accessible built environment.

We conclude that ISO/FDIS 21542 (when fully agreed) could be used, rather than the ADASAD, Australian or Canadian standards, **as the base-line accessibility standard which must be completed with clauses from other good guidance documents**, in order to cover certain gaps and weaknesses, so as to cover adequately all aspects of buildings, outdoor areas and other built infrastructure. However, there are many areas of good practice guidance and presentation techniques within these other standards that could and should be used to inform any future development of ISO/FDIS 21542 towards being an EU wide applicable accessibility reference document (standard).

3.3 Analysis of gaps

3.3.1 Inventory of national and international legal requirements and advisory measures for ensuring accessibility of the built environment

3.3.1.1 Types of documents

Approximately 300 documents have been checked for coverage of accessibility requirements by 1 November 2010, and all have been categorised under the headlines of:

- general legislation
- building code
- technical regulation
- standard
- guideline

Furthermore it has been noted whether they primarily describe functional or technical requirements under each headline. It should be noted, however, that documents may fall into several categories. (see [Annex F](#) and separate Excel table)

3.3.1.2 Coverage of functional and technical requirements

Table 1 – Number of general legislation, building code, technical regulations, standards and guides within European Member states

Type	GENERAL LEGISLATION		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE	
	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical
Total	63	28	40	36	57	57	50	72	120	119

Observations:

- Guidelines and technical regulations form the main basis of the inventory, standards and building codes occurring less frequently
- 2/3 of documents are of functional as well as technical nature

3.3.1.3 Coverage of building elements by all types of documents

The preliminary document inventory indicates that all building elements seem to be covered comprehensively when viewed across all countries and types of documents. No partial or absolute gaps were found within the selected 4 main areas:

- External Environments and Approaches to Buildings
- Internal Environments
- Transport Facilities
- Specific Building Uses

3.3.1.4 Coverage of external environments and approaches to buildings, all documents

Preliminary conclusions:

- all elements covered comprehensively by many documents

3.3.1.5 Coverage of internal environments, all documents

Preliminary conclusions:

- all elements are comprehensively covered by many documents
- indoor climate scores just one document with comprehensive coverage, but conclusion is questionable as very few responses in second round on this additional element were received

3.3.1.6 Coverage of transport facilities, all documents

Preliminary conclusions:

- all elements comprehensively covered by several documents
- cycle parking scores lowest; 4 documents with comprehensive coverage

3.3.1.7 Coverage of specific building uses, all documents

Preliminary conclusions:

- all building elements are covered comprehensively by many documents
- in general less documents on specific building uses than on external and internal environments
- gas/petrol stations scores low with 4 documents comprehensive coverage
- ports score lowest with 5 partial coverage documents only, but conclusion is questionable as very few responses were received on this element in second round

3.3.1.8 Combined coverage of building elements by country/state/region, - alldocuments

Preliminary conclusions:

- all countries report several gaps in their combined coverage of user requirements.
- many have no or only partial coverage of close to half of all building elements
- countries that report no missing coverage (equal to zero in the last column 'None') by inspection show to simply not have answered on all building elements.
- the countries that report the highest degree of coverage are in the top of the table.

Important notes:

- coverage is reported on the basis of all types of documents in each country
- Differences in approach of rapporteurs may have influence on ratings, and adjustments may be introduced during the next stage

3.3.1.9 High degree of coverage, single documents

Preliminary conclusions:

- Several single documents could be candidates for further development towards a European Standard with almost full coverage of all building elements.
- The single documents reported to have the most comprehensive coverage of all building elements are listed in the table above.

Important notes:

- differences in approach of rapporteurs may have influence on ratings, and adjustments may be introduced during the next stage

3.3.1.10 Estimate on potential suitability in public procurement

Preliminary conclusions:

- close to 40 % of documents found are reported to have high potential suitability as technical specifications and criteria for awarding public contracts
- approximately 30 % of documents are reported as suitable for guidance for different levels of adapting existing buildings
- an in depth analysis of the documents and their coverage of building elements may lead to pointing to several documents that combine high suitability and comprehensive coverage

3.3.1.11 Technical and functional requirements

Preliminary conclusions:

- general legislation documents are more functional than technical in nature
- standards show the opposite tendency
- building code, technical regulations and guidelines show a balance between functional and technical types of requirements
- two thirds of documents are of dual nature

What are functional accessibility requirements and technical performance criteria?

Functional requirements describe what shall be possible to do /to perform. An example:

Wheelchairusers shall be able to use the entrance. Or in a more detailed level: Wheelchairusers shall be able to pass through the entrancedoor.

Technical performance criteria describe technical criteria for fulfilling the functional criteria and are needed to make it possible to verify the functional criteria. One example: *To make it possible for wheelchairusers to pass the door, the doorwidth shall be min xx mm.* Often the performance criteria is implicit and the formulation simplified to *“The doorwidth shall be min xx mm.”* Still it should be regarded as a technical performance criterion.

Mandate 420 requests in our report:

An analysis of whether they describe functional requirements or information on the technical performance criteria (including on construction products) shall be provided.

(b) **An analysis of gaps** identifying areas in the accessibility to the built environment where no standards, building codes **technical regulations or guidance documents** exist or where the existing standards, building codes, **technical regulations or guidance documents** need to be complemented to have a comprehensive European standard.

This analysis should distinguish between

- functional accessibility requirements and
- a range of minimum technical performance criteria to comply with those functional requirements.

3.3.2 Inventory of national legal requirements in the built environment in European MS

- **with reference to accessibility standards**




- only 4 countries have building regulation with reference to accessibility standards: Austria, Ireland, Slovenia and United Kingdom
- Germany and Switzerland have also reference to their accessibility standard but only partly and on very unequal level in the different regions (countries), cantons and communities – few countries / cantons are more advanced than others

- **with unequal approach in regions, countries, cantons and communities**
 - 2 countries have considerable differences among their regional building regulations: Austria and Spain, Austria has already implemented the harmonisation concept with OIB Guideline 4 in seven of nine regional building regulations and Spain has new guidance documents which are applied now in the whole country on equal level
 - 3 countries have due to their federal structure also differences in the implementation of accessibility: Belgium, Germany and United Kingdom
- **with guidance documents referred to in the regulation**
 - 15 countries have guidance documents referred to in building regulation: Austria (new approach concept), Croatia, Cyprus, Denmark, Germany, Greece, Iceland, Ireland, Italy, Latvia, Netherlands, Poland, Spain, United Kingdom and Switzerland.
- **without any reference to standards or guidance documents**
 - 13 countries have all accessibility requirements established within building regulation and no reference to any standards or guidance documents: Belgium, Czech Republic, Estonia, Finland, France, Hungary, Lithuania, Luxembourg, Malta, Portugal, Romania, Slovakia, Sweden
- **without reference to the building regulation**
 - Denmark and Norway have got accessibility standards not judicially referred to in the building regulation, and has therefore of minor importance and less implementation

See table 2 about correlation between building regulation / guidance documents and accessibility standards in European MS on next page

Table 2 – Correlation between building regulation / guidance documents and accessibility standards in European Member States

Correlation between Building Regulation and Standards in Europe	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	UK	Liechtenstein	Norway	Switzerland	total sum	
Type 1 Building regulation with standards referred to in the regulation											R																					R	7	
Type 2 Building regulation with guidance documents referred to in the regulation																																		14
Type 3 Building regulation without standards referred to in the regulations																																		15
National accessibility standard available without reference to legislation																																		1
Different regional building regulation in regions, countries and communities with different references																																		5

- Building regulation only 
- Regulation with guidance 
- Standard only partly applied 

3.3.3 Inventory of user need coverage on accessibility requirements of the built environment

Table 3 - User needs coverage in European and EFTA countries and International (including ISO 21542)

User Needs (indicated for each country with Generally, partly or not covered: G/P/N and indicated with our colours green/yellow/orange)	Inter-national			EU countries																								EFTA					
	ISO 2142	ADA	CANADA	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	Liechtenstein	Norway	Switzerland
People using a wheelchair	c	c	c	c	c		c	c	c		p	c	c	c	c		c		c	p	c	c	c	p			c		c	c		c	c
People with walking difficulties	c	c	c	c	c		c	c	c		p	c	c	c	c		c			p	c	c	c	c			p		c	c		c	c
People with reduced manual dexterity / arm function / strength	c	p	c	c	p		p	p			n	c	c	p	c		p			p	c	n	c	c			p		c	p		c	c
People with vision impairments / blind	c	p	c	c	p		c	c	c		p	c	c	c	c		p		c	p	c	n	c	p			n		c	c		c	c
People with Hearing impairments / deaf	c	p	c	c	p		p	c	p		p	c	c	p	p		p		c	p	c	n	c	n			p		c	p		c	c
People with Intellectual / cognitive / mental impairments	c	p	c	p	p		p	p	p		n	c	n	p	n		p		n	p	p	n	c	n			p		c	p		c	p
People with allergies	p	n	c	n	p		n	n	p		n	n	n	n	n		n		n	n	n	n	n	n			n		p	n		c	n
People with diversities in age and stature	c	p	c	c	p		c	c	p		p	p	p	c	n		n			n	n	n		p			n		p	c		c	c

3.3.3.1 Comments on coverage of User Needs

Generally

The Table identifies that within the EU Member countries and the other countries studied the availability of design guidance and regulations related to the different user needs identified is fairly consistent across the board. The project has identified that there are areas where a good level of comprehensive guidance and regulation is available but worrying there are also clear areas where the needs of some user groups are not being addressed at all in the available guidance.

Findings

As would be expected by those involved in the field of inclusive design, most EU Member countries enjoy access to a good comprehensive range of guidance for people with mobility impairments, and especially for those who use a wheelchair as their mobility aid and people who experience difficulties with walking.

Across EU Member countries, guidance for people with other physical impairments such as reduced manual dexterity, arm function and strength is less comprehensive although only a few Member countries have no guidance at all on such issues.

The needs of people with sensory impairments (vision and hearing) are covered in most EU member countries but there is a clear indication that the depth of guidance and regulation available is substantially less comprehensive than it is for people with mobility impairments. However, comprehensive guidance does exist in some EU Member countries on which others can build.

Of more concern are the areas of user needs where no guidance or regulation exists at all. These include issues related to people with allergies, where there is a clear and worrying lack of existence of guidance across all EU Member countries, and issues related to people with intellectual, cognitive and mental impairments.

For people with allergies, some 75% of the countries considered do not cover the issue at all. The situation for people with intellectual, cognitive and mental impairments is better but the evidence suggests that with only some 25% of countries having comprehensive guidance on the issue there are clear deficiencies in the scope and coverage of guidance available across the board.

Indeed even in addressing the needs of people of short stature and older people, only about 30% of countries examined have guidance or regulation that could be considered to be comprehensive.

Conclusion

Whilst there is evidence to suggest that some EU Member Countries enjoy good comprehensive coverage across all user groups, (e.g. Norway, Sweden, Austria, France, Poland, Switzerland and the UK), it would appear that the guidance available in international documents such as the ISO and those relevant to Canada are more comprehensive than any produced by individual EU Member countries.

3.3.4 Inventory of national country reports of existing legislation / standards / guides on accessibility requirements of the built environment

3.3.4.1 Legislation and Standardization

Our analysis shows, that accessibility of the built environment is covered within different laws and on different levels (antidiscrimination act, equal treatment on workplace, UN-Convention, public transport and traffic issues, ...), depending on the political structure of the respective country.

Generally, the member states are responsible for their building regulation, which is partly influenced by the European Union through mandatory EU legislation. Examples are the Construction Product Regulation, which is based now on 7 basis requirements for the whole building (relevant for marketing of construction products), and the TSI-PRM legislation especially for railway stations. Thus, EU legislation has an influence on national building regulations.

Nevertheless, we have a range of different approaches regarding legislation on accessibility among European MS, whereas there are accessibility standards with similar approach in most of the countries. Mainly, those different approaches occur concerning two issues – consistent accessibility legislation within the countries on the one hand, and implementation of accessibility standards within legislation on the other. According to this, the table below provides an overview of the correlation between building regulation and standards in each European country.

In many cases (e.g. Austria, Belgium, Germany, Spain, Switzerland and UK and especially in states with federal structure), there is no consistent building regulation for the whole country. Regional authorities (federal states/cantons/provinces/communities) carry the responsibility for writing as well as for supervising compliance with the building regulation. For example, in Switzerland it was not possible to get a clear answer from professional architects regarding the requirements for accessibility of the built environment, because it depends on the respective canton and communities. Architects have to negotiate every building project when they request a building permit. Therefore, the level of accessibility differs a lot: some communities have high awareness on the subject and strongly focus on accessibility in their guidelines; others only have basic requirements included.

In terms of standards and guidelines, different levels of importance and acceptance status are shown among the European countries. In German speaking countries, standards on accessibility have high importance and are well known as “state of the art” – e.g. SIA 500 in Switzerland. Procurement procedures require solutions, which are “state of the art”. Thus, standards on accessibility are used in order to ensure compliance. Architects are more or less responsible for its implementation; to what extent differs a lot and depends on the functional (and technical) requirements of the building regulation. Building regulation does not always refer to existing accessibility standards. In many countries, all accessibility requirements are covered within building regulation. Thus, standards are no accepted tools (e.g. Romania), do not seem to be necessary because of the detailed information within the building regulation itself (e.g. Sweden) or are replaced by other tools (e.g. checklists in Denmark).

Building regulation often has implemented more functional than technical requirements. According to the ‘new approach concept’ it becomes more important to reference technical standards within functional requirements. Austria provides a good example of this issue. The harmonised building regulation - based on the concept of the EU Public Procurement Directive – with six essential requirements including accessibility in Guideline 4 since 2008 has been implemented within the building regulation in seven of nine federal states by 2011. It contains direct references to different clauses of ÖNORM B 1600 (“Barrier free buildings – Design Guideline”). In Germany, we find a similar approach. The new accessibility standards DIN 18040-1 for public buildings and DIN 18040-2 for dwellings have now been finalized and published, but they have not yet been implemented in the respective building legislation in any of the 16 federal states. Now a long period of discussions and negotiation is going to start within the federal countries if, how much and what of the new DIN standards is going to be included in their building.

These finding clearly show that an equal approach on accessibility should be implemented in all European MS.

3.3.4.2 Implementation

Generally, there is an approach to build new buildings accessible in most of the countries. There seems to be no legislated procedure for public procurement concerning accessibility in nearly every country.

Belgium, Malta and Poland provide positive examples. In Belgium, public buildings have to be accessible to get a building licence. In Malta, clauses or conditions regarding accessibility are generally included in public procurement documents. The Polish City of Gdynia was one of the partners in the Build for All programme completed in 2006. Concerning the procedure of approving the specific design phases in the light of accessibility in Poland there is a similar procedure within the

process of obtaining the building permit. The Building Design has to be verified and stamped by the specialist on Safety and Work Hygiene (BHP), which is supposed an expert on accessibility, i.e. he or she has to know the regulations within this area. Then the public buildings and some dwelling houses are turned when built it after the approval procedures done by all kinds of experts, safety expert among them.

The absence of this kind of quality assessment procedures and inspection systems regarding accessibility during the process of execution and at its end, is an issue many of the rapporteurs complain about. The analysis clearly shows a lack of accurate implementation of accessibility of the built environment in practice because of a lack of information as well as negative attitudes towards accessibility issues among all of the people involved in the process of procurement, execution and authorisation.

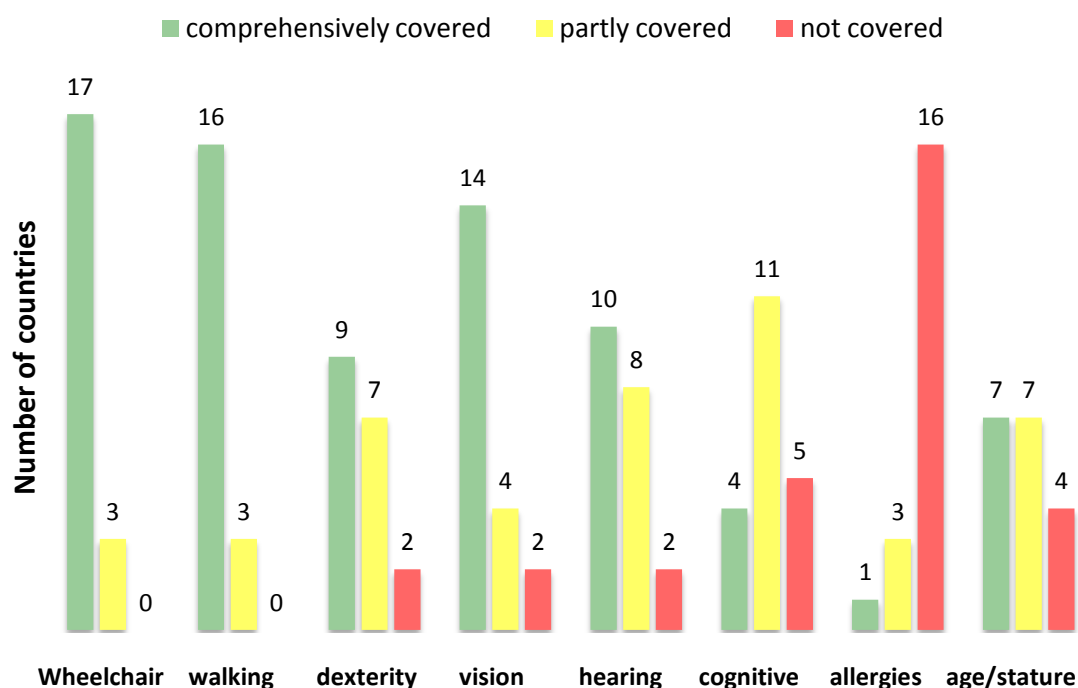


Figure 4 - Coverage of user needs in European countries

The analysis shows, that the coverage of user needs by regulations, standards and guidelines in European MS strongly focuses on certain user groups i.e. wheelchair users, people with walking difficulties and people with visual impairments/blind people. This indicates a disadvantage for other user groups such as people with allergies, people with intellectual/cognitive/mental impairments, people with diversities in age and status, people with reduced manual dexterity/arm function/strength and people with hearing impairments/deaf people.

3.3.4.3 Conclusion about national country reports

Good practice examples

As the analysis clearly shows, awareness and education regarding the implementation of accessibility of the built environment in Europe requires improvement. Good practice examples show attempts of doing so through different approaches. There are well-elaborated and detailed **guidelines and standards** in most of the countries. To meet the requirements in practice, education/training and sensitisation among authorities, planners and craftspeople as well as among consumers/users of the built environment are essential.

There are some good examples for a certain **educational approach** within universities etc. (see [Annex J.2](#)).

Financial support for refurbishment to improve accessibility (e.g. Belgium: Flemish adjustment support; Denmark: government fund for improvement in access to buildings with public service functions; Finland: Housing Finance and Development Centre of Finland (ARA) supporting lifts in old multi-storey dwellings; Germany: government-owned bank “Kreditanstalt für Wiederaufbau (KfW)” supporting modernisation work in existing housing etc.); Financial support and funding for new social housing projects and in three countries also for single family houses if accessibility is incorporated according the adaptable housing concept (e.g. in Austria in all federal countries).

Award schemes (e.g. Austria: award for good practices of accessible building sites every two years; Finland: yearly award by architects’ and designers’ “Armi Association” and Finnish Association of People with Physical Disabilities; Hungary: “Accessible Building of the Year”; Ireland: “Excellence through accessibility Awards”, “O2 Ability Awards”, “ABLE Business Excellence Award”, “RIAI/OPW Accessibility Award”; Portugal: annual award by the National Rehabilitation Institute (INR) for research on disability related issues , annual award for accessible housing by the National Institute for Housing and Urban Rehabilitation, annual award for accessible architecture by the Santa Casa da Misericordia in co-operation with the National Institute of Architects etc.) and **information for professionals as well as for consumers** provided by several organisations (e.g. Austria: “design for all”, Belgium: “Enter vzw” etc.) should help to encourage the implementation of accessibility requirements.

In order to gain public attention and awareness, **implementation on a large scale** in public urban environment, for instance, are of great impact (e.g. Austria: project “Accessible village/city for all users”; Cyprus: new design concerning pedestrian pavements covering requirements for wheelchair users and blind people; Greece: accessible pedestrian route connecting the archaeological sites in the centre of Athens, Acropolis accessible for wheelchair users, public transport fully accessible; Austria: accessible prefabricated house at “Blue Lagoon” public transport fully accessible, pedestrian routes and crossings accessible also for blind people, tourism accessibility checks introduced by the chamber of commercial affairs/tourism and the ministry of tourism, accessibility checks for shops, medical centre etc.)

3.3.5 Inventory of updated summary of CEBC “access for all” report

Report from the Consortium of European Building Control CEBC “Access For All” in Europe, December 2007– updated 2011 with available data

Some data have been updated and improved due to changes in building regulations. During the public consultation period all country data will be updated.

These tables provide a good overview about the application of building regulations concerning accessibility within non-domestic/commercial buildings and within dwellings in the different countries.

Excerpt from the study:

Although access to the built environment is essentially a Member State responsibility, the Commission 2003 Communication on ‘Establishing equal opportunities for people with disabilities: A European Action Plan’ committed itself to take into account the recommendations made in 2003 by the group of independent experts on accessibility to the built environment and expressed in the report called ‘2010: a Europe for All’.

Most Member States have regulatory and/or technical standards and conformity assessment schemes or audit trails to assess accessibility of buildings, which are also used in public procurement. Whilst many standards, building codes and other means are based on work in ISO and guidance given by CEN, the different national approaches are not harmonised and this could influence the acceptance or otherwise of designs and products, whilst at the same time not influencing the level of accessibility in a building.

The study has shown that the principles of the legislation vary very little in their requirements and this is somewhat unexpected. However it is gratifying to know that there is a commonality of purpose running through the legislative requirements and associated guidance. The problems of access for disabled people will in fact be the same in whichever country they live and work.

The tables included later in this report set out the main requirements of each country's legislation, usually building regulations, and the guidance issued setting out how to meet those requirements.

In some countries which have separate states or provinces, the legislation differs slightly, and where this is the case the table shows an indicative form of the requirements or a common theme.

Findings

The responses in this publication are from the 25 member countries of CEBC, which includes Northern Ireland and Scotland separately, as their building regulations differ in some respects from England and Wales. Austria, Belgium and Germany's responses are a common denominator of their legislation, as there are a number of provinces or Länder in these countries.

Perhaps surprisingly in some respects, but very gratifying in others, was to learn that the requirements for disabled access are very similar, if not the same in many countries in Europe. Almost invariably the minimum size of a passenger lift is 1.1m x 1.4m and for nondomestic buildings in all countries without exception, access is covered from the site boundary, the approach to the building, entry into the building and in the building itself. As far as dwellings are concerned only Croatia and Estonia do not control the approach to the building for disabled access purposes.

In the case of a requirement for automatic doors at the entrance to buildings, only Belgium and Croatia stipulate the provision of this facility. The most varied requirements that the questionnaire revealed were those in respect of facilities for disabilities other than physical ones, as can be seen by the responses in respect of hearing and sight impairments. An interesting variance is the one concerned with the number of storeys where a passenger lift becomes mandatory. Where it is mandatory, the majority fall into the category of three, four or five storey.

Conclusions

Although the prime mover for this study was to look at access for the disabled, it should be remembered that good access for the disabled results in good access for everyone, including particularly, parents with children in pushchairs and prams as well as the ambulant disabled and the elderly.

Table 4 - Non-domestic/commercial buildings, CEBC report – access for all in Europe – updated 2011

Non-domestic/commercial	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	UK & Wales	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Liechtenstein	Lithuania	Luxembourg	Malta	Netherlands	Ireland	Norway	Poland	Portugal	Romania	Scotland	Slovakia	Slovenia	Spain	Sweden	Switzerland
Legislation/ regulations supported by guidance notes?	y	n		y	n	n	y	y	n	n	n	y	y		y	y	y	y		n			n	y	y	y			y	n ⁱ	y	y	y ⁱ	
Disabled access covered by legislation?	y	y		y	y	y	y	y	y	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	
Disabled access a Building Regulation matter?	y	n		y	y	y	y	y	y	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	
Regulations performance based?	p	n		y	p	y	y	y	y	p	y	y	y		y	y	y	y		y			y	y	y	y			y	n	y	y	y	
Regulation applies to non-dwellings?	y	n		n	y	y	y	y	y	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	
Regulations apply to extensions as well as new buildings?	y	n		n	y	n	y	y	y	y	y	n	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	
Regulations apply to the approach to the building?	y	y		y	y	y	y	y	y	y	y	y	y		y	y	y	y		y			y	p	y	y			y	y	y	y	y	
Maximum gradients to external ramps specified?	n	y		y	y	y	y	y	y	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	
Regulations apply to external stairways?	n	y		y	y	y	y	y	y	y	y	y	y		y	y	y	y		y			n	y	y	y			y	y	y	y	y	
Regulations apply to minimum width of entrance doors?	n	y		y	y	y	y	y	y	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	
Regulations control visibility of large glazed areas?	n	y		y	n	y	n	y	n	n	y	y	y		n	y	y	y		y			n	y	y	y			y	n	y	y	y	
Regulations control widths of corridors and hallways?	n	y		y	y	y	y	y	n	n	y	y	y		y	y	y	y		y			y	y	y	n			y	y	n	y	y	
Regulations control internal door widths?	n	y		y	n	y	y	y	n	n	y	y	y		y	y	y	y		y			n	y	y	y			y	y	y	y	y	
Regulations control the gradient of internal ramps?	y	y		y	n	y	y	y	n	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	
Regulations control internal stairs?	y	y		y	y	y	y	y	y	y	y	n	y		y	y	y	y		y			n	y	y	y			y	y	y	y	y	

Table 4 - Non-domestic/commercial buildings, CEBC report – access for all in Europe – updated 2011 (continued)

Non domestic/commercial	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	UK & Wales	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Liechtenstein	Lithuania	Luxembourg	Malta	Netherlands	Ireland	Norway	Poland	Portugal	Romania	Scotland	Slovakia	Slovenia	Spain	Sweden	Switzerland
Are passenger lifts required by the Regulations?	y ³	y		y	n	y ⁵	y	y	n	y	y ³	p	y ²		y ²	y ²	y	y		y			n	n	y ⁴	y ⁵			y	y ³	y ³	y	y ²	
Platform lifts and stair lifts be considered as an alternative?	y	y		y	n	y	n	y	n	y ^E	n	n	y ²		y	y	y	y		y			n	y	n	y			y	y	y	y	y	
Regulations require toilets for the disabled?	y	y		y	y	y	y	y	y	y	y	y	y ²		y	y	y	y		n			y	y	y	y			y	y	y	y	y	
Regulations control the colour/contrast of internal surfaces?	y	n		y	n	n	n	y	y	n	y	y	y ²		n	n	y	y		y			n	y	y	n			y	n	y	n	y	
Regulations stipulate automatic doors at entrances?	p	y		y	n	n	n	n	n	n	n	n	n		n	n	n	n		n			n	n	n	n			n	n	n	n	n	
Reception areas and lobbies controlled by Regulations?	y	y		y	y	y	y	y	n	p	y	y	y		n	n	y	y		y			n	y	y	y			y	n	y	y	n	
Regulations require low level counters etc at reception areas?	n	y		y	n	y	n	y	n	y	y	y	y		n	n	y	y		y			n	y	n	n			y	n	y	y	n	
Are induction loops required for the deaf	p	n		y	n	y	n	y	n	y	y	n			y	n	n	y		n			n	y	y	n			y	y	y	y	n	
Are wayfinding signs required?	y	n		y	n	y	n	y	y	y	y	y	y		n	n	y	y		y			n	y	y	n			n	y	y	y	y	
Is artificial lighting controlled by the Regulations?	y	n		y	n	p	n	y	y	n	y	y	y		y	n	y	y		n			n	n	y	y			n	n	y	y	y	
Is means of escape in case of fire for disabled people controlled?	y	n		y	n	y	p	n	n	n	y	n	p		n	y	n	n		n			n	n	y	n			n	n	y	y	n	
Are building management action plans accepted with trade off for alarms, refuges etc?	y	n		y	n	y	n	y	y	n	y	n	n		n	y	y	n		n			n	y	y	n			y	n	y	n	n	

y yes ^{2 3 4 5} , , , etc. minimum number of storeys
 n no ^E existing buildings only
 p partly ⁱ included in Building Regulations

Table 5 - Dwellings – CEBC Building report - access for all in Europe – updated 2011

Dwellings	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	England & Wales	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Liechtenstein	Lithuania	Luxembourg	Malta	Netherlands	Northern Ireland	Norway	Poland	Portugal	Romania	Scotland	Slovakia	Slovenia	Spain	Sweden	Switzerland
Legislation/ regulations supported by guidance notes?	y	n		y	n	n	y	y	n	n	n	y	y		y	y	y	y		n			n	y	y	y			y	n ⁱ	y	y	y	y
Disabled access covered?	y	y		y	y	y	y	y	y	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	y
Disabled access a Building Regulation matter?	y	n		y	y	y	y	y	n	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	y
Regulations performance based?	y	n		y	y	y	y	y	n	p	y	y	y		y	y	y	y		y			y	y	y	y			y	n	y	y	y	y
Regulation applies to dwellings?	y	y		n	y	y	y	y	n	y	y	y	y		y	y	y	y		n			y	y	y	y			y	y	y	y	y	y
Regulations apply to existing as well as new buildings?	y	y		n	y	y	y	y	y	y	y	n	n		y	n	y	y		y			n	y	y	y			y	y	y	y	y	y
Regulations apply to the approach to the building?	y	y		n	y	y	y	y	n	y	y	y	p		y	y	y	y		y			y	y	y	y			y	y	y	y	y	y
Maximum gradients to external ramps specified?	y	y		n	y	y	y	y	n	y	y	y	y		y	y	y	y		y			y	y	y	y			y	y	y	y	y	y
Regulations apply to external stairways?	y	y		n	y	y	y	y	n	y	y	y	n		y	y	n	y		y			n	y	y	y			y	y	y	y	n	y
Regulations apply to minimum width of entrance doors?	y	y		n	y	y	y	y	n	y	y	y	p		y	y	y	y		y			y	y	y	y			y	y	y	y	y	y
Regulations control visibility of large glazed areas?	y	y		n	n	n	n	n	n	n	y	y	n		n	n	y	y		y			n	y	y	y			y	n	y	y	y	y
Regulations control widths of corridors and hallways?	y	y		n	y	y	y	y	n	y	y	y	n		y	y	y	p		y			y	y	y	y			y	n	n	y	y	y
Regulations control internal door widths?	y	y		n	n	y	y	y	n	y	y	y	n		y	y	y	y		y			n	y	n	y			y	n	y	y	y	y
Regulations control the gradient of internal ramps?	y	y		n	n	y	y	y	n	p	y	y	n		y	n	y	y		y			y	y	y	y			y	y	n	y	y	y

Table 5 - Dwellings – CEBC Building report - access for all Europe – updated 2011 (continued)

Dwellings	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	England & Wales	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Liechtenstein	Lithuania	Luxembourg	Malta	Netherlands	Northern Ireland	Norway	Poland	Portugal	Romania	Scotland	Slovakia	Slovenia	Spain	Sweden	Switzerland
Regulations control internal stairs?	y	y		n	y	y	y	y	n	y	y	n	y		y	n	y	y		y			n	y	y	y			y	y	y	y	y	y
Are passenger lifts required?	y ³	y		n	n	y ⁵	y ³	n	n	y ³	y ³	y ⁶	y		y ⁴	n	y ⁴	p		y			n	n	y ⁵	y ⁵			y ⁵	y	y ⁵	y ³	y ³	y ³
Platform lifts and stair lifts be considered as an alternative?	y	y		n	n	y	n	n	n	y ^E	n	n	n		y	n	y	n		y			n	n	n	n			n	y	y	y	y	y
Toilets for the disabled?	y	y		n	y	y	n	y	n	y	y	y	n		y	y	y	n		n			y	y	y	y			y	y ⁴	y	y	y	y
Regulations control the colour /contrast of internal surfaces?	y	n		n	n	n	n	n	n	n	n	y	n		n	n	y	y		y			n	n	y	n			n	y	y	n	n	y

3.3.6 Analysis of Gaps (Overview)

Background

The information used to develop this overview derives from a review of the standards, regulations and guidance available in around 54 countries or semi-autonomous regions across the EU and EFTA and several international countries including Australia, Canada and the US. An assessment was also made of ISO/FDIS 21542

This has generated a considerable amount of data relating to both the provision and scope of information available to designers, building owners and users on developing accessible, inclusive buildings and spaces. It has also identified areas where a good level of guidance exists and, importantly, where there are gaps in standards, regulations or general guidance.

Recording the availability of information was undertaken by considering a broad range of issues that affect the accessibility of an environment or space. This was then used to identify whether the issue was covered in the standards, regulations and other guidance available within each country or region. An assessment was also made of the general scope of the information identified in terms of its overall coverage of the issue. The information was gathered by Project Team members and a number of volunteers identified by the Team.

Establishing a classification system

The scope of coverage of the information contained in the various published documents available in the non-EU countries, EU Member States and semi-autonomous regions considered in the study was recorded using the following three main classifications:

- Comprehensive coverage (c)
- Partial coverage (p); and
- Not covered (n)

A further classification of (n/a) was used to identify those areas for which no information was available or identified by the Project Teams and volunteers.

On the tables contained in [Annex E](#), (c) is denoted in green, (p) in yellow and (n) in red, (n/a) is shown in purple.

Details of the classification system adopted

The study has identified that there are a considerable number of published regulations, standards and other good practice guidance available across EU Member States. Indeed for some design issues such as the provision of the environment for people with mobility impairments for example steps and stairs, ramps and external circulation routes, there appears to be an oversupply of information.

However, whilst the documents within each country may be comprehensive and be classified as such (c), in most cases the regulations, standards and guidance given for that country also accommodates and reflects local or cultural expectations which may be different to other EU member States. Such differences should always be tolerated, even encouraged, rather than subdued.

Whilst the classification of (c) identifies, for example, that comprehensive information is available within a particular country for designers and others to use in the creation of accessible buildings and spaces, it does not mean that the information contained in the document is necessarily suitable or could be considered applicable to all EU Member States.

Therefore it would not be appropriate to simply take one regulation, standard or guidance source that has been designated as having a comprehensive coverage and adopt it or consider it as being suitable for an EU wide standard. Indeed, given the cultural and legislative differences that exist between EU Member States and in semi-autonomous regions within those countries, such an outcome would not be possible in a project of this time-frame.

The classification exercise undertaken has achieved is the identification of where guidance of various levels of is available in order to inform and influence the process of developing an EU wide accessibility standard.

Similarly the classification of partial coverage (p) indicates that whilst some information is available it is not comprehensive in its coverage and some gaps exist in the information given.

What is of significant relevance perhaps is how the system adopted has identified those areas where gaps clearly exist in the regulations and standards and where no guidance exists to inform the design and management process.

This is important in the development of a future EU wide standard because whilst the information identified as being comprehensive (c) or partial (p) may be influenced by cultural and legislative issues within individual countries, that is not so for the areas where a complete lack of information has been identified.

That means that any future work done to create standards or guidance in these areas can be done with an EU wide applicability as one of the main objectives. The issues for which no guidance is currently available are shown with the notation (n).

An overview analysis of the findings

An overview analysis of what is covered by the those Regulations and Standards shows that for the physical features, building use classes and other characteristics considered in the study, all the issues necessary to create an accessible built environment are covered somewhere in regulations, standards and guidance across the non-EU Countries and Member States examined.

3.3.6.1 Statutory Regulations

In terms of the statutory requirements associated with the needs of people with physical and/or mobility impairments there is a considerable amount of comprehensive information available in all countries and areas considered in the study.

With the exception of the Netherlands, all EU Member States have comprehensive information available for the provision of access routes and approaches, and the provision of gradients and ramps, external steps and stairs, and handrails both when approaching a building and when moving about internally.

Details on the provision of suitable circulation routes and manoeuvring spaces internally are also very well covered across the countries considered although there are a few EU Member States, which have only partial coverage.

In line with the general trend towards concentrating on information that addresses the design needs of people with mobility impairments, coverage on the provision of wheelchair accessible toilets and showers is very good throughout EU Member States. There are though less examples of comprehensive coverage of providing toilet and shower facilities for ambulant disabled people and much less for those addressing the needs of children.

With the exception of the above the coverage of available information and guidance is inconsistent across all other access issues that were considered.

Very high returns for no coverage were noticed on several important issues for accessibility including the provision of external lifts, internal and external surface finishes, drop off/pick up points, seating and rest areas, facilities for guide dogs, external and internal lighting, external and internal signage, the provision of travelators, escalators, windows, switches and controls, acoustics, and emergency egress.

Important areas such as accessible first aid facilities and refuse systems and were not covered in any of the countries or areas considered in the study and other important areas such as the provision of furnishings and acoustics were also very sparsely covered.

It is clear when considering the gaps in coverage that the majority of the areas which are covered more comprehensively within the statutory documents are those relate more to addressing the needs experienced by people with physical and mobility impairments when using the built environment. Important areas for other user groups, although also important to people with mobility impairments, such as environmental factors (colour, lighting and acoustics), communications systems (signage and enhanced hearing equipment), and indoor air quality are less well covered, which is so a common picture in regulations across all EU Member States.

The study also considered the provision of regulations with regard to building according to class type or use.

For transport facilities there is little coverage on accessibility in relation to the provision of facilities associated with the use of taxis, buses and airports. There is also very little information relating to the use of parking controls and across all countries considered there is no regulation at all on the accessibility of facilities associated with cycling.

Across other class types and uses there such as hotel, residential, healthcare, leisure, retail, banks etc, the amount of guidance within the regulations on the providing accessible buildings and places is inconsistent, but generally poor across all countries considered. Guidance within the regulations on the provision of accessible gas and petrol stations, listed and historic environments, and rural environments is very poor.

3.3.6.2 National accessibility standards

Only eight European countries – Austria, Denmark, Germany, Ireland, Slovenia, United Kingdom, Norway and Switzerland – have accessibility standards implemented. Depending on the implementation within building regulation or other legislation the importance of the respective standards for planning, public procurement and execution of works is very different. The accessibility standard of Denmark is not referenced in any legislation and therefore of minor importance concerning practical implementation in the built environment.

In contrary, the Austrian accessibility standard has high importance and influence within Austria due to its clear reference in the harmonised building regulation document – OIB Guideline 4 “*Safety in use and accessibility*” which is implemented in seven regional building regulations of seven federal countries. In addition to this concept the so called “state of the art” approach on standardisation gives clear guidance to architects and public procurers to implement all technical requirements in their planning to be on the ‘safe side’ if later any complaints are raised. Due to the authorized status of architects in Austria it is even more recommendable to follow the “shall” requirements in the standard. This is an additional obligation for architects and civil engineers in Austria and comes from the previous history of their professional status that are acting in their whole professional business under oath as an authorized expert and have to follow all legislation issues very strictly. In all contracts and tenders one clause about the “state of the art” concept is included which obliges all parties to follow the standards in each relevant technical field.

In all countries with federal structure we found out that often an unequal approach concerning the level of implementation of accessibility requirements exists although the accessibility standards are implemented on the market – but with much lower importance than all building regulation requirements. We found out that Switzerland and Germany both have their different regional countries, cantons or even communities a very different approach on accessibility which cannot be described easily even by experts. It is always a matter of negotiation in each building project about the amount of requirements on accessibility.

Within the UK, different regulations on accessibility apply in England and Wales, Northern Ireland, and Scotland. Wales will shortly be assuming control of its own building regulations, so there may well be four different regulation documents applicable to the UK.

Currently England and Wales, and Northern Ireland have separate and identifiable building regulations related to accessibility whereas Scotland includes accessibility requirements within its general building standards for domestic and non-domestic buildings. Norway has an interesting advanced standard on Universal Design.

3.3.6.3 Implementation of accessibility requirements within CEN Standardisation

CEN/CENELEC Guide 6 gives guidance on accessibility and 'factors to consider' with functional requirements but is not very well known within CEN/TCs. Some years ago ANEC started a questionnaire among CEN/TCs about knowledge and use of Guide 6. The result was rather disappointing that less than 5% even know the Guide 6 and less are applying it in their standardization development.

One of the main reasons why Guide 6 has no importance is the previous lack in *Construction Product Directive* which has been changed in the new *Construction Product Regulation*. Accessibility was missing in the essential requirement 4 "Safety in use". Therefore no further requirements on accessibility was included in the Interpretative document and no procedure was established due to legal requirements. In other areas of the previous six essential characteristics the CEN Consultant plays an important role in standards development. Without his approval no standard can be proceeded to enquiry. The CEN Consultant checks if all requirements of the different Directives have been respected in the draft of the standard.

The PT A leader has elaborated a report on the implementation of accessibility within CEN/TCs based on the CEN/CENELEC Guide 6 requirements. This study was prepared for ANEC in 2004 and could be used as basis for further updating research. In this study the relevant CEN/TCs are listed and combined with the specific 'factors to consider' based on Guide 6. Further proposals are provided on how these problem could be solved. A short overview is included below in recommendations.

The experts recommend to ask CEN for further guidance in this matter. Due to the new *Construction Products Regulation (CPR)* with inclusion of accessibility to the basic requirement No.4 the approach within European standardization will be changed. More information about recent development will be included after the Open Meeting in cooperation with EC DG ENTR and CEN.

Recommendations

All relevant CEN/TCs should be invited by CEN to explain and confirm how they include necessary accessibility requirements within their published standards and in the development of new standards before enquiry. This could also be done by a CEN Consultant on accessibility issues similar than on other essential characteristics and Directives (Lift Directive, Machinery Directive etc.). If support is needed an accessibility consultant could provide further guidance. As in the environmental field a "help desk" could be established within CEN with a pool of accessibility consultants with expertise in different areas. All convenors and secretariats should attend a seminar/workshop where basic information on accessibility issues is provided and responsibility is strengthened on this essential characteristic.

At the moment it is not quite clear how the Interpretative Document Nr. 4 will be revised to include accessibility accordingly. This should be the basis for further checks. The new accessibility standards - functional and technical - could provide further guidance for all relevant design and product CEN/TCs.

Another point is the application of the Vienna Agreement which could be used to implement the finalized ISO 21542 as a technical report or technical specification within CEN which has no obligation to withdraw existing national accessibility standards. In the meantime the work on a common European accessibility standard can be started immediately based on ISO 21542 and incorporating missing areas from other good reference documents.

3.3.6.4 Conclusions

Gaps exist in the information contained in regulations, standards and guidance across most individual Member Countries. Whilst they were evident in some issues related to the provision of buildings and spaces to meet the needs of people with physical or mobility impairments, in the main the greatest and most obvious gaps were identified in the areas which mainly affect other user groups. These were:

- certain impairments, for example, mental health, learning disabilities, cognitive, allergies;
- the use of the built environment by children and older people; and
- The issues that affect the equality of use of the built environment for people relating to their age, gender, religion, ethnicity, sexual orientation and social grouping.

What is clear from the study is whilst some specifically targeted research projects are needed to develop guidance on such gaps, generally sufficient guidance in EU and non-EU countries around the world already exists to generate, if required, an EU wide guidance document.

3.4 Conclusions View, Findings and Recommendations

3.4.1 Overview

Terms such as 'procurement', 'inclusion', 'accessibility' and 'compliance' are difficult to define precisely, and they are often not fully understood by those responsible for managing or providing the products or environments people use. They are also not readily understood by those administering and triggering the procurement process.

Indeed it was the occurrence of poor delivery of accessibility in publicly funded projects and the reasons why this is occurring that was a major driver in instigating the work undertaken for this project.

Explaining the importance of the above terms and the relationship between them can be difficult as it will vary according to several influencing factors across EU Member States. These include culture, legislation, the availability of guidance and regulation, how it is interpreted, and the expectation of what is to be delivered.

The main thrust of the project was to address why projects relating to the built environment, and especially ones procured through public funding, are being delivered without providing an appropriate level of accessibility for the people who will use them, and especially disabled people.

The project involved an examination of the scope and detail of existing standards, regulations and guidance and the identification of areas where no guidance or standards exist. It addressed how conformity and adherence to standards and regulations is checked and the different types of control systems in use in member states. The project outcome has been to make recommendations for improvements in the delivery of accessible built environments for publicly funded projects.

The project has identified that there is a plethora of available guidance, legislation and enforcement procedures currently available within Member States to ensure appropriate delivery. However, whilst adequate regulations, standards and guidance exist, there are clear and influencing shortcomings in:

- the timing within the procurement process when accessibility and inclusion is identified and introduced;
- the importance, both real and perceived, that the procurement process places on the need to provide appropriate levels of accessibility for any delivered project;
- processes of ensuring conformity assessment;
- procedures for enforcement, including financial and punitive penalties for non-compliance;

- The level of training and knowledge of design professionals, controllers and procurers in accessibility related issues; and
- accreditation systems for access professionals.

Shortfalls in these issues are apparent across all EU Member States considered in the study.

3.4.2 Findings

The findings of the project can be summarised as follows:

3.4.2.1 Legislation, Regulations and Standards

The study has identified that there are many good national regulations, standards and guidance documents available in EU Member States. In fact, if taken all together it appears there is almost an oversupply of information. Some of the information available reflects local or cultural expectations and requirements, which should always be tolerated, even encouraged, rather than subdued.

An overview study of the areas covered by the information available shows that for those physical features, characteristics and use classes of the built environment selected for consideration, the majority of issues that will need at some time to be considered in the delivery of an accessible built environment are covered somewhere in the regulations, standards and guidance across the EU Member States.

Whilst, there are some gaps in the published documents and some additional research and preparation of guidance is necessary, there is also evidence to show that many of the gaps can be filled by good guidance which is currently available in the non-EU Member States that were also examined.

Whilst guidance sources such as ISO also reference associated documents, they do in themselves contain basic good practice guidance within the main document to enable designers to make design decisions without the need, and cost, of obtaining a number of additional publications.

Ensuring that designers and building managers can obtain clear general guidance easily in one document, albeit supported by additional referenced sources where appropriate, must be considered to be an important factor in deciding the adoption of any guidance that will operate EU wide.

3.4.2.2 The Gaps

Through this study we have found there are both gaps and weaknesses in terms of actual coverage of issues and elements in documents.

Gaps or weaknesses may be of three basic kinds:

- Where a **functional requirement for accessibility** is missing from the guidance or requirements, or is only partly considered;
- Where there is no **technical specification** for a built element or building type, or where the specification is incomplete or not well developed.
- Where general principles are given with no firm guidance.

The analysis of documents from all countries has shown some countries have greater coverage of access requirements and specifications than others. This is better understood in terms of variations which relate to a range of different conditions, rather than being simply called “gaps”.

Gaps and weaknesses in national documents are found in relation to functional requirements and in relation to technical specifications.

By definition, we can say that gaps and weaknesses in functional requirements arise because certain user needs have not been considered.

Gaps in technical specifications can occur either because certain building types or environments are not considered, or the specifications do not fully address the activities of the wide range of users who will use the particular environment or part of the building in certain ways.

Across the information available in EU Member States the main gaps identified related to the:

- coverage and existence of credible and useful regulations, standards and guidance for certain impairments, for example, mental health, learning disabilities, cognitive, allergies;
- use of the built environment by children and older people; and
- any regulations are focused on the requirements for buildings, there are large gaps for outdoor built environment

What is clear from the study is whilst some specifically targeted research projects are needed to develop guidance on such gaps, generally sufficient guidance in EU and non-EU countries around the world already exists to generate, if required, EU wide standards and guidance documents.

3.4.2.3 Signposting

The importance, advantages and requirement to consider accessibility and inclusion as part of the procurement process is not signposted sufficiently within the processes adopted in most EU Member States.

In addition, there is no clear signposting or indication of the principles by which the accessibility or usability of a completed building or product can be measured or judged.

3.4.2.4 Conformity and Enforcement

The study has identified that scant regard is paid amongst many EU Member States to conformity assessment and enforcement of legislation, regulation and guidance.

The reasons for this vary with influencing factors including:

- how enforcement is controlled within individual countries; and
- how its importance is perceived.

Variations in approach include those ranging from systems that are totally hands-off throughout the development process once an initial permit to build has been obtained, to a lack of adequate inspection and authorisation of completed works by compliance assessment bodies.

The delivery of an accessible built environment is often considered by those commissioning and delivering buildings and spaces to be an issue that will inevitably incur additional costs. Whilst this is an ill-informed and incorrect approach it is a very real one, and one that is often a much more influential factor in deciding what will be provided than other issues such as enhanced benefits to society.

In most situations, successful compliance with any regulation, standard and guidance will depend upon enforcement and the level of expectation amongst those providing the built environment that transgressions from the regulations will be robustly and effectively challenged.

It is clear from the study that the systems are generally not working in practice and there are clear shortcomings in both of these areas.

However, in order to insist on or expect compliance it is also important to clearly set down or 'signpost' the required and expected parameters within the procurement and delivery process. The study has identified that that is currently not the case.

The study has also identified that there is insufficient incentive (financial or punitive) for those providing the built environment to meet the standards and guidance that already exist. Simply introducing more regulations, mandates or directives or providing additional guidance documents without also addressing the widespread inadequate and ineffective conformity assessment and enforcement processes currently in place is unlikely to improve the situation.

Improved enforcement on its own is unlikely to have any real impact without also signalling at the procurement stage a benchmark by which the acceptability of a delivery will be judged.

It is also clear from the study that the experience, qualifications and professional expertise in accessibility and inclusion of those who are responsible for ensuring compliance or conformity with regulations and standards varies considerably across EU Member States. In most cases training and levels of experience in such issues is inadequate and contributes to the lack of actual accessibility of the finished project.

A move by the EU to develop an EU wide 'competent persons' scheme similar to that currently found in some Member States to establish and monitor professional standards for competence and expertise amongst accessibility professionals could go some way to improving the delivery of accessible built environments.

3.4.3 Recommendations

The study suggests it is possible to create a strategy and underlying ethos that will deliver built environments that are both accessible and sustainable without creating additional financial or bureaucratic burdens on public bodies or the public purse.

It also identifies that if inclusive design is considered as a fundamental and inherent part of the procurement process clear opportunities exist to reduce overall expenditure by eliminating costly re-work and the under-utilisation or inappropriate ordering of deliverables.

To achieve this, the study recommends that:

The EU should instigate the development of:

- 1. A strategy that will adopt principles of inclusive design and establish them as fundamental deliverables of any procurement process for publicly funded projects;**
- 2. Guidance to public procurers as to how to clearly identify the legal requirements for equality and inclusion, how they should be addressed in developing accessible, inclusive built environments, who should be involved in the process and who is responsible for ensuring delivery;**
- 3. Penalties, either financial or punitive, that can and should be used to address any failure to deliver an appropriate level of accessibility for any publicly funded project;**
- 4. An EU wide accreditation system for professionals involved in the delivery of accessible built environments; and**
- 5. A common EU Standard for Accessibility in the Built Environment for all EU Member States, with basic functional requirements and technical specifications**

3.4.4 Proposal and recommendations concerning Mandate 420 – Accessibility Statement

Our interpretation of the Mandate is that the objective is essentially to make the Procurer's work easier and to assist them in ensuring that accessibility and European Design for All standards will be met in future projects addressing the built environment.

We propose that considering and delivering appropriate standards of accessibility should become a fundamental and absolute requirement of the procurement process and in inviting tenders for built environment projects.

The proposed procedure will complement and support the safe and sustainable use of buildings and the built environment.

Secondly, we also propose the development of a set of accessibility related criteria for awarding the contract and later for carrying out conformity assessment.

For design or design & construction projects, (*Works: design & execution*) consideration of accessibility issues must be introduced into the procurement procedure. This can be done using an Accessibility Statement (see below).

For construction only projects, accessibility requirements should have already been taken into account *in the design*, at which time they should also have been described in an Accessibility Statement (see below). This will then be implemented by the contractor.

We believe that those involved in procurement will have limited knowledge and experience of accessibility and inclusion issues and, in our view, it is not necessary for them to be competent persons in the subject.

However, to assist procurers in ensuring that accessibility and inclusion are both appropriately planned for and actually delivered, we also propose that instructions and tools are prepared to identify to them how that can be achieved.

The procurer will have the responsibility to include and require accessibility as part of the project. The justification for this can be in national legislation that has to be followed and the European Directives, which require accessibility. For example, building projects that are co-financed with EU funds must be accessible for all.

In addition to the above Accessibility Statement we also recommend the introduction of an **Access Conformity Certificate (ACC)** which would be issued at the end of a project providing all the elements identified in the initial Accessibility Statement (see below) have been appropriately complied with or addressed.

The person issuing the ACC could be the person who developed the initial Accessibility Statement or an independent qualified access professional or competent person.

Being in receipt of an ACC should be a fundamental and absolute requirement for the issuing of any permission from the building authority to occupy the building.

3.4.4.1 Contract Notice

In Section II, Object of the Contract, the notice shall include a description of any works/services in which accessibility must be taken into account.

In Section IV, Procedure, for procedures based on the most economically advantageous tender,

- Part IV.2 Award Criteria shall include accessibility according to EU Standards as an award criterion, with appropriate weighting.

Therefore, we propose that in relation to accessibility, the award criteria should be based on:

1. The tenderer's accessibility knowledge/expertise,
2. The submission of an appropriate Accessibility Statement based on the EU Accessibility Standards and reflecting the following two points of the Mandate:
 - a) fulfilment of functional requirements/ user groups covered, and
 - b) implementation of the EU Accessibility Standards in the technical solution
(- meeting the technical performance criteria for accessibility).

An Accessibility Statement is a tool that can be used to clearly identify how the consideration of accessibility has or will inform and influence decisions taken in the design process.

It may be structured in a standard template to be used by all bidders. There may also be a general part and a sub-section for specific issues depending on the nature of the project.

A qualified Access Advisor should be responsible for filling in and signing the Accessibility Statement.

The signed Accessibility Statement would be an obligatory document for any building project, which receives EU funding and the Statement must be supplied by the tenderer when submitting a bid.

In procurement of design or design and build projects, the Accessibility Statement can be used as a tool for evaluating competing bids. In the case of procurement of construction works it will be an obligatory document, allowing the procurement to proceed correctly, but the Accessibility Statement will not be used as an award criterion.

The Statement may further be used as a basis to help assess the conformity of the building after completion.

The Statement has to “be signed off” and can then be used for conformity checking. But the accessibility statement itself does not remain “live” as such. For conformity checking there may be an additional document which describes the changes and decisions due to unforeseen situations. The access advisor will check the conformity with reference to the access statement.

The Accessibility Statement is the basis for the Access Conformity Certificate (ACC) which is proposed to be added as a third tool for final checking after completion of the works. The ACC will be introduced to certify all accessibility measures based on the Access Statement and including all unforeseen situations and changes during the building process and should be integral part of the occupancy permit proceedings.

Who is the Access Advisor or Accessibility Expert?

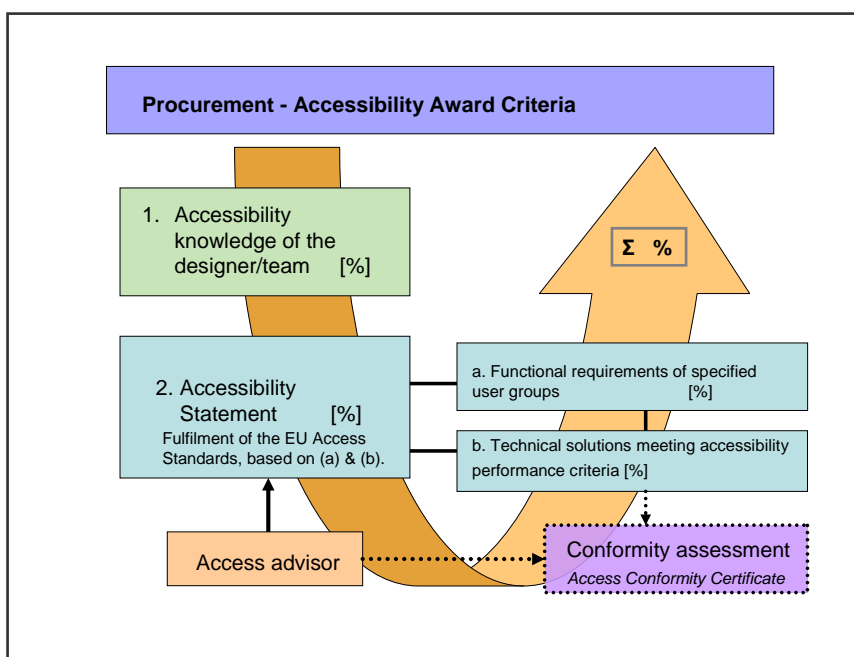
The access advisor/expert has *either*

- a recognised national qualification in accessibility of the built environment, *or*
- proven high level experience in accessibility through completed projects *or*
- taken the European Access Advisors’ Certificate (This could be proposed for development in phase II of the Mandate, as a “support action”).

It is **essential** that access advisors have a recognised level of expertise in order to issue and sign a [European] Accessibility Statement. We propose that the necessary procedures for this should be developed in relation to phase II of the Mandate.

In Diagram 1. below, items that will be used as award criteria are shown with the symbol: [%]. The weighting which is given to each item has not been specified but the Accessibility Statement should be given the greatest importance.

Diagram 1 – Procurement – Accessibility Award Criteria



(Proposed) Input for the Accessibility Statement template, covering (3b) in the above diagram.

Part of the Accessibility Statement will contain a table of references to the EU Standard, showing the building functions and elements.

Table 6 – Proposed model for grading the achieved level of accessibility for each element of a project

	●	●●
	Meets the minimum EU Standard	Exceeds the EU Standard
Elements:		
Ramps		
Doors		
etc.		

The EU Accessibility Standards could be graduated with “minimum” and “better” solutions, making it easier to award points for good or better accessible designs. This will also make the EU Standards more easily applicable to existing buildings. The EU Standards will indicate

- basic accessibility performance criteria, and
- a fixed range of “nice to have” performance criteria, indicating better solutions.

3.4.4.2 Existing buildings

The Accessibility Statement can also be used for the adaptation or extension of existing buildings. The template can be used for assessing design proposals and renovations to buildings or the built environment.

For procurement of renovation of existing buildings/environments, the accessibility should be addressed at the highest possible level.

3.4.4.3 Proposals for the Toolkit (to be developed in phase II of the Mandate)

The Toolkit will be used mainly by procurement officers but also designers and contractors. They will be able to find the functional and technical specifications on the toolkit. These specifications may be used as award criteria in the tenders, or in support of conformity processes.

Contents of Toolkit:

- Short introduction with the philosophy of Design for All and description of the diverse user groups,
- National legislation referring to accessibility (based on the Inventory collected by Project Team A, and continually updated),
- EU Directives referring to accessibility of the built environment,
- The two EU Accessibility Standards:
 - I. Standard functional requirements of specified user groups,
 - II. Standard of technical specifications to meet the functional requirements;
- National /international accessibility guidelines in common use (based on the Inventory collected by Project Team A, and continually updated),
- National / International examples of Good Practice in Accessible Built Environment,
- Template of the *Accessibility Statement* which responds to the EU Access Standards (I and II) – to be used as Award Criteria.

To make the Toolkit user-friendly, parts of the content, e.g. the Introduction, the Good Practices and technical solutions, can be presented in an eLearning programme with text, videos, design drawings and other illustrations.

3.5 Proposal for a standardization work programme

3.5.1 Functional requirements as the basis for planning and design of the built environment

Introduction

Buildings and the built environment must ensure the independence, comfort, health, safety and equal participation of all users. Normally they will accommodate people in all stages of life, from infancy to old age. People who use buildings and the built environment have different needs and abilities. It is essential that designers and planners take into account the requirements of all users so as to support their activities and functions.

Functional requirements for accessibility, as statements of the main demands for an accessible environment, must address the needs which all people have in any given situation. A description of the functional requirements of all users must be available at the planning stage of any built environment, so that the facility will work successfully for everyone. Functional requirements must also reflect the types of activities that the users wish to engage in. The design, construction and management of the built environment are therefore a matter of direct concern to everyone. Procurers of buildings and built infrastructure have a responsibility to ensure that environments are suitable for supporting all users' activities.

Over the past few decades, governments, public authorities, planners and designers have taken steps to provide an accessible built environment by addressing the functional requirements of the wider range of users, including persons with disabilities, and including such requirements in laws, standards and guidelines.

In different EU Member States and regions, and in countries around the world, there is now a wide range of documents containing functional requirements, some of which may be obligatory for designers to use and others only advisory.

Although there is a growing common understanding of the needs of users and their functional requirements regarding accessibility of the built environment, there are many different procedures and approaches to delivering accessibility in the different countries and jurisdictions. Public procurement officers throughout the European Union therefore have different approaches and tools

to address and to demand – or not to demand – accessibility. The implementation of accessibility and the end result have often been considered unsatisfactory or even missing.

Mandate 420

According to the Mandate 420, the consideration of functional requirements in this study has two objectives:

“First, defining a European standard at the level of common **functional** requirements for accessibility in the built environment that can be used for public procurement....

Second defining European standard/Technical specifications that describe the **technical** details to be able to fulfil the above mentioned functional accessibility requirements, for example, the minimum adequate width of a door”.

To reach the first of these objectives, a work programme was carried out by the project team with the following steps:

1. **Inventory:** An inventory of statutory documents, standards and guidelines on accessibility of the built environment was developed, made up of over 300 publications from more than 20 European and non-European countries. This work is presented in [section\(s\) 3](#) and [Annexes F](#) and [G](#).
2. **Inventory analysis:** Documents in the inventory were analysed and classified according to whether they contained functional requirements, technical specifications or both.
3. **User Needs:** A survey of EU member states was conducted using a standard table of user needs which were answered by experts in accessibility of the built environment.
4. **Identification of basic functional requirements:** From the analysis of documents, and experts’ knowledge and interpretation of the data, a set of main functional requirements for accessibility was elaborated. These requirements are described and discussed in relation to the context of developing an EU reference document, that will enable a common approach to public procurement.

These analyses have enabled conclusions to be drawn, leading to proposals for the development of an EU-level document containing common functional requirements for accessibility in the built environment that can be used for public procurement.

The results of this work programme and proposals are presented below.

3.5.1.1 Inventory Analysis

Table 7 below shows the frequency of functional and technical requirements that are present in the collected documents (all countries)

Table 7 – Technical and functional requirements in the collected documents

TYPE OF DOCUMENT	GENERAL LEGISLATION		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE	
	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical
Totals	74	39	40	36	58	58	52	74	126	125

The functional requirements are statements of the main demands for an accessible environment. Documents in the inventory may include functional requirements, technical specifications or both.

In about 2/3 of the countries, functional requirements are stated in laws dealing with accessibility in planning and design.

In building codes, technical regulations and guidelines, functional and technical requirements are found in almost equal numbers of documents.

In Standards about 50% more documents refer to technical specifications than those documents that refer to functional requirements.

3.5.1.2 Consideration of user needs in statutory and advisory documents

A table was produced in order to collect information from national rapporteurs in EU member states, identifying which target groups (and thus their user needs) are covered in the legislation on accessibility in each country.

Experts were asked to indicate which user needs are covered in the national legislation, standards or other guidance documents. These answers indicated, for each country, whether coverage of the user needs for each target group was covered, partly covered or not covered. This provided an overview of the strengths, gaps and weaknesses in the coverage of different types of user needs in the EU Member States.

Table 8 below shows the categories of users.

Table 8 – Table of User Needs

People using a wheelchair
People with walking difficulties
People with reduced manual dexterity / arm function / strength
People with vision impairments / blind
People with hearing impairments / deaf
People with Intellectual / cognitive / mental impairments
People with allergies
People with diversities in age and stature

These broad categories of target groups were chosen, based on a review of user categories frequently mentioned in the Inventory documents and the expert team's knowledge of the field. The list aims to cover the wider range of user needs related to accessibility and therefore it includes the main types of functional impairments.

Although some people might argue that this classification is a product of a "medical" model of disability and therefore inappropriate, we believe that functional requirements for accessibility can only be defined and addressed in the design process, once there is full recognition of the range of abilities and limitations of disabled persons in any given environment. Designers need to have knowledge and guidance about the range of challenges and possibilities which users have in the built environment, and for this it is essential to specify the functional requirements of persons who have different disabilities and bodily stature.

Within the category of "Diversities in age and stature", older people and children are included, as well as people who are very short or tall or obese. In particular, for older people, which is a growing proportion of the population, their needs are also widely covered by the other categories, taking into account the range of impairments they may acquire, (including motor functions – co-ordination, balance, strength, stamina - sight, speech, hearing, understanding, etc...).

An overview of the target groups of users addressed in statutory and guidance documents, by countries, is shown in table 9 below.

Table 9 - Coverage of User Needs in European and EFTA countries and International (including ISO/FDIS 21542, USA, Canada)

User Needs (indicated for each country with complete, partly or not covered: c/p/n and indicated with colours green/ yellow/ red)	Inter-national			EU countries																								EFTA					
	ISO/FDIS 21542	ADA - USA	CANADA	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	Liechtenstein	Norway	Switzerland
People using a wheelchair	c	c	c	c	c		c	c	c		p	c	c	c	c	c	c		c	p	c	c	c	c	p		c	c	c	c		c	c
People with walking difficulties	c	c	c	c	c		c	c	c		p	c	c	c	c	c	p			p	c	c	c	c	p		p	c	c	c		c	c
People with reduced manual dexterity / arm function / strength	c	p	c	c	p		p	p			n	c	c	p	c	c	n			p	c	n	c	c	p		p	c	c	p		c	c
People with vision impairments / blind	c	p	c	c	p		c	c	c		p	c	c	c	p	c	c		c	p	c	n	c	p	p		n	c	c	c		c	c
People with Hearing impairments / deaf	c	p	c	c	p		p	c	p		p	c	c	p	p	c	n		c	p	c	n	c	p	n		p	p	c	p		c	c
People with Intellectual / cognitive / mental impairments	c	p	c	p	p		p	p	p		n	c	n	p	n	p	p		n	p	p	n	c	n	n		p	p	c	p		c	p
People with allergies	p	n	c	n	p		n	n	p		n	n	n	n	n	p	n		n	n	n	n	n	n	n		n	p	p	n		c	n
People with diversities in age and stature	c	p	c	c	p		c	c	p		p	p	p	c	n	p	p			n	n	n		p	n		n	p	p	c		c	c

The table above shows categories of users in the left-hand column and countries across the top. Scores in the cells of the table indicate the degree of coverage of user needs for each EU and EEA country, and USA and Canada, on each user category, based on statutory documents, standards and guidelines. The key shows whether user needs are covered:

- c = complete,
- p = partly or
- n = not covered

with corresponding colours: green/ yellow/ red.

The coverage of user needs in the ISO/FDIS 21542 document are shown, for comparison, since it is a widely accepted document, internationally. Also, USA and Canada are shown because their documents are also well-known and very detailed.

The results show that the best coverage of user needs in rank order is as follows:

Table 10 – Coverage of user needs in each target group

	Target groups / User Needs	Coverage		
		c	p	n
1	People using a wheelchair	25	3	0
2	People with walking difficulties	22	5	0
3	People with vision impairments / blind	19	7	2
4	People with hearing impairments / deaf	13	11	3
5	People with reduced manual dexterity / arm function / strength	13	10	3
6	People with diversities in age and stature	9	11	6
7	People with intellectual / cognitive / mental impairments	6	15	7
8	People with allergies	2	6	20

Out of the 27 responding countries plus ISO/FDIS 21542, the target group with the best coverage is “people using a wheelchair”, followed by people with walking difficulties and “vision impairments / blind”.

“People with allergies” are covered least and also “people with intellectual / cognitive / mental impairments” are less well considered.

Countries which address the needs of most target groups comprehensively are: Canada, Norway, Austria and Switzerland.

ISO/FDIS 21542 is also comparable to Canada and Norway, with a comprehensive coverage of all target groups except “people with allergies”.

These results broadly confirm the experts’ impression that the main concern of laws, standards and guidance for accessibility of the built environment focuses on wheelchair users and ‘persons with reduced mobility’. This perception is also present in the population in general. The fact that many disabilities and long-term health conditions are in “hidden” (from view) may contribute to a lack of awareness of these issues by lawmakers and others who prepare design standards and guidance.

3.5.1.3 Identification of basic functional requirements

The Project team has examined current documents containing functional requirements for accessibility in order to develop a framework for an EU reference document that will provide a common approach to public procurement of accessible built environments.

3.5.1.4 Structure and content of the functional requirements

It has been mentioned above that functional requirements are organised and presented in different ways in the documents studied. They vary according to:

- the overall approach taken⁵
- the scope of the requirements, (completeness of the functional requirements in connection with the needs, activities and functions of users)
- the method of presentation of requirements (in terms of linguistic style and design of the content for ease-of-use by the designer).
- the connection between functional requirements and technical specifications.

Therefore a proposal for a common approach is needed, building on “best practice” documents, having a sound structure and integrating the best basic functional requirements.

Gaps and weaknesses

It was noted that are gaps and weak points in current documents and poorly served target groups, which need to be addressed in the **common document**. These gaps are:

- **Functional requirements for people with allergies.** It has been shown very few countries address the target group of people with allergies. Consequently there are few examples of functional requirements suitable for their needs. Requirements are considered necessary for this category as the number of people with allergies is increasing rapidly due to a variety of factors including pollution, indoor climate problems, etc. From the inventory, only 1 document has comprehensive coverage of indoor climate, 5 have partial coverage and the rest of the countries gave no answer or answered “none”.
- **Functional requirements for people with cognitive / intellectual / mental impairments** are covered only partly or not at all in majority of countries studied. Requirements are considered necessary for this category of users, also because they apply as well to increasing numbers of older people with memory loss or dementia, visitors who do not speak the local language, etc.
- **Functional requirements for children** are very infrequent in statutory and guidance documents. From the inventory only 6 documents have comprehensive coverage, 21 have partial coverage and 28 have no requirements for children’s interior or exterior play areas. Of course, there are some functional requirements related to needs of other target groups, which can assist children’s access and use of the built environment, such as those for people with walking difficulties, people with reduced manual dexterity, etc.

3.5.1.5 Additional parameters contributing to accessibility of the built environment

In addition to the gaps above, we have also identified other factors that are not widely addressed as such, but which must be considered in design, due to the way human activities and life conditions are rapidly changing.

Allergies are increasingly common, working life and conditions are changing, with the increased use of new technologies and devices; large numbers of people are travelling, we live in increasingly ‘smart’ environments. In 2010, for the first time in history, more than 50% of the world population lives in cities.

⁵In some countries, the functional requirements are defined as 'basic actions' such as motion, grasp and manipulation, location and communication – MGLC- (abbreviated as DALCOCriteria in Spanish), and similar criteria in Switzerland. Since the approach of most countries is to define functional requirements in relation to ‘user needs’, we have chosen not to use ‘basic actions’ as the unit of our analysis or proposals.

With respect to these trends and challenges, we suggest it is necessary to include certain general parameters in functional requirements that will contribute to and guarantee an improved accessible environment for all. These parameters are:

- **Equitable access and use of the built environment by all persons**
- **Health, safety in use of buildings, environments, equipment**
- **Comfort in the built environment.**

Equitable use implies that the functionalities to be included in an EU common reference document must be addressed to all users, not only disabled users. By accommodating the needs of all disabled users, then the needs of the whole population will also be covered.

We propose that the EU might require studies of **safety and accessibility for all**, for building projects, (similar to an environmental study which places requirements on energy-saving, use of sustainable materials, etc).

The concept of “Accessibility and safety in use” has already been introduced in the revised EC “Construction Product Regulation” (89/106/EEC”).

Comfort relates to the ease and enjoyment of environments and the limitation of unwanted noise, pollutants, and other sources of disturbance. Limiting physical and emotional stress should be important targets for an accessible environment.

It is likely that, by taking these three parameters into account, the economic viability of buildings and other built environments will be increased, as will the well-being and security of the users.

Targets for a common EU document

The proposed functional requirements document should aim to establish:

1. A common language for the description, design and management of accessibility in the built environment
2. A common set of requirements for planning and design
3. Functional requirements that are broadly based (inclusive of the widest range of user needs), both for economic and social reasons

3.5.1.6 Proposal for a unified EU document containing functional requirements

A unified EU document containing functional requirements is proposed, with a specific approach suitable for design, procurement and management of accessible built environments and buildings.

The contents of the common document should include:

<p>A user guide to the document</p> <p>Scope and purpose</p> <p>Terms and definitions</p> <p>-----</p> <p>An introduction to accessibility</p> <p>The list of target groups and user needs</p> <p>The set of basic functional requirements for accessibility</p> <p>Sub-sets of specific requirements contributing to each main functional requirement</p> <p>A set of built environment elements</p> <p>A list of building/environment types and their related built environment elements</p> <p>References</p>
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<p><u>(Accompanying documents / other formats)</u></p> <p>Technical Specifications Manual Examples of design solutions</p> <p>Online Toolkit</p>
--

The basic functional requirements should act as a “guide” which takes the designer or procurer to the necessary solution (i.e. technical specifications) which is needed in relation to an element or set of elements.

With the structure and contents outlined above, a “toolkit” can be designed (in accordance with Mandate phase II) with a database and various workflows to allow different persons (roles) to participate in the procurement and design process.

As stated earlier, the common document must address the needs of the main target groups.

3.5.1.7 Proposed main target groups:

Table 11 – Target groups with user needs

Target groups / User Needs
People using a wheelchair
People with walking difficulties
People with vision impairments / blind
People with hearing impairments / deaf
People with reduced manual dexterity / arm function / strength
People with diversities in age
People with diversities in stature
People with learning difficulties / mental impairments
People with allergies

Within each of these target groups certain users are also covered, for example:

Table 12 – Target groups including other sub-groups

Target groups / User Needs	Including sub-groups...
People using a wheelchair	Parents with pushchairs People carrying luggage People using rollators
People with walking difficulties	Pregnant women Some older people Children
People with vision impairments / blind	Some older people
People with hearing impairments / deaf	Some older people People in noisy environments
People with reduced manual dexterity / arm function / strength	Children Some older people People with long-term health conditions
People with diversities in age	Children Older people

People with diversities in stature	People who are very short Children People who are very tall People with obesity
People with learning difficulties / mental impairments	People who do not understand the local language
People with allergies	

3.5.1.8 Proposed EN standard with basic functional requirements

The proposed basic functional requirements for the common EU document are shown below :

Proposed list of basic functional requirements

- 1. Equitable and safe use of outdoor areas**
- 2. Equitable and safe approach to a building**
- 3. Equitable and safe entry via the same entrances**
- 4. Equitable and safe use of the same paths in horizontal circulation**
- 5. Equitable and safe access to the same paths in vertical circulation**
- 6. Equitable and safe use of the same rooms**
- 7. Equitable and safe use of the same equipment and facilities**
- 8. Equitable and safe use of toilet and sanitary facilities**
- 9. Equitable and safe exit and evacuation routes, concepts for emergency planning**
- 10. Equitable and safe communication and orientation via two or more senses***
- 11. Equitable and safe use of facilities and buildings for their intended purpose**
- 12. Equitable and safe protection from environmental hazards, indoors and outdoors**

* Provided through two or more senses, using auditory, visual or tactile means

It should be noted that the list of basic functional requirements addresses the major considerations of access to and use of the built environment. Within each of these basic requirements, it is proposed that sub-sets of specific requirements should be developed in connection with the use of each area or element of a building / built environment. For example:

Equitable and safe use of outdoor areas

- 1.a. Equitable and safe in exterior pedestrian traffic routes
- 1.b. Equitable and safe, access and use in outdoor areas for rest and recreation
- 1.c. Equitable and safe access and use of pedestrian crossing points
- etc.

Documents which have this type of structure, with detailed functional requirements are listed as references, below. Examples of such documents include:

1. GUDC draft standard (which uses the term "strategies")
2. ISO ...- use clauses 3.etc.

It is important to note that functional requirements cannot stand by themselves as the *only* demands (or advice) for design and procurement of buildings or environments which are to be accessible. It is not advisable to give a unified list of functional requirements without specifying the set of built environment elements which they relate to.

Furthermore there shall be an additional document with technical specifications which are intended to support the functional requirements. Phase II of the mandate should include the development of technical specifications, leading from the functional requirements.

3.5.1.9 Proposed EN standard with technical specifications for built environment elements

A proposed list of elements for the built environment is based on the list of ISO/FDIS 21542 elements.

Why we need to propose a unified document for the EU accessibility document (to be developed in phase II).

Through our analysis of a wide range of documents and country reports, it is clear that the same issues are dealt with using similar approaches but there are different priorities, policies, terminology, and ways of understanding and working. Also, experts from different countries and different backgrounds view things differently. National Standards are not easily transferred to a pan-European level and the way they address issues is unlikely to satisfy users from many countries and cultures or EU public procurement – and EU policy in general – there is a need for a common basic reference document which can contribute to a common understanding about the functional requirements and specifications that are needed. Also, in a new document, as opposed to an existing national Standard, certain (newer) issues can be introduced to support accessibility, such as safety in use and sustainable development.

What we propose and which documents to build on:

First, we propose the functional requirements for accessibility to be presented as one ‘Standard’, which procurers can use/refer to. This can be an independent document or the first part of a general document which also contains technical specifications.

The functional requirements will be taken from the ISO document with some modifications.

The document will be supported by our tables and further analysis, as required, including the functional requirements related to the user needs, and building elements.

We propose to use ISO as the basis for the EU document because:

- It is providing requirements to create a sustainable built environment which is accessible for all.
- It is not a “national” document – with the ‘issues’ these can have, and
- It has been so far accepted by many countries. Many MS have been involved in developing this standard and have had opportunity to discuss and comment on the requirements. It also means that the document is quite wellknown in many MS.

For the issues which ISO does not cover at all, (outdoor environments, etc.) we will propose one or more documents which have been found to cover the elements adequately.

3.5.2 Proposal for an EN standard/Technical Specification describing all technical details based on the functional accessibility requirements

In the overview table all aspects, building elements, facilities and building types are listed with ISO 21542 comprehensive, partial or no coverage or if only coverage with other European national or non-EU good reference standards.

This traffic light model - applied in the whole report - gives a clear picture about

- the provisions that already exist in areas identified as "GREEN" as recommended by the teams,
- the provisions to be conspired to define the areas identified as "YELLOW",
- a description of the expected content of the non yet existing provisions identified as "RED".

Table 13 – Coverage with ISO/FDIS 21542

c	comprehensive
p	partial
n	not

Table 14 – Use of font colours in Table 15

Black	ISO standards Building aspects, building elements, building uses ...
Clear Red	comprehensive coverage by EN standard
Brown	comprehensive coverage by any national European standard
Blue	comprehensive coverage by non-EU country standard

Table 15 – Proposals for an EN standard/Technical Specification for phase II

CEN 207 document proposals	Referenced Documents/Guidance ¹
External Environments and Approaches to Buildings	
Access Routes and Approaches	ISO 21542
Gradients and Ramps	ISO 21542
Steps and Stairs	ISO 21542
Handrails	ISO 21542
External Lifts	ISO 21542, EN 81-70,
Surface Finishes	ISO 21542, CSA B651, BS 8300
Crossing Points, Tactile Paving, and Dropped Kerbs	ISO 21542, RACyL D217/2001, CSA B651
Drop Off/Pick Up Zones	ISO 21542, BS 8300, CSA B651
Car parking	ISO 21542
Obstacles on a path and Street Furniture	ISO 21542
Seating and rest areas	ISO 21542
Facilities for Guide Dogs	ISO 21542
Signage and Wayfinding (external - audible)	ISO 21542, BS 8300
Signage and Wayfinding (external - tactile)	ISO 23599
Signage and Wayfinding (external - visual)	ISO 21542
Lighting (external)	BS 8300, CSA B651
Internal Environments	Internal Environments
Entrances	ISO 21542
Reception Areas, counters, desks and ticket offices	ISO 21542
Security Provisions	CSA B651

CEN 207 document proposals	Referenced Documents/Guidance ¹
Storage Facilities	BS 8300, CSA B651
Circulation Routes	ISO 21542
Manoeuvring space requirements	ISO 21542
Lobbies	ISO 21542
Internal Doors	ISO 21542
Windows	ISO 21542
Passenger Lifts	ISO 21542
Passenger Lifts for existing buildings	ISO 21542, EN 81-70, EN 81-82
Platform Lifts / Lifting Platforms	ISO 21542, EN 81-40
Stairs	ISO 21542
Ramps	ISO 21542
Escalators	ISO 21542
Travelators	ISO 21542
Handrails	ISO 21542
Sanitary facilities for ambulant disabled people (Toilets/Showers/Changing)	ISO 21542
Sanitary facilities for wheelchair users (Toilets/Showers/Changing)	ISO 21542
Sanitary facilities for other users – e.g. Children, enlarged WCs, etc. (Toilets/Showers/Changing)	ISO 21542
First Aid Facilities	ÖNORM B 1602, CSA B651
Surface Finishes	ISO 21542, CSA B651, BS 8300, RACyL D217/2001
Glazing and Manifestations/markings	ISO 21542
Colour Contrasts	ISO 21542
Signage and wayfinding (interior – audible)	ISO 21542, BS 8300, RACyL D217/2001
Signage and wayfinding (interior – visual)	ISO 21542
Signage and wayfinding (interior – tactile)	ISO 21542
Lighting (interior)	ISO 21542 maintained? ¹ , BS 8300, CSA B651
Acoustics	ISO 21542, BS 8300, RACyL D217/2001
Audible Communication Systems	ISO 21542, CSA B651, RACyL D217/2001
Switches, Outlets and controls	ISO 21542
Emergency Egress Requirements	ISO 21542
Refuse systems	ISO 21542, DIN 18040-2:2011-XX, CSA B651
Furnishing (seating, desks, etc)	ISO 21542
Indoor climate	ÖNORM B 1600? To be determined ¹
Transport Facilities	Transport Facilities
Bus Facilities	BS 8300 plus additional UK documents, RACyL D217/2001, CSA B651
Rail Facilities	EN TSI-PRM
Taxi Facilities	ISO 21542, BS 8300, RACyL D217/2001, CSA B651
Airport Facilities	RACyL D217/2001

CEN 207 document proposals	Referenced Documents/Guidance ¹
Car Parking (including number, dimensions and access)	ISO 21542
Parking Control	ISO 21542, RACyL D217/2001, CSA B651
Cycle Parking	CSA B651, DIN 32984:2000-05; Draft DIN 32984:2010-02
Specific Building Uses	Specific Building Uses
Office, Conference and Meeting Areas	ISO 21542, BS 8300, CSA B651
Kitchen/Refreshment (including bars, pubs and restaurants, tea points and vending machines)	ISO 21542, BS 8300, CSA B651
Hotels, student accommodation, etc	ISO 21542, RACyL D217/2001, 2010 ADA, CSA B651
Residential	ISO 21542, RACyL D217/2001, DIN 18040-2, CSA B651,
Sport	ISO 21542, RACyL D217/2001, BS 8300, CSA B651
Auditoriums, concert halls and similar	ISO 21542, BS 8300
Education	BS 8300 suggested ¹ , RACyL D217/2001, CSA B651
Healthcare	To be determined ¹ , RACyL D217/2001, CSA B651
Library	BS 8300 suggested ¹ , RACyL D217/2001, CSA B651
Leisure Attractions/Entertainment	2010 ADA, RACyL D217/2001, CSA B651
Retail	2010 ADA to be considered ¹ , RACyL D217/2001, CSA B651
Industrial	BS 8300, RACyL D217/2001, CSA B651
Shared space	RACyL D217/2001, CSA B651
Public Plaza	RACyL D217/2001, CSA B651
Waterfront Environments (beaches, paths, cabins)	RAA D293/2009, CTE/AutonomyDec
Child Play Areas (interior and Exterior)	2010 ADA ¹ , CSA B651
Judicial Facilities, Detention Facilities or Correctional Facilities	2010 ADA ¹ , RACyL D217/2001
Bank, Post Offices, ATM's	ISO 21542, BS 8300
Laboratories	BS 8300, ÖNORM B 1602
Gas/Petrol Stations	BGR 181
Religious	BS 8300, RACyL D217/2001
Listed/Historic Buildings	INTERNATIONAL BUILDING CODE
Rural Environments	RACyL D217/2001, to be determined
Ports	to be selected , 2010 ADA (partly covers ports) ¹
<p>NOTE ¹: When double checking and comparing document excerpts in phase II, it is possible that the recommended reference documents for some elements or building uses may be changed. In some cases ISO 21542 may be maintained as the most appropriate source of guidance, while other reference documents may be added or removed, depending on the in-depth analysis.</p>	

3.5.3 Proposed documents for phase II: References to the explicit details in ISO 21542 and other guidance documents

In table 16 below the references to the explicit details in ISO 21542 and to the characteristics of the additional guidance are presented. Texts are not provided in full due to copyright and lengths of texts but all references to the different numbers of relevant paragraphs.

Additionally the traffic-light model has been applied for each building element or building uses:

• comprehensive coverage within ISO 21542 is indicated with GREEN
• partial coverage with ISO 21542 is indicated with YELLOW
• where no coverage exists in ISO, the field is indicated with RED

Table 16 - Overview of “Proposed Documents” for phase II with references to explicit details in ISO 21542 and other guidance documents

Built environment element	Documents proposal for phase II	References to the explicit details in ISO 21542 and other guidance documents ¹
External Environments and Approaches to Buildings	External Environments and Approaches to Buildings	
Access Routes and Approaches	ISO 21542	ISO 21542: 5, 5.1, 7.1-7.7,
Gradients and Ramps	ISO 21542	ISO 21542: 8, 9
Steps and Stairs	ISO 21542	ISO 21542: 7.8 – 7.11
Handrails	ISO 21542	ISO 21542: 7.12
External Lifts	ISO 21542	ISO 21542: 6.8.3
Surface Finishes	ISO 21542, CSA B651, BS 8300	ISO 21542: 6.6, 6.7, 7.1, 7.2 CSA B651: Annex D: Potential for slip on floor and tread finishes. BS 8300: 9.1.Surface finishes, 9.1.1. Visual characteristics, 9.1.2. Materials and acoustic design, 9.1.3. Floor surfaces, 9.1.4. Wall surfaces, 9.1.5. Glazed walls and screens
Crossing Points, Tactile Paving, and Dropped Kerbs	ISO 21542, RACyL D217/2001	ISO 21542: 6.7, 8.2, 7.3, 7.13 RACyL D217/2001: Article 23. Pedestrian kerb cuts, Article 24. Pedestrian crossings, Article 25. Crossings for entry and exit of vehicles, Article 26. Pedestrian flyovers, Article 27. Underpasses for pedestrians, Article 34. Protection and signaling works and scaffolding use in public spaces,
Drop Off/Pick Up Zones	ISO 21542, BS 8300	ISO 21542: 6.4 To be determined in phase II
Car parking	ISO 21542	ISO 21542: 6.1, 6.2, 6.3, 6.5
Obstacles on a path and Street Furniture	ISO 21542	ISO 21542: 7.14
Seating and rest areas	ISO 21542	ISO 21542: 21.3, 23.1,

Built environment element	Documents proposal for phase II	References to the explicit details in ISO 21542 and other guidance documents ¹
Facilities for Guide Dogs	ISO 21542	ISO 21542: 30
Signage and Wayfinding (external - audible)	ISO 21542, BS 8300	ISO 21542: 7.2, 40 To be determined in phase II
Signage and Wayfinding (external - tactile)	ISO 23599	ISO 21542: 6.5, 6.8.2, 40, Annex A ISO 23599: whole standard
Signage and Wayfinding (external - visual)	ISO 21542	ISO 21542: 6.5, 6.8.2, 40, Annex A
Lighting (external)	ISO 21542, BS 8300, CSA B651	ISO 21542: 33, 35
Internal Environments	Internal Environments	Internal Environments
Entrances	ISO 21542	ISO 21542: 10
Reception Areas, counters, desks and ticket offices	ISO 21542	ISO 21542: 19, 36,8,
Security Provisions	CSA B651	To be determined in phase II
Storage Facilities	ISO 21542, BS 8300	ISO 21542: 29 BS 8300: 10.1 Storage facilities, 10.1.1 Provision of storage facilities, 10.1.2 Access to storage facilities, 10.1.4 Fittings for storage facilities, 10.1.5 Visibility of storage facilities, 12.1.4 Storage units accessible to wheelchair users, 12.8.7.2 Wardrobes and storage systems
Circulation Routes	ISO 21542	ISO 21542: 11, Annex C
Manoeuvring space requirements	ISO 21542	ISO 21542: 11.3, 11.4
Lobbies	ISO 21542	ISO 21542: 10.8
Internal Doors	ISO 21542	ISO 21542: 18 – 18.2
Windows	ISO 21542	ISO 21542: 18.3
Passenger Lifts	ISO 21542	ISO 21542: 15
Passenger Lifts for existing buildings	ISO 21542	ISO 21542: 15
Platform Lifts / Lifting Platforms	ISO 21542	ISO 21542: 16
Stairs	ISO 21542	ISO 21542: 13
Ramps	ISO 21542	ISO 21542: 8
Escalators	ISO 21542	ISO 21542: 17
Travelators	ISO 21542	ISO 21542: 17
Handrails	ISO 21542	ISO 21542: 14, 8.5
Sanitary facilities for ambulant disabled people (Toilets/Showers/Changing)	ISO 21542	ISO 21542: 26.2

Built environment element	Documents proposal for phase II	References to the explicit details in ISO 21542 and other guidance documents ¹
Sanitary facilities for wheelchair users (Toilets/Showers/Changing)	ISO 21542	ISO 21542: 26.3-26.13
Sanitary facilities for other users - e.g. Children, enlarged WCs, etc. (Toilets/Showers/Changing)	ISO 21542	ISO 21542: 26.6, 26.16-26.18
First Aid Facilities	ÖNORM B 1602	To be determined in phase II
Surface Finishes	ISO 21542, CSA B651, BS 8300	ISO 21542: 31 CSA B651: Annex D: Potential for slip on floor and tread finishes. BS 8300: 9.1.Surface finishes, 9.1.1. Visual characteristics, 9.1.2. Materials and acoustic design, 9.1.3. Floor surfaces, 9.1.4. Wall surfaces, 9.1.5. Glazed walls and screens
Glazing and Manifestations/markings	ISO 21542	ISO 21542: 18.1.5, 18.1.6
Colour Contrasts	ISO 21542	ISO 21542: 15.4.4, 17, 18.1.1, 18.1.7, 18.1.5, 35, 36,5
Signage and wayfinding (interior - audible)	ISO 21542, BS 8300	ISO 21542: 30.2, 32, 39, 40 To be determined in phase II
Signage and wayfinding (interior - visual)	ISO 21542	ISO 21542: 6.8.2, 30,2, 36.5, 39, 40, 41
Signage and wayfinding (interior - tactile)	ISO 21542	ISO 21542: 30.2, 36.5, 39, 40, 41
Lighting (interior)	ISO 21542 maintained?	ISO 21542: 19.5, 33, 38.3.2, To be determined in phase II
Acoustics	ISO 21542, BS 8300	ISO 21542: 32 To be determined in Phase II
Audible Communication Systems	ISO 21542, CSA B651	ISO 21542: 21.1, 32.3, 39.3 To be determined in phase II
Switches, Outlets and controls	ISO 21542	ISO 21542: 36
Emergency Egress Requirements	ISO 21542	ISO 21542: 34, 38
Refuse systems	ISO 21542, DIN 18040-2:2011-XX	ISO 21542: 36.11 To be determined in phase II
Furnishing (seating, desks, etc)	ISO 21542	ISO 21542: 37
Indoor climate	To be determined	To be determined in phase II
Transport Facilities	Transport Facilities	Transport Facilities
Bus Facilities	BS 8300 plus referenced UK documents	To be determined in phase II
Rail Facilities	EN TSI-PRM	All TSI requirements and standards to be referenced.
Taxi Facilities	ISO 21542, BS 8300	ISO 21542: 5.1 BS 8300: 4.1 Designated on-street parking, 4.5 Setting-down and picking-up points, 13.3.3. Shops, supermarkets

Built environment element	Documents proposal for phase II	References to the explicit details in ISO 21542 and other guidance documents ¹
		and shopping malls: 13.3.3.2 Arrival
Airport Facilities	RACyL D217/2001	RACyL D217/2001: Article 37. Airports, heliports and stations for public transport of travellers: 1. access, 2. rooms and facilities and 3. platforms
Car Parking (including number, dimensions and access)	ISO 21542	ISO 21542: 6 To be determined in phase II
Parking Control	ISO 21542, RACyL D217/2001	ISO 21542: 6.9 To be determined in phase II
Cycle Parking	DIN 32984:2000-05; Draft DIN 32984:2010-02	To be determined in phase II
Specific Building Uses	Specific Building Uses	Specific Building Uses
Office, Conference and Meeting Areas	ISO 21542, BS 8300	ISO 21542: 19.5, 20, 22 To be determined in phase II
Kitchen/Refreshment (including bars, pubs and restaurants, tea points and vending machines)	ISO 21542, BS 8300	ISO 21542: 24, 28, 29 To be determined in phase II
Hotels, student accommodation, etc	ISO 2154, 2010 ADA	ISO 21542: 26, 27 To be determined in phase II
Residential	ISO 21542, CSA B651	ISO 21542: 26 To be determined in phase II
Sport	ISO 21542, BS 8300	ISO 21542: 21, 26 BS 8300: 13.7. Sports related buildings, 13.7.1. General, 13.7.2. access for disabled spectators, 13.7.3. Access for disabled people who are participants or competitors in sports events, 13.7.4 Swimming pools
Auditoriums, concert halls and similar	ISO 21542, BS 8300	ISO 21542: 21, 23, 33.8 BS 8300: 11.3 Audience seating, 11.3.1 Provision of wheelchair spaces in audience seating, 11.3.2 Access to audience seating, 11.3.3 Visual clarity and orientation, 11.4 Lecture and conference facilities, 11.4.2 Access to lecture and conference facilities, 11.4.3 Design for raked floors, 11.4.4 Sight lines, 11.4.5 Types of seating in lecture and conference facilities, 11.4.6 Ancillary equipment in lecture and conference facilities
Education	BS 8300 suggested	BS 8300: 11.4 Lecture and conference facilities, 11.4.1 Provision of wheelchair spaces in lecture and conference facilities, 11.4.2 Access to lecture and

Built environment element	Documents proposal for phase II	References to the explicit details in ISO 21542 and other guidance documents ¹
		conference facilities, 11.4.3 Design for raked floors, 11.4.4 Sight lines, 11.4.5 Types of seating in lecture and conference facilities, 11.4.6 Ancillary equipment in lecture and conference facilities, 11.4.7 Study spaces, 11.4.8 Reading distance and size of lettering, 11.4.9 Visual clarity and orientation, 11.4.10 Acoustics, 13.9. Educational, cultural and scientific buildings, 13.9.1. General, 13.9.2. Accessible routes and spaces
Healthcare	To be determined	To be determined in phase II
Library	BS 8300 suggested	BS 8300: 11.1 Counters and reception desks, 13.9.4 Reading and studying in libraries
Leisure Attractions/Entertainment	2010 ADA	2010 ADA: 206.2.9 and 234 Amusement Rides, 206.2.10 and 235 Recreational Boating Facilities, 206.2.14 and 237 Fishing Piers and Platforms, 206.2.11 Bowling Lanes., 206.2.13 and 236 Exercise Machines and Equipment, 206.2.15 and 238 Golf Facilities, 206.2.16 and 239 Miniature Golf Facilities
Retail	2010 ADA to be considered	To be determined in phase II
Industrial	BS 8300	BS 8300: 13.2 Industrial buildings, 13.2.1 General, 13.2.2 Access routes in industrial buildings, 13.2.3 Toilet accommodation, 13.2.4 Storage of hazardous materials in industrial buildings, 13.2.5 Equipment in industrial buildings
Shared space	RACyL D217/2001	To be determined in phase II
Public Plaza	RACyL D217/2001	To be determined in phase II
Waterfront Environments (beaches, paths, cabins)	RAA D293/2009	To be determined in phase II
Child Play Areas (interior and Exterior)	2010 ADA, Network Info Child Playgrounds	2010 ADA: 240 Play Areas, 240.1 General, 240.1.1 Additions, 240.2 Play Components
Judicial Facilities, Detention Facilities or Correctional Facilities	2010 ADA	2010 ADA : 203.7 Detention and Correctional Facilities, 232 Detention Facilities and Correctional Facilities, 808 Courtrooms, 808.4 Judges' Benches and Courtroom Stations, 807 Holding Cells and Housing Cells, 807.2 Cells with Mobility Features, 807.3 Cells with Communication Features
Bank, Post Offices, ATM's	ISO 21542, BS 8300	ISO 21542: 19, 36.8 To be determined in phase II

Built environment element	Documents proposal for phase II	References to the explicit details in ISO 21542 and other guidance documents ¹
Laboratories	BS 8300	BS 8300 : To be determined in phase II
Gas/Petrol Stations	BGR 181	BGR 181 : To be determined in Phase II
Religious	BS 8300	BS 8300 : 13.8 Religious buildings and crematoria, 13.8.1 General, 13.8.2 Places of worship, 13.8.3 Crematoria and cemetery chapels
Listed/Historic Buildings	International Building Code	International Building Code : To be determined in phase II
Rural Environments	To be determined	To be determined in phase II
Ports	2010 ADA partly covers ports	2010 ADA : 235 and 1003 Recreational Boating Facilities, 235.2 Boat Slips, 235.3 Boarding Piers at Boat Launch Ramps

NOTE ¹: Due to time constraints and some translation requirements the list of reference clauses is not complete. This work will continue during the public consultation period and a revised version will be presented at the Open Meeting.

All documents from table 15 and 16 are listed below in table 17 with full title and number:

Table 17 – All listed documents in tables 15 and 16 with number and title

	Indication	Title of standard / regulation
ISO	ISO 21542	Accessibility and usability of the built environment
	ISO/DIS 23599	Assistive products for blind and vision impaired persons -- Tactile walking surface indicators
EN Standards / EU Regulations	EN 81-40	Stairlifts and inclined lifting platforms intended for persons with impaired mobility
	EN 81-41	Safety rules for the construction and installation of lifts — Special lifts for the transport of persons and goods — Part 41: Vertical lifting platforms intended for use by persons with impaired mobility
	EN 81-70	Safety rules for the construction and installation of lifts – Particular applications for passenger and good passenger lifts Part 70 - Accessibility to lifts for persons including persons with disability
	EN 81-82	Improvement of the accessibility of existing lifts for persons including persons with disability
	EN 115-1	Safety of escalators and moving walks - Part 1: Construction and installation
	EN TSI-PRM	Technical specification for interoperability for Persons with Reduced Mobility
European MS Standards / Regulations	BS 8300	Design of buildings and their approaches to meet the needs of disabled people – Code of practice
	CTE/AutonomyDec	Código Técnico de la Edificación
	DIN 32984:2010-02	Ground surface indicators in public traffic areas

	Indication	Title of standard / regulation
	DIN 18040-2	Construction of accessible buildings - Design principles - Part 2: Dwellings
	ÖNORM B 1600	Barrier-free construction - Design principles
	RAA D293/2009	Reglamento que regula las normas para la accesibilidad en las infraestructuras, el urbanismo, la edificación y el transporte en Andalucía
	RACyL D217/2001	Reglamento de Accesibilidad y Supresión de Barreras en Castilla y León
	BGR 181	Fußböden in Arbeitsräumen und Arbeitsbereichen mit Rutschgefahr
International	ADA 2010	ADA Standards for Accessible Design
	CSA B651	Canadian Standards Association - CSA B651 Accessibility of the Built Environment Standard
	INTBUILDING CODE	International Building Code

3.5.3.1 Final conclusions for the EN standardisation programme on accessibility

The referenced documents above, built up on ISO/FDIS 21542 requirements are proposed as a baseline structure for the technical requirements for the future European standard/Technical Specification/Technical Report on accessibility of the built environment which describe the range of minimum technical details to comply with the functional requirements.

Generally ISO/FDIS 21542 covers most of the building elements **comprehensively** which are relevant for basic accessibility requirements in the built environment. It has to be considered that the difference between comprehensive and partial coverage with ISO 21542 is not so high and it is sometimes a question of personal interpretation if comprehensive or partial coverage has been chosen in the questionnaire.

3.5.3.1.1 Comprehensive coverage of building elements by ISO 21542

External environment:

- Access Routes and Approaches
- Gradients and Ramps
- Steps and Stairs
- Handrails
- Car parking
- Obstacles on a path and Street Furniture
- Seating and rest areas
- Facilities for Guide Dogs
- Signage and Wayfinding (external - visual)

Internal environment

- Entrances
- Circulation Routes
- Maneuvering space requirements
- Lobbies
- Internal Doors
- Windows
- Passenger Lifts
- Stairs

- Ramps
- Escalators
- Moving Walks
- Handrails
- Sanitary facilities for ambulant disabled people (Toilets/Showers/Changing)
- Sanitary facilities for wheelchair users (Toilets/Showers/Changing)
- Sanitary facilities for other users - e.g. Children, enlarged WCs, etc. (Toilets/Showers/Changing)
- Glazing and Manifestations/markings
- Signage and wayfinding (interior - visual)
- Switches, Outlets and controls
- Emergency Egress Requirements
- Furnishing (seating, desks etc.)

Different building uses:

- Office, Conferences and Meeting areas

3.5.3.1.2 Partial coverage of building elements by ISO 21542

For building elements where partial coverage has been indicated several “good documents” have been referred to in the tables above. These documents can provide further guidance for completion of the requirements within ISO 21542.

These are the building elements where some improvements could be made on the basis of other “good documents” referred in the tables above.

External environment with partial coverage:

- External lifts
- Surface Finishes
- Crossing Points, Tactile Paving and Dropped Kerbs
- Drop Off/Pick Up Zones
- Signage and Wayfinding (external – tactile)
- Lighting (external)

Internal environment:

- Security Provisions
- Storage Facilities
- Passenger lifts for existing buildings
- Platform lifts/Lifting platforms
- Surface finishes
- Signage and wayfinding (interior - audible)
- Lighting (interior)
- Acoustics
- Audible Communication Systems
- Indoor climate

Traffic facilities

- Car Parking
- Parking Control
- Rail Facilities

Different building uses:

- Kitchen, refreshment
- Hotel, student accommodation
- Sport
- Auditorium, concert halls etc.
- Education

- Healthcare
- Library
- Retail
- Industrial
- Shared spaces
- Judicial Facilities, Detention Facilities
- Bank, Post Offices, ATMs
- Laboratories
- Gas-/Petrolstations
- Listed/Historic buildings

We had several discussions in Team A about the fact if all these different building uses are really necessary. What kind of additional specific provisions are requested if all general requirements on accessibility based on ISO 21542 are fulfilled? In phase II of the Mandate 420 this could be further developed.

3.5.3.1.3 Non-coverage of requirements by ISO 21542

Non-coverage of requirements by ISO 21542 lead to the recommendation of existing national standards from European Member states and/or other non-EU standards as “good documents” (ref.doc.). Only for ports no existing document could be found.

Building elements (external and internal environment):

- Signage and Wayfinding (external audible) – ref. doc. BS 8300
- First Aid facilities – ref. doc. CSA B651
- Refuse system – ref. doc. DIN 18040-2 and/or CSA B651

Traffic facilities:

- Bus – ref.doc: RACyL D217/2001 and/or CSA B651
- Taxi – ref.doc: RACyL D217/2001 and/or CSA B651
- Airport – ref.doc: RACyL D217/2001 and/or CSA B651)
- Cycle parking – ref.doc.: DIN 32984, and/or CSA B651)

Specific building uses:

- Residential – ref. doc. RACyL D217/2001 and/or CSA B651
- Leisure attraction – ref. doc. RACyL D217/2001 and/or CSA B651
- Public Plaza – ref. doc. RACyL D217/2001 and/or CSA B651
- Waterfront environment (e.g. beaches) – ref. doc. RAA D293/2009 and/or CTE/AutonomyDec
- Child play areas – ref. doc. CSA B651
- Religious – ref. doc. RACyL D217/2001
- Rural areas – ref. doc. RACyL D217/2001
- Ports (Marine) – no reference document available

Conclusions

With these recommended reference documents plus ISO 21542 a complete framework of existing standards for accessibility requirements in the built environment can provide clear short term guidance and is also the basis for the future standards development programme within CEN.

In phase II of the Mandate 420 a final list of all necessary building elements, facilities and building uses should be further developed. .

4 Team B – Analysis of existing conformity assessment schemes of the buildings and products meeting accessibility requirements for the built environment

4.1 General consideration

The built environment is not easily defined. In the context of this report the term is used to refer to everything that is man-made that provides a setting for human activity, ranging in scale from personal shelter to neighbourhoods to large scale civic surroundings. Built environment can include everything from roads and transport infrastructure to pitches and arenas for sports and leisure activities. As an activity it starts with the decision to build and it proceeds through many stages which involve many players, processes and activities before finally reaching completion. Even following completion the accessibility of the built environment is greatly influenced by how it is managed and maintained.

Thus, the accessibility of the built environment cannot be assessed as a whole without paying attention to each phase that defines it.

For this report we have grouped these phases under the following headings:

- Inception
- Design
- Construction
- Completion
- Use & Maintenance

In each of these phases different participants perform the many activities necessary to obtain the desired outcomes: defining the requirements, employing the service providers, conducting feasibility studies, designing and detailing, obtaining statutory consents, tendering, monitoring, controlling, constructing, handing over, using, managing and maintaining the end product. In order to assess how and where accessibility requirements are best inputted and controlled to ensure a successful outcome it is necessary to analyse in each phase how and where accessibility can be addressed and what the most significant factors are.

The concepts for conformity assessment used in this analysis, as applied to the built environment, are those provided by the ISO 17000 series of standards. It has to be mentioned that this series of standards was developed for trade purposes to be used in the framework of the free trade agreement. Experience with the application of such standards began more than 20 years ago with a series of guides developed by CASCO which was initially a policy committee within ISO and not a standardization one. The EU used these guides to support its new approach to permit the free movement of goods within the European market. This subsequently became the EN 45000 standards series.

Due to the growth of trade and the effectiveness of such documents in trading, ISO changed the status of CASCO to a standardization committee and began the development of the ISO 17000 series.

The background to the concepts used in the analysis is given because these have to be adapted for application to the built environment. Built environment is not a commodity that is traded or developed as serial products are. Built environment is an outcome of a design that is unique, has a life cycle of several decades and is used by people in every country.

In the framework of ISO 17000 series, the conformity assessment activities include **testing, certification, inspection** and accreditation of conformity assessment bodies. According to ISO 17000, conformity assessment activities can be performed by first party, second party and third party.

In the EU another type of conformity assessment is also used: project approval. This concept was introduced by the New approach Directive and it is specifically for complex conformity modules. Others Directive such TSI-PRM have also used modules to express the assessment of conformity but in a different way than New Approach.

Internationally recognised practice has proven that certification and accreditation of conformity assessment bodies are activities that can be performed only by third parties.

Certification is one of the conformity assessment elements that is relevant in the case of construction products for those that are covered for the type 1, 1+, 2 and 2+. The construction products relevant for accessibility in the built environment are not included in these modules. The majority of the construction products relevant to accessibility in the built environment have to comply with module 4 and have to provide a declaration of conformity with essential requirements.

Another category of products incorporated in the built environment that requires certification includes lifts/elevators. In their case, the existing directive includes, type tests and project approval as well as certification and quality management.

A further third party conformity assessment is inspection and this is the most usual way to assess and attest conformity in the building sector.

The first party activities of conformity assessment are the self declaration of conformity based on internal controls of the business and on adequate checks and tests. In the case of the built environment this kind of activity is performed particularly for the design/planning phase. It is also increasingly used for the construction and completion phases where the costs associated with effective third party certification and approvals have limited their application. For construction products that are covered by former CPD, now CPR, self declaration of conformity will be used with the new requirements which take effect from 1 July 2013.

Sometimes, for this type of conformity the term “self-certification” is incorrectly used. Any certification that involves an attestation of conformity must be performed by independent persons in order to assure the independence and impartiality of the process. In the case of first party conformity assessment, those performing the assessment, issue also the attestation of conformity (in this case a declaration) and they undertake the liabilities for their product.

The new approach directive was supported by a directive regarding manufacturer liabilities for products put on the market. In 2010, CEBC – the Consortium of European Building Control issued a report regarding the use of “self-certification” in the building sector which covered self declaration throughout the whole construction process not only to the assessment of accessibility in the built environment.

4.2 Conformity assessment fundamentals

4.2.1 Standards about conformity assessment

Products and services are mainly promises that are transformed into reality at the end of the procurement and delivery process. Business customers, consumers, users and public officials have expectations about products and services relating to features like quality, ecology, safety, economy, reliability, compatibility, interoperability, efficiency and effectiveness. The process for demonstrating that these features meet the requirements of standards, regulations and other specifications is called **conformity assessment**. In brief, conformity assessment is the process used to ensure that products and services deliver on their promises.

The World Trade Organisation Agreement on Technical Barriers to Trade (WTO/TBT Agreement) was established to ensure that technical regulations and standards, and the procedures for assessing conformity with them, do not create unnecessary obstacles to international trade. Successive reviews of the TBT Agreement have noted the usefulness of ISO/IEC conformity assessment standards and guides in harmonising conformity assessment practice and as benchmarks for the technical competence of assessment bodies so that credibility and confidence in their results can be obtained. ISO/IEC’s conformity assessment work therefore helps to overcome trade barriers.

Practitioners and users of conformity assessment from around the world have pooled their knowledge and experience to produce a series of standards and guides setting out current best

practice. These standards and guides are produced through the ISO Committee on conformity assessment, ISO/CASCO, and form what is known as the “CASCO toolbox”.

Table 18 – ISO 17000 seria

Subject	Document	Title
Vocabulary, principles and common elements of conformity assessment	ISO/IEC 17000:2004	<i>Conformity assessment — Vocabulary and general principles</i>
Code of good practice for conformity assessment	ISO/IEC Guide 60:2004	<i>Conformity assessment — Code of good practice</i>
Drafting normative documents for use in conformity assessment	ISO/IEC 17007:2009	<i>Conformity assessment — Guidance for drafting normative documents suitable for use for conformity assessment</i>
Testing/calibration	ISO/IEC 17025:2005	<i>General requirements for the competence of testing and calibration laboratories</i>
	ISO/IEC 17043:2010	<i>Conformity assessment — General requirements for proficiency testing</i>
Inspection	ISO/IEC 17020:1998 ^a	<i>General criteria for the operation of various types of bodies performing inspection</i>
Supplier's Declaration of Conformity (SDoC)	ISO/IEC 17050-1:2004	<i>Conformity assessment — Supplier's declaration of conformity — Part 1: General requirements</i>
	ISO/IEC 17050-2:2004	<i>Conformity assessment — Supplier's declaration of conformity — Part 2: Supporting documentation</i>
Product certification	ISO/IEC Guide 23:1982 b	<i>Methods of indicating conformity with standards for third-party certification systems</i>
	ISO/IEC Guide 28:2004 b	<i>Conformity assessment — Guidance on a third-party certification system for products</i>
	ISO/IEC Guide 53:2005 b	<i>Conformity assessment — Guidance on the use of an organization's quality management system in product certification</i>
	ISO/IEC Guide 65:1996 b	<i>General requirements for bodies operating product certification systems</i>
	ISO/IEC Guide 67:2004 b	<i>Conformity assessment — Fundamentals of product certification</i>
Management system certification	ISO/IEC 17021:2006	<i>Conformity assessment — Requirements for bodies providing audit and certification of management systems</i>
Certification of persons	ISO/IEC 17024:2003 b	<i>Conformity assessment — General requirements for bodies operating certification of persons</i>
Marks of conformity	ISO Guide 27:1983 b	<i>Guidelines for corrective action to be taken by a</i>

Subject	Document	Title
		<i>certification body in the event of misuse of its mark of conformity</i>
	ISO/IEC 17030:2003	<i>Conformity assessment — General requirements for third-party marks of conformity</i>
Accreditation	ISO/IEC 17011:2004	<i>Conformity assessment — General requirements for accreditation bodies accrediting conformity assessment bodies</i>
Mutual Recognition Arrangements (MRAs)	ISO/IEC Guide 68:2002	<i>Arrangements for the recognition and acceptance of conformity assessment results</i>
Peer assessment	ISO/IEC 17040:2005	<i>Conformity assessment — General requirements for peer assessment of conformity assessment bodies and accreditation bodies</i>
a Currently under revision.		

4.2.2 Conformity assessment overview

Definition of conformity assessment

For the purpose of this project, the terminology of the standards listed in terminology section will be used. It is, however, recognized that some of the terms are used in everyday language in a broader sense and with a wider range of meanings. It is recognized that Member States may implement conformity assessment standards in different ways but this will introduce market fragmentation. All stakeholders will benefit from both harmonised technical requirements and harmonised means of demonstrating conformance with those requirements.

Conformity assessment

The standard EN ISO/IEC 17000 defines conformity assessment as “a demonstration that specified requirements relating to a product, process, system, person or body are fulfilled”.

The expression “object of conformity assessment” or “object” s used throughout EN ISO/IEC 17000 to encompass any particular material, product (including service), installation, process, system, person or body to which conformity assessment is applied. In the context of this report an object of conformity assessment is typically a product.

In the case of the built environment, and for the purpose of the analysis of conformity schemes, the objects of conformity are construction works and construction products used in building, public spaces and shared areas, and transport infrastructure)

Typically, conformity assessment involves:

A set of specified requirements that are the reference for assessment

A procedure for assessing conformity against the requirements

An attestation that fulfillment of the requirements has been demonstrated.

In general, conformity implies that all requirements shall be fulfilled. Permissible exclusions are defined in some specifications, e.g. certification against ISO 9001.

A conformity assessment system is a set of “rules, procedures and management for carrying out conformity assessment”. A conformity assessment scheme is a “conformity assessment system related to specified objects to which the same specified requirements, rules and procedures apply”. This means that a conformity assessment scheme is the application of a conformity assessment system to a specific situation in which the type of objects (products) and the requirements are always

the same. For instance, an example of a conformity assessment system would be third party attestation (certification), whereas its application to libraries, based on library accessibility guidelines, would be one of the available conformity assessment schemes.

Conformity assessments may be performed by different parties, as described in the following.

First party assessment

A first party assessment is done by a supplier, manufacturer or service provider to attest the fulfilment of specific requirements. The assessment is done by the supplier, manufacturer or service provider based on first or third party services.

Second party assessment

A second party assessment is done by a second party, usually the buyer or user of the product. Mostly, this term applies to a company controlling its subcontractors.

Third party assessment

ISO/IEC 17000 defines “third party conformity assessment activity” as “performed by a person or body that is independent of the person or organization that provides the object and of user interests in that object”. The third party conformity assessments are certification and inspection. The key concepts of a third party assessment in the standards are “independent” and “impartial”. Relevant standards are EN 45011 for UE, now under revision and transformation as ISO 17065 specifying general requirements for bodies operating product certification systems and EN ISO/IEC 17020 specifying general criteria for bodies performing inspection. The difference between inspection and certification is explained below.

Third party assessment is used by a manufacturer or service supplier to provide maximum confidence in its products/processes

Assessment by accredited bodies

A conformity assessment body of any type (first, second and third) can apply for accreditation. Accreditation is the procedure by which an authoritative body gives formal recognition that a body or person is competent to carry out a specific conformity assessment. Conformity assessment bodies seek accreditation when they need an independent third party to assess and declare their competence. However, conformity assessment bodies may comply with the relevant requirements without having to be accredited. The requirements for accreditation are stated in the respective standards EN ISO/IEC 17020, EN ISO/IEC 17025 and EN 45011. These requirements are very detailed and concern organization, competence, independence, impartiality and general principles for how to carry out reliable conformity assessments.

4.2.3 Functional model of conformity assessment

EN ISO/IEC 17000 uses a functional model to illustrate how conformity assessment systems may be set up. It is comprised of four functions: selection, determination, review and attestation, and surveillance (Figure 5). Below is a short description of the four functions as they are presented in EN ISO/IEC 17000.

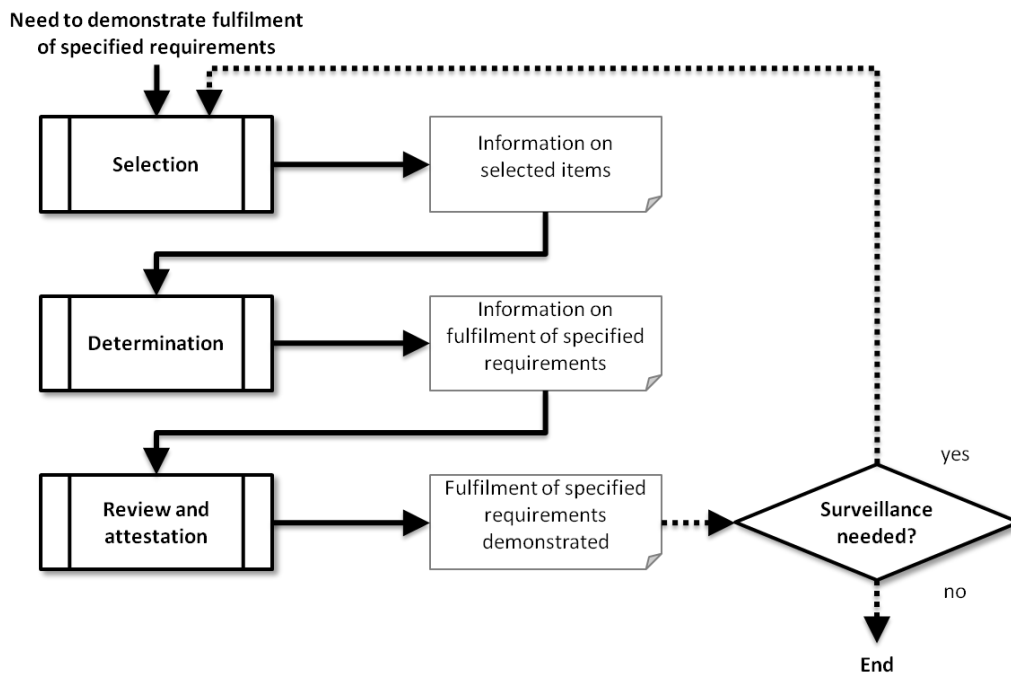


Figure 5 - The functional model of conformity assessment (EN ISO/IEC 170000:2004)

The first function is *selection*, and it involves planning and preparing activities in order to collect or produce all the information and input needed for the subsequent determination function. This includes selecting the object of conformity assessment (sampling may be necessary to select a part of the entire object that is representative of the whole), consideration of the specified requirements and choice of the most appropriate procedures to be used for determination activities. Figure 5 represents all the information, samples (if sampling is used), decisions and other output from the selection function as “information on selected items”.

The second function is *determination*. Determination includes the activities that are undertaken to develop complete information regarding fulfilment of the specified requirements by the object of conformity assessment or its sample. Some examples of determination activities are testing, inspection, audit and peer assessment. Figure 5 represents all the output from the determination function as “information on fulfilment of specified requirements”. The output is a combination of all the information created by the determination activity, as well as all the input to the determination function. The output is usually structured to facilitate review and attestation activities.

The third function is *review and attestation*. Review constitutes the final stage of checking before taking the important decision as to whether or not the object of conformity assessment has been reliably demonstrated to fulfil the specified requirements. Attestation is the conformity statement, usually presented in a form that most readily reaches all of the potential users. Figure 5 represents all the output from the review and attestation function as “fulfilment of specified requirements demonstrated”.

The fourth function is *surveillance*. Conformity assessment can end when attestation is performed. In some cases, however the assessment functions may need to be systematically iterated to maintain the validity of the statement resulting from attestation. User needs drive such activities. For example, an object of conformity assessment may change over time. This could affect its continuing fulfilment of specified requirements. The activities undertaken in surveillance are planned in order to satisfy the need to maintain the validity of an existing statement resulting from attestation. To satisfy this need, a complete repeat of the initial assessment is not usually necessary in every iteration of the surveillance. Thus, during surveillance, the activities in each function illustrated in Figure 5 may be abridged, or different from, the activities undertaken in the initial assessment.

Selection: requirements

EN ISO/IEC 17000 defines a specified requirement as a “need or expectation that is stated”. Specified requirements may be stated in normative documents such as regulations, standards and technical specifications.

Determination

The determination can be carried out in many ways. ISO/IEC 17000 defines two types of activities aimed at developing full information regarding the fulfilment of the specified requirements by the object concerned: testing and inspection.

Testing is defined as the “determination of one or more characteristics of an object of conformity assessment, according to a procedure”. The requirements given in EN ISO/IEC 17025 are applicable to testing laboratories. When testing laboratories have (or need) to demonstrate their competence to conduct specific tests and choose a third party accreditation body, the requirements of EN ISO/IEC 17025 are applying.

Inspection is defined as the “examination of a product design, product, process or installation and determination of its conformity to specific requirements or, on the basis of professional judgment, general requirements”. The requirements given in EN ISO/IEC 17020 are applicable to inspection bodies. When inspection bodies have (or need) to demonstrate their competence to conduct inspections and choose a third party accreditation body, the requirements of EN ISO/IEC 17020 apply.

Review and attestation: statements

After an assessment is finished, a review shall be carried out to check that all the activities involved are suitable, adequate and effective. EN ISO/IEC 17050 recommends and EN 45011 obliges (clause 4.2(f)) the review to be carried out by person(s) other than those who made the determination. Based on a decision following the review, a statement can be issued assuring that fulfilment of the specified requirements has been demonstrated. EN ISO/IEC 17000 refers to this issued statement as an attestation.

The attestation can be made by the supplier. In the context of conformity assessments, the stakeholder that places the product onto the market is called the first party. Therefore, this is a first party attestation, also called declaration. A customer or user, the second party, can also issue an attestation. When an attesting person or organization is independent of both the supplier and the customer, this person or organization is referred to as a third party. The manufacturer or service provider is still responsible for conformance with requirements, even if a third party is involved in the assessment.

These attestations are described in the following.

First party attestation

A first party attestation is a statement issued by a supplier or manufacturer, based on a decision following review, that fulfillment of specific requirements has been demonstrated. The decision and the review are made by the supplier or manufacturer. The supplier may refer to assessments, if any, made by other first, second or third parties, but the supplier is entirely responsible for the attestation.

Supplier’s declaration of conformity

A supplier’s declaration of conformity (SDoC) is a first party attestation with details compliant with the standard EN ISO/IEC 17050. Part 1 of EN ISO/IEC 17050 contains general requirements. Part 2 specifies supporting documentation, i.e. information on how the attestation is carried out. Anyone should be able to repeat the attestation and arrive at the same result using this information. A SDoC may be based on first or third party determination.

Second party attestation

A second party declaration is an attestation of conformity issued by a second party, usually the buyer or user of the product. Mostly, this term applies to a company controlling its subcontractors or a large buyer or government agency carrying out the assessment itself.

Third party attestation

EN ISO/IEC 17000 defines certification as “third party attestation related to products, processes, systems or persons”. A keyword here is “independent”. The standard defines “third party conformity assessment activity” as “performed by a person or body that is independent of the person or organization that provides the object and of user interests in that object”. Applicable standards that include criteria for bodies that performed audits and certification are EN ISO/IEC 17021 for management systems, ISO/IEC 17065 for products as well as ISO/IEC 17020 for inspection. The difference between the two is explained below.

Certification

Both EN ISO/IEC 17021 as well the future ISO/IEC 17065 specify general requirements for bodies operating audits and certification of systems and products. A requirement is stated that a certification body shall not supply or design products of the type it certifies, and not give advice or provide consultancy services to the applicant (the party applying for a certificate) as to methods of dealing with matters. These practices are contrary to the requirements of independence and would be barriers to obtaining certification. In a certification process, the determination activities are separate from review and attestation activities. Determination activities could be, in a certification process, tests, project approval and/or auditing. Also, the certification process includes surveillance during a certification period. These activities are described in the certification schemes. A certification granted provides presumption of conformity with the reference for the whole certification period which is normally 3 years.

Inspection

The ISO/IEC 17020 standard specifies general criteria for the operation of several types of bodies performing inspection. The standard specifies general criteria for the competence of impartial bodies performing inspection irrespective of the sector involved. It also specifies independence criteria. In the case of inspection, the review and attestation activities are performed by the same persons that performed the determination activities. In this case, the determination activity is inspection that could involve measurement or assessment of the tests results. A report of inspection provides presumption of conformity with the reference only for the products or for the works inspected.

Difference between inspection and certification

Generally, inspection involves direct determination of the conformity of unique —often complex or critical— products or small series of products with specific or general requirements, whereas product certification primarily involves determination of the conformance of products manufactured in long series and for an interval, to specific requirements. While the inspection of products in use (in-service inspection) is a well-established discipline, there is no such thing as certification (ISO/IEC Guide 65) of products in use (from [IAF, 2004]). “Products in use” means individual instances of a product, purchased and used by a customer.

The IAF/ILAC *Guidance on the Application of ISO/IEC 17020* provides a clear description of the differences between inspection (ISO/IEC 17020) and product certification (ISO/IEC Guide 65), as shown in the table below.

Table 19 – Differences between inspection and product certification

Activity	Inspection	Product Certification
Nature of operation	Inspection of individual products, and not necessarily by third party (direct determination of conformance)	Certification of series of products and always by third party (indirect determination of conformance)
Conformity	Examined against standards or other normative documents and/or general requirements	Assessed against standards or other normative documents
Assurance	Report provides condition at the time of inspection	Certification normally provides continuing assurance of compliance
Decisions	No need for separation of those taking inspection decisions from those performing inspection	Certification decisions taken by a different person(s) from those who have carried out evaluation
Issuing of licenses	No licenses issued	Grants license to suppliers to issue certificate
Marking of products	Marks put only on products covered by inspection	Marks may be put on a certified product under license
Surveillance	Only where required in order to support inspection	Normally necessary to provide continuing assurance of compliance
In-service inspection of products	Always by inspection	Not by product certification

Accredited attestation

A conformity assessment body (testing laboratory, inspection or certification body) can apply for accreditation to ask its competence recognition and thus produce accredited attestations.

An overview of conformity assessment activities and the responsibilities of the parties involved are presented below:

Table 20 – Overview of conformity assessment activities

Conformity assessment system or scheme	Document	Party performing conformity assessment			Functional approach			Surveillance (when needed) ^b	Result
		First party	Second party	Third party	Selection stage	Determination stage	Review and attestation stage		
Supplier's declaration of conformity	ISO/IEC 17050	✓	-	-	??✓	??✓	✓	-	Declaration
Certification of products	ISO/IEC Guide 65	-	-	??✓?	??✓	??✓	✓	✓	Certificate
Certification of management systems	ISO/IEC 17021	-	-	??✓	??✓	??✓	✓	✓	Certificate

Conformity assessment system or scheme	Document	Party performing conformity assessment			Functional approach			Surveillance (when needed) ^b	Result
		First party	Second party	Third party	Selection stage	Determination stage	Review and attestation stage		
Certification of persons	ISO/IEC 17024	—	—	☑☑	☑☑☑	☑☑☑	☑	☑	Certificate
Inspection	ISO/IEC 17020	☑ ☑	☑☑☑	☑☑☑	☑☑☑	☑☑☑	☑	—	Report
Testing / calibration	ISO/IEC 17025	☑ ☑☑	☑☑☑	☑☑☑	☑☑☑	☑☑☑	☑	—	Report

a. At present, ISO and IEC do not have specific International Standards or Guides for second-party conformity assessment systems. Second-party conformity assessment systems can be developed to rely on first-party declarations, third-party attestations and certification, or second-party acceptance criteria.

b. Surveillance is part of the conformity assessment system and not an external market surveillance activity.

4.3 Identification and analysis of the accessibility assessment schemes within building control schemes for building, public spaces and shared areas

The statistics on building control reveal that very few schemes are based on standards, the majority only relating to regulations or guidance documents. From a standardization point of view the situation points to

- The need to develop schemes relating to standards. This is a very important issue in phase II, if a new EN accessibility standard is to play a significant role at all.
- The importance of EN standards in backing up regulations

A very important secondary conformity mechanism exists in several countries, namely when a Disability Discrimination Act or similar is in place which urges building owners to comply with a National accessibility standard. Characteristically, this type of conformity mechanism

- Resides outside of normal control procedures and schemes,
- Seems to be one of the most important factors for actually using standards in procurement of buildings, new as well as existing ones.

It should be stressed, therefore, that

- The importance of a full set of mechanisms, including a discrimination act or similar legislation, should not be underestimated.

4.3.1 European experience and practices – EU member states and EFTA

In each European country a building control system is in place which assures the fulfillment of essential requirements for buildings. Generally the essential requirements are broadly similar to CPD and include:

- Mechanical Resistance and Stability
- Safety in case of Fire
- Hygiene, Health and the Environment
- Safety in Use (added 'accessibility' due to new CPR)

- Protection against Noise
- Energy Economy and Heat Retention

In some European countries where have been adopted acts regarding the accessibility of the persons with disability or an anti-discrimination, the building control systems include requirements for accessibility.

Depending on the country and system of control, accessibility may be included as part of the Hygiene, Health and the Environment requirement or as part of the safety in use requirement.

The actual analysis of the systems for accessibility assessment for building, public spaces and shared areas is based both on the data received via checklists (16 EU MS and EFTA and 3 from Australia, Canada and USA) and from data provided by CEBC 2007 study "Access for All in Europe".

More than 65 assessment schemes were reported. The most frequently indicated were the inspection schemes managed by the national building authorities.

4.3.1.1 Analysis based on types of conformity schemes

The conformity assessment schemes for which data was obtained have been categorized under the types:

- Building control authority scheme
- Supplier self-declaration
- Certification or accreditation of suppliers
- Third party certification
- Others, especially regarding a dedicated reference to accessibility requirements that are included in standards or specification agreed to national level

Table 21 – Conformity assessment scheme types

Scheme type	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Others
Total	40	10	9	20	18

Data collected during M 420 phase I for the purpose of the analysis of the existing conformity assessment schemes are presented in [Annex H.1](#)

Findings:

- Building control authority schemes dominate, using as reference accessibility requirements included in laws and regulation
- Third party certification is reported in only 7 countries (Belgium (8 schemes), Austria, Latvia, Romania, Spain and UK (1), Denmark (2), Ireland (3))
- First party conformity assessment schemes for accessibility exists in some countries (Belgium (2), Ireland and Denmark (4)), due to legislation that in certain circumstances allows this kind of assessment.
- Only two schemes are reported to be based on standards. In the case of Austria certification schemes exist for ONORM 16010, and in Spain a certification scheme exists for UNE 17001, a standard for management of the accessibility within a company.
- Countries like Belgium, Ireland, Netherland Spain and UK reported more than one inspection schemes

- The conformity schemes reported by Belgium cover different aspects of accessibility and are based on their federal experience.
- In the case of Romania and Latvia, certification schemes are reported for lifts. These also exist in other countries but have not been reported.
- Others accessibility schemes are reported as follow; Austria, Germany, Ireland and UK (1), Greece (4) and Belgium (9).

The functional approach of conformity according to ISO 17000 includes the following phases:

1. Selection
2. Determination
3. Review and attestation
4. Surveillance

The involved parties in the conformity assessment scheme have to agree the reference and appropriate guidelines for the process in the selection phase. Normally the owner and/or administrator of the conformity assessment scheme develops the scheme based on an international/European/recognized standard or regulation.

The second phase is determination where the activities are performed that allows assessment of the object of conformity, in our situation: building, shared spaces and public area. In the case of building control schemes, determination activity is inspection and this provides a greater presumption of conformity than a self declaration. In the case of self declaration the credibility and expertise of the person who issued the self declaration is extremely important: the owner, the developer or a designated consultant on their behalf.

In both situations – building control scheme and self declaration - the training and education of the person that performs both determination activities and attestations are paramount.

Another specific of the schemes used in the built environment is that the attestation is granted almost forever. In fact, the outcome of the construction works has a life cycle of decades. Over the lifespan of a building few surveillance activities are performed by Building Control Authorities and those performed are mostly due to claims. A second approach to monitoring the accessibility performance of buildings is the use of accessibility labels and/or the awards. These tools can significantly improve the level of awareness of accessibility requirements and they are very important in the case of improving the accessibility of the existing buildings. The situation of accessibility labels and award is presented in 4.3.2.

In the case of conformity assessment schemes of accessibility, team B has also considered that it is useful to present an approach to the determination activities used during the final assessment process based on the built environment elements as identified by team A. Normally, these kinds of determination activities are performed at the end of the construction phase.

Table 22 – Relationship between built environment elements, parameter to assess and determination activities in case of building completion

CEN 207 Inventory	Parameter to assess	Determination activities/ device used
Built Environment Elements		
External Environments and Approaches to Buildings		
Access Routes and Approaches	<ul style="list-style-type: none"> ▪ No steps or obstacles ▪ Dimensions: width, slope, passing and turning spaces. + Surface finishes, signage, external lighting 	<ul style="list-style-type: none"> – Visual inspection – Tape-line, angle measurer,
Gradients and Ramps	<ul style="list-style-type: none"> ▪ Dimensions: width, horizontal landing, slope and length + Handrail and guards + Tactile walking surface indicator 	<ul style="list-style-type: none"> – Tape-line, angle measurer – Visual inspection – Gradient meter

CEN 207 Inventory Built Environment Elements	Parameter to assess	Determination activities/ device used
Steps and Stairs	<ul style="list-style-type: none"> ▪ Dimensions: width, rise and going of steps, staircase landings ▪ Head clearance + Handrail and guards + Visual and tactile warnings 	– Tape-line
Handrails	<ul style="list-style-type: none"> ▪ Provision ▪ Profile, continuity and horizontal extension ▪ Installation: height, mechanical resistance + Visual and tactile information 	<ul style="list-style-type: none"> – Visual inspection – Tape-line. – Vernier Calipers to measure Diameter –
External Lifts	<ul style="list-style-type: none"> * Car and door dimensions * Manoeuvring space outside the car * Automatic doors (suitable time...) * Easily location (contrast...) * Provision of handrail * Surface finishes * Lighting * Emergency warnings * Control devices easily reached (height) and located (visual contrast, tactile information)) + Visual and acoustic information 	<ul style="list-style-type: none"> – Tape-line – Visual inspection
Surface Finishes	<ul style="list-style-type: none"> ▪ Even, stable and firm ▪ slip resistant ▪ Tactile walking surface indicators 	<ul style="list-style-type: none"> – Visual inspection – test on site
Crossing Points, Tactile Paving, and Dropped Kerbs	<ul style="list-style-type: none"> — Signage of crossing points (on the pavement and vertical signs) — Provision of dropped kerbs — Profile: width, slope — Tactile warning surface 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Drop Off/Pick Up Zones	—	–
Car parking	<ul style="list-style-type: none"> — Provision ▪ Location ▪ Minimum width and length ▪ Kerb ramp ▪ Surface ▪ Signage 	<ul style="list-style-type: none"> – Visual inspection – Tape-line – BS 6571 - 4:1989 Vehicle parking control equipment- Part 4: Specification for barrier type parking control equipment
Obstacles on a path and Street Furniture	<ul style="list-style-type: none"> ▪ Visual indicators for unavoidable obstacles ▪ Design to be detectable width cane — Street furniture: Location — Street furniture: suitable design for ease of use 	– Tape-line, Visual inspection
Seating and rest areas	<ul style="list-style-type: none"> — Provision * furniture: location, suitable design for ease of use * types of seating, benches 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Facilities for Guide Dogs	* Provision of dog relief area (larges buildings)	– Verification of the service, with customer service staff
Signage and Wayfinding (external - audible)	+ Suitable amplification and acoustic conditions	<ul style="list-style-type: none"> – Visual inspection – Acoustic inspection
Signage and Wayfinding (external - tactile)	<ul style="list-style-type: none"> + Tactile walking surface indicators, change in material + Guided path + Provision of raised tactile and Braille signs 	– Visual inspection

CEN 207 Inventory Built Environment Elements	Parameter to assess	Determination activities/ device used
Signage and Wayfinding (external - visual)	<ul style="list-style-type: none"> ▪ Additional illumination or luminance contrast ▪ Visual contrast + Information signs outside the building <ul style="list-style-type: none"> – Location – Height – Font and size of lettering – Differences in LRV – Glare free – Illumination – Understable 	<ul style="list-style-type: none"> – Visual inspection
Lighting (external)	<ul style="list-style-type: none"> ▪ Provision ▪ Minimum illumination ▪ Positioning of lights 	<ul style="list-style-type: none"> – Visual inspection. – photometer
Internal Environments		
Entrances	<ul style="list-style-type: none"> ▪ Identification ▪ Level threshold ▪ Passage width and height ▪ Circulation spaces, manoeuvring area + Detailed requirements for internal doors <ul style="list-style-type: none"> – Operating force – Visual indicators for Glazed doors – Location, visual contrast – Door locks reachable and operable 	<ul style="list-style-type: none"> – Visual inspection – Tape-line – Plunger/dynamometer – BS 6262:1982 Code of practice for glazing for buildings AMD 4063; AMD 4582; AMD 8279 (Partially superseded but remains current) – BS 6262-1:2005 Glazing for buildings Part 1 to Part 7 – BS 7036-1:1996 Code of practice for Safety at powered doors for pedestrian use – Part 1. General – BS 7036-4:1996 Code of practice for Safety at powered doors for pedestrian use – Part 4. Low energy swing doors
Reception Areas, counters, desks and ticket offices	<ul style="list-style-type: none"> ▪ Location (easily recognizable, glare free...) ▪ Space to manoeuvre ▪ Suitable design of a counter, desk and ticket office ▪ Even illumination ▪ Queue number ticket system designed to be accessible ▪ Hearing enhanced system – Provision of seats with a suitable design 	<ul style="list-style-type: none"> – Visual inspection – Tape-line – Photometer – Acoustic inspection
Security Provisions	<ul style="list-style-type: none"> – Accessible fastenings – Accessible Surveillance System 	<ul style="list-style-type: none"> – Visual inspection – Test site
Storage Facilities	<ul style="list-style-type: none"> ▪ Minimum manoeuvring space ▪ reachability of the shelves ▪ opening direction 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Circulation Routes	<ul style="list-style-type: none"> ▪ No steps ▪ Minimum clear width and length of passage ▪ No hanging objects on walls (easily detectable width cane) 	<ul style="list-style-type: none"> – Visual inspection – Tape-line

CEN 207 Inventory Built Environment Elements	Parameter to assess	Determination activities/ device used
	<ul style="list-style-type: none"> + Surface finishes + Lighting + Visual contrast + Signage and wayfinding 	
Manoeuvring spacere quirements	<ul style="list-style-type: none"> ▪ Minimum space required for a 90°-180° turn 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Lobbies	<ul style="list-style-type: none"> ▪ Unobstructed manoeuvring space between doors ▪ Visual awareness of an entrance door + Visual marking 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Internal Doors	<ul style="list-style-type: none"> ▪ Clear width and height ▪ Level threshold ▪ Manoeuvring space ▪ Operating force ▪ Visual indicators for Glazed doors, visual contrast ▪ Door locks reachable and operable 	<ul style="list-style-type: none"> – Visual inspection – Tape-line – Plunger/dynamometer
Windows	<ul style="list-style-type: none"> ▪ Restrictions opening ▪ Easy manoeuvrability of hardware and shutters ▪ Height 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Passenger Lifts	<ul style="list-style-type: none"> – Provision (number) ▪ Car and door dimensions ▪ Manoeuvring space outside the car ▪ Automatic doors (suitable time...) ▪ Easily location (contrast...) ▪ Equipment in the car : Provision of handrail ▪ Surface finishes ▪ Lighting ▪ Emergency warnings ▪ Control devices easily reached (height) and located (visual contrast, tactile information)) + Visual and acoustic information 	<ul style="list-style-type: none"> – Verification of the service – test on site – Tape-line – Visual inspection – EN 81-1: 1999 Safety rules for the construction and installation of lifts - electric lifts(Amd 1) (+A3:2009) – EN 81-2:1999 Safety rules for the construction and installation of lifts - hydraulic lifts(Amd 1) (+A3:2009) – EN 81-70:2003 Safety rules for the construction and installation of lifts – Particular applications for passenger and good passenger lifts. Accessibility to lifts for persons including persons with disability (Amd A1:2005)
Platform Lifts / Lifting Platforms	<ul style="list-style-type: none"> ▪ Height ▪ Platform dimensions ▪ Maximum Force to be able to withstand ▪ Guarding 	<ul style="list-style-type: none"> – Verification of the service – test on site – Tape-line – Visual inspection
Stairs	<ul style="list-style-type: none"> ▪ Dimensions: width, rise and going of steps, staircase landings ▪ Head clearance + Handrail and guards + Visual and tactile warnings 	<ul style="list-style-type: none"> – Tape-line – Visual inspection
Ramps	<ul style="list-style-type: none"> ▪ Dimensions: width, horizontal landing, slope and length + Handrail and guards + Tactile walking surface indicator 	<ul style="list-style-type: none"> – Tape-line – Visual inspection

CEN 207 Inventory Built Environment Elements	Parameter to assess	Determination activities/ device used
Escalators	<ul style="list-style-type: none"> + Rise and going of steps (stairs) ▪ Warning indicators at the top and bottom ▪ Minimum level of illumination — Dimensions: width, horizontal landing — Speed limit — Guards and handrails — Visual and tactile warnings 	<ul style="list-style-type: none"> – Tape-line – Verification of the service – test on site
Travelators	<ul style="list-style-type: none"> ▪ Minimum level of illumination — Dimensions: width, horizontal landing — Speed limit — Guards and handrails — Visual and tactile warnings 	<ul style="list-style-type: none"> – Tape-line – Verification of the service – test on site
Handrails	<ul style="list-style-type: none"> ▪ Provision ▪ Profile, continuity and horizontal extension ▪ Installation: height, mechanical resistance + Visual and tactile information 	<ul style="list-style-type: none"> – Visual inspection – Tape-line.
Sanitary facilities for ambulant disabled people (Toilets/Showers/Cha nging)	<ul style="list-style-type: none"> ▪ Toilet seat height, depth and distance to wall ▪ Clear manoeuvring space in front of the toilet ▪ Opening doors ▪ Grab rails 	<ul style="list-style-type: none"> – Visual inspection – Tape-line.
Sanitary facilities for wheelchair users (Toilets/Showers/Cha nging)	<ul style="list-style-type: none"> — Provision ▪ Dimensions, Clear maneuvering space ▪ Doors (width, opening system) ▪ Toilet seat height, depth and distance to wall ▪ Grab rails ▪ Washbasins: dimensions, ▪ Water supply ▪ Tap controls ▪ Urinals ▪ Shower place, bathrooms ▪ Other fittings reachable ▪ Alarm ▪ Minimum illumination ▪ Finished surfaces ▪ Location of light switches 	<ul style="list-style-type: none"> – Visual inspection – Tape-line.
Sanitary facilities for other users - e.g. Children, enlarged WCs, etc. (Toilets/Showers/Cha nging)	<ul style="list-style-type: none"> ▪ Toilet seat height, depth and distance to wall 	<ul style="list-style-type: none"> – Visual inspection – Tape-line.
First Aid Facilities	<ul style="list-style-type: none"> + Assisted evacuation. Rescue techniques (very general considerations in annex C) 	<ul style="list-style-type: none"> – Check Emergency Plan
Surface Finishes	<ul style="list-style-type: none"> ▪ Slip-resistant conditions ▪ Anti-glare + Visual contrast 	<ul style="list-style-type: none"> – Visual inspection – test on site
Glazing and Manifestations/marki ngs	<ul style="list-style-type: none"> + Visual marking 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Colour Contrasts	<ul style="list-style-type: none"> ▪ Visual contrast ▪ Difference in reflectance value 	<ul style="list-style-type: none"> – Spectrophotometer – BS 8493:2008 (+A1:2010): Light reflectance value (LRV) of a surface - Method of test

CEN 207 Inventory Built Environment Elements	Parameter to assess	Determination activities/ device used
Signage and wayfinding (interior - audible)	<ul style="list-style-type: none"> ▪ Suitable amplification and acoustic conditions 	<ul style="list-style-type: none"> – Acoustic inspection
Signage and wayfinding (interior - visual)	<ul style="list-style-type: none"> ▪ Additional illumination or luminance contrast ▪ Visual contrast ▪ Information signs outside the building ▪ Location ▪ Height ▪ Font and size of lettering ▪ Differences in LRV ▪ Glare free ▪ Illumination ▪ Understable ▪ Information displays 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Signage and wayfinding (interior - tactile)	<ul style="list-style-type: none"> ▪ Tactile walking surface indicators, change in material ▪ Guided path ▪ Tactile maps and floor plans ▪ Provision of raised tactile and Braille signs 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Lighting (interior)	<ul style="list-style-type: none"> + Location of windows ▪ Level of illumination ▪ Limitation of glare and shadows ▪ Uniformity and luminance distribution ▪ Colour rendering ▪ Controls and adjustments 	<ul style="list-style-type: none"> – Visual inspection – Light meter (Photometer)
Acoustics	<ul style="list-style-type: none"> ▪ Location ▪ Information conveyed audibly ▪ Adequate sound isolation to mitigate noise ▪ Sound absorption of the surroundings surfaces and furnishing of the room 	<ul style="list-style-type: none"> – Acoustic inspection
Audible Communication Systems	<ul style="list-style-type: none"> ▪ Hearing enhancement systems at an information point ▪ Hearing enhancement systems provided in conference and meeting areas ▪ Acoustic warning systems 	<ul style="list-style-type: none"> – Acoustic inspection – test on site – IEC 60118-4:2006 Electroacoustics. Hearing aids. Induction loop systems for hearing aid purposes. Magnetic field strength – Induction loop tester
Switches, Outlets and controls	<ul style="list-style-type: none"> ▪ Heights and distances ▪ Operation, identification, usability ▪ Card access, dispensing machines 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Emergency Egress Requirements	<ul style="list-style-type: none"> ▪ Fire defence plans –generic- + Fire evacuation routes (annex C) –generic- – Fire compartment ▪ Areas of rescue assistance ▪ Evacuation lift + Emergency wayfinding 	<ul style="list-style-type: none"> – Check Emergency Plan – Visual inspection – Fire records – Management plans – National Regulations – Standards (i.e in the UK they have BS9999).
Refuse systems	<ul style="list-style-type: none"> ▪ Refuse bins (general requirement) 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Furnishing (seating, desks, etc)	<ul style="list-style-type: none"> ▪ Seating (heights, armrest, back support...) + Desks and ticket offices → Reception areas ▪ Drinking fountains: height, usability... 	<ul style="list-style-type: none"> – Visual inspection – Test site

CEN 207 Inventory Built Environment Elements	Parameter to assess	Determination activities/ device used
Indoor-climate	<ul style="list-style-type: none"> ▪ (Only general considerations in Annex B) — Humidity, air currents, cold, heat,... — Pollen filters, air renewal 	<ul style="list-style-type: none"> – Sensory testing – Check levels of air quality (meter of air quality)
Transport Facilities		
Bus Facilities	— Information on proximity, hours, accessibility	– Visual inspection
Rail Facilities	— Information on proximity, hours, accessibility	– Visual inspection
Taxi Facilities	— Information on proximity, hours, accessibility	– Visual inspection
Airport Facilities	— Information on proximity, hours, accessibility	– Visual inspection
Car Parking (including number, dimensions and access)	<ul style="list-style-type: none"> – Provision + Location + Minimum width and length + Kerb ramp + Surface + Signage 	<ul style="list-style-type: none"> – Visual inspection – Tape-line
Parking Control	<ul style="list-style-type: none"> ▪ Height ▪ Usability 	<ul style="list-style-type: none"> – Tape-line – Test site
CycleParking	— Easy detection, no interference	– Visual inspection

Legend:

+ To see detailed in others elements

* Without specifying, we consider the requirements for indoor environments of buildings

— Considerations not included in ISO 21542, which have been covered by national/regional standards or legislations

4.3.1.2 Analysis of the type of reference used in conformity assessment schemes

The second criteria used for analysis of the existing conformity assessment schemes for accessibility is the type of the reference used

Any conformity assessment scheme is based on a reference. As the inventory stage proves, the most used reference in accessibility assessment process are regulations. Even if the functional or technical requirements concerning accessibility are presented in standards as is in Austria, Germany or the UK, the assessment criteria are included only in regulation or in guidance for these regulations. The standards reported here are coming mainly from products incorporated in the built environment such as lifts.

Table 23 – Enforcement or addressing of conformity assessment schemes

Enforced through	Regulations	Standards	Guidance
Total	43	10	22

Findings:

- Majority of schemes are based on regulations (reported as follows: Austria, Cyprus, Estonia, Finland, Latvia, Luxembourg and Sweden, one regulation; Italy and Norway(2); Denmark, Netherlands, Spain and UK (3), Ireland (4) and Belgium (9))
- The conformity schemes based on regulations and guidance include all kind of schemes both building control and others scopes (eg. fire protection, tourism)
- Only few schemes are based on standards (as reported by Austria, Latvia, Spain, Belgium and Germany(2))

NOTE: This analysis is based only on the data collected by checklists.

4.3.1.3 Analysis of the requirements for technical capacities

The third criteria used for the analysis of the conformity assessment schemes of accessibility is the extent that these take into consideration requirements for the technical capacities of the bodies or persons involved in the process both of planning and construction works.

Table 24 – Analysis of the requirements for technical capacities

Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems
Yes, total	29	16	16

Findings:

- Only 7 EU countries reported that requirements for technical capabilities in accessibility are established for planners and designers in place (Austria, Belgium, France, Netherlands, Spain and UK);
- Only 5 countries reported requirements established for building contractors (Austria, Belgium, Netherlands and UK);
- Only 8 countries reported requirements established for the bodies or persons operating building control systems

NOTE: This analysis is based only on the data collected by checklists. Extended data are presented in [Annex H.1](#).

4.3.1.4 Analysis of the documents issued as evidence for attestation of accessibility assessment

As stated in the first part of this chapter, accessibility of the built environment results from a sequence of processes like planning, construction, completion and use. In order to achieve accessibility, the fulfillment of accessibility requirements has to be achieved in each of the sub activities.

One way to determine this is to evaluate, assess and approve drawings and documents at various stages during their development and to carry out site inspections. The documents issued for each of these processes and attestations vary from country to country.

Based on data collected from 15 countries through the checklist launched at the start of this project, documents issued during the process of planning, building control and construction works, completion and use of buildings and shared areas are used.

Two stages for planning, **application/planning** and **application/building project** were enquired about, due to the fact that in many countries these are carried out as separate activities, and that approval of the application/planning is necessary for an approval of the project with all written and drawn documentation.

The next phases are construction, followed by completion and use; detailed information and abbreviations used for Conformity Assessment Schemes identification are presented in the Annex H.2

The table below summarizes results:

Table 25 – Relationship between building phase and type of documents

Building phase	Type of document		
	permits	certificate	others
Application/planning		Urbanism certificate in Romania	Approved plans in Estonia, Finland, Latvia, Netherland, Romania and Sweden Routing sheet in Austria
Application/building project	Building permit in Austria, Belgium, Cyprus, Denmark, Estonia, Finland, Greece, Hungary, Latvia, Lithuania, Norway, Netherlands, Romania and Sweden	Disability access certificate for BCA – DAC scheme in Ireland; Plans certificate for Approved inspector scheme in UK	Statement of city Safe use and Accessibility issued by the architect and approved by an Adviser in Cyprus Planning permission in Ireland Certification from rehabilitation engineer in Hungary Building licence in Spain Approved drawings for Building Control (England and Wales) in UK
Construction		Inspection notice in Finland Site records of the constructors in Germany in Norway Enforcement notice in case of non-compliance in Ireland	
Completion	Occupancy permit in Austria, Hungary Permit of use in Belgium	Certificate of completion in Norway and Spain Fire safety certificate for BCA FSC in Ireland Final certificate on completion in UK	Certificate of Safe use and Accessibility in Cyprus, Approval of use in Finland, Declaration of compliance in Germany, Operating licence in case of PD43/2002 scheme in Greece
Use		Access audit reports for the MININT and J-TAP 2008 scheme in Greece.	

Findings:

- The majority of documents are the type that indicates approval of the application and the building/construction project
- By their sheer dominance approval type documents make the application phase the most important to assessment of accessibility requirements
- Provided assessment of accessibility requirements can be performed adequately in this phase, the chances of final as-built compliance increases.
- The second most important building phase relevant to the assessment of accessibility requirements is completion, and this is in addition is when most certificates are issued. A certificate signifies involvement of a third party, as representatives of authorities in this case are in charge with.

4.3.2 The conformity assessment schemes in accessibility labels and awards.**4.3.2.1 Overview**

Labels and awards concerning accessibility are good tools to increase awareness of the topic and to disseminate good practice.

Even though not all may fulfil the requirements stipulated in European standards, they provide a lot of information about the facilities and services of the entities assessed and can also be useful tools when altering or extending existing buildings and public spaces.

Normally, a label or an award includes more criteria than the built environment alone because the service, facility or whole place may be assessed. They can be applied to an accessible city, building or community. Team B decided to illustrate some labels and awards to demonstrate how they can be used as appropriate tools to monitor the accessibility of built environment.

4.3.2.2 TOURISM AND DISABILITY LABEL (France)

In France a Tourism and Disability label was introduced in 2001 to provide reliable and objective information on the accessibility of tourist facilities. The label may be given to facilities which meet prescribed accessibility standards for people with physical, hearing, vision or mental impairments, each represented by a pictogram. The label is given for a period of five years and can be renewed following re-assessment that the standards have been met. Labels can be applied for by a wide variety of facilities including among others historic sites, castles, museums, restaurants, sports facilities and parks

4.3.2.3 NATIONAL ACCESSIBLE SCHEME (NAS) LABEL (UK)

In the UK the National Accessible Scheme Label is used to identify how accessible holiday accommodation is to people with mobility or sensory impairments. All properties are independently audited by trained assessors. The written assessments outline strengths and areas for improvement and are based on a set of defined standards. *One Step Ahead* is a lesser level assessed scheme which assesses accommodation for people with mobility impairments without providing full wheelchair accessibility. It also includes a visit from a trained consultant and specific advice about how to make the property more accessible. The schemes are financed by fees, paid by the accommodation owners.

4.3.2.4 ENAT CODE OF GOOD CONDUCT LABEL

The ENAT (European Network for Accessible Tourism) Code of Good Conduct is a commitment label and certification scheme for public and private enterprises and organisations, recognising their efforts to promote accessible travel and tourism. The label denotes the commitment of an enterprise or organisation to follow a set of principles for the development of accessible tourism, within its sphere of activity. The Code does not aim to measure compliance with access standards, national norms or proprietary accessibility schemes and the label is therefore not a guarantee or symbol of

“full accessibility”. Signing the Code allows the user to display a European and international label and certificate which can complement existing accessibility labels.

4.3.2.5 EXCELLENCE THROUGH ACCESSIBILITY AWARD SCHEME (EtA) (Ireland)

The EtA Award is a quality label developed for public bodies which is awarded to organisations that have achieved a standard of excellence in all three areas of Customer Services, Built Environment and Information and Communications Technology. The organisations are assessed by trained inspectors using an assessment tool which includes 14 accessibility guidelines and 41 criteria. The focus is on continuing commitment to improvement of public services and buildings and the awards are made at three levels – Commitment, Quality and Excellence.

4.3.2.6 WORLD ARCHITECTURE FESTIVAL AWARD SCHEME

The ONCE Foundation inaugurated the first World Architecture Festival Accessibility Award Scheme in Barcelona in 2010

4.3.2.7 ACCESS CITY AWARD SCHEME

The Access City Award rewards cities with over 50,000 inhabitants which take exemplary initiatives to improve accessibility in the urban environment.

The applicants present the work implemented and planned to improve the accessibility for persons with disabilities in their city environment, including actions, policies and initiatives. The initiative must be ongoing and demonstrate (or will demonstrate) improved accessibility for persons with disabilities in all four key areas:

- accessibility to the built environment and public spaces
- accessibility to transportation and related infrastructures
- accessibility to information and communication technologies
- accessibility to public facilities and services

The applicant must show evidence of having improved accessibility for persons with disabilities (i.e. evidence should be benchmarked);

Evaluation criteria

1. Scope of the actions/initiatives

The applicant shall demonstrate a global approach and an ambitious vision for the future in tackling accessibility in the city.

2. Ownership, level of commitment

The applications should demonstrate that the actions/initiatives in these different areas are part of a global strategy or policy framework, rather than just ad-hoc projects.

The accessibility strategy, following design-for-all, should be included in the city’s policies and its regulations. Appropriate resources (staff, budget, etc...) should be allocated to implement these policies.

3. Impact

The city’s policies/initiatives should have a demonstrable impact on the everyday life of the city and persons with disabilities. The applicants should therefore include qualitative and quantitative data to support claims of success. Planned initiatives and policies will be considered for their coherence and potential impact.

4. Quality and sustainability of results

The quality of results is defined in terms of improvements made to the level of accessibility and its compliance with standards and legislation.

Delivering sustainable results to ensure the full accessibility requires continuous efforts, the establishment of a sound structure and monitoring mechanisms (for regularly checking accessibility, notifying and repairing problems, handling complaints etc.).

5. Involvement of persons with disabilities and relevant partners

Active and clear involvement of persons with disabilities, their representative organisations, and accessibility experts should be demonstrated in both the planning, implementation and maintenance of city's policies and initiatives aimed at increased accessibility.

4.3.3 International experience and practices – Australia, Canada and USA

Australia, Canada and USA reported an experience of almost 20 years in the field of accessibility. An overriding factor in these countries outside the EU has been the existence of Human Rights Legislation backed up by Building Codes, Regulations and Standards. A number of instruments, standards and practices were identified which appear to have contributed to the effective implementation of accessibility legislation.

These include:

Australia

- A comprehensive suite of accessibility standards is available including enhanced and additional requirements, requirements for children and adolescents, tactile surfaces and orientation. Guidance relevant to accessibility and usability is also covered in other standards such as standards for glass, colour, signs, lighting and slip resistance
- An administrative protocol entitled A Process to Administer Building Access for People with a Disability aims to ensure a consistent approach to the implementation of access requirements in both new and existing buildings
- A system of "Access Panels" of experts has been established to guide and assist certifiers with difficult access questions

Canada

- Like Australia a comprehensive suite of accessibility standards is available under CSA B651
- Regulations under the Ontario Accessibility Act are being developed and will cover, inter alia, built environment
- Both Standards and Guidance Documents, such as the City of London Facility Accessibility Design Standards, are presented in a user friendly format and are easy to apply by both designer and certifier
- An Accessible Procurement Toolkit has been produced by Industry Canada

United States of America

- The ADA Standards for Accessible Design provide extensive coverage across almost all building elements, including existing building, but are principally focused on people with mobility limitations. They are also very difficult to negotiate.
- A mediation programme, introduced by the Department of Justice, facilitates the resolution of conflicts
- Building Code Departments are responsible for issuing construction permits, for inspecting construction and for issuing occupancy certificates. A multiplicity of codes which were not harmonised with standards has restricted the effectiveness of the system

The following three sections are reports received from contact persons in respectively Australia, Canada and USA. The conclusions and views are theirs.

4.3.3.1 Conformity Assessment of accessibility in Australia

The responsibilities for assessment of accessibility mainly are to:

- Australian Building Codes Board – This body is responsible for the development of the Building Code of Australia (BCA), which dictates how all buildings throughout Australia are to be constructed. It tells you “what you have to do” whilst the standards “tell you how to achieve the outcome”. We have just recently completed an alignment of the BCA to the DDA legislation which requires the same level of compliance from the Federal legislative base, the DDA and the Federal building regulations, the BCA. Over the past 15 years we have been fortunate in gradually adding building requirements for disability access into the BCA, however the BCA only catered for the 80th percentile of people with disabilities, whereas the DDA required that the 90th percentile must be catered for in our built environment.
- Local Government Building Regulations – These are the City and Shire Councils, which in addition to the BCA have their own specific building requirements that in many cases may be unique to their area. Many of these are additional disability access requirements that go beyond the BCA requirements. They are referred to as Development Controls Plans (DCPs)

Other Bodies involved in accessibility of the built environment are:

- Association of Consultants in Access Australia. (ACAA)
- State Building Commissions who also play a part in the administering of disability access being incorporated into the built environment.
- Tertiary Education bodies in assisting in the training and education of students who will work in the area of the built environment.

Conformance Assessment Schemes (CAS)

These are administered by in every case by the Building Surveyors, Certifiers and in many cases Access consultants. Involvement takes place in many cases on a project from the planning of the brief. Other projects, access consultants are not brought in until the concept/schematic stages, which in turn are then approved by the local planning authorities. Each of the following stages, detailed design, detailed documentation, site inspections throughout the project and final inspection at practical completion are all certified by building surveyors in every case and in the majority of cases by access consultants. The latter involvement is voluntary in the private to have access consultants approved, but as disability access inclusion in a building or facility is a requirement they are more often than not involved.

As a signatory to the UN convention of Rights of Persons with Disabilities and a major contributor to the Bill of Rights, Australia is 100% behind all that it stands for. Our Federal Disability Discrimination Act - 1992 legislation requires that Disability Action Plans (DAPs) are developed by all organisations, but as this is claims based legislation, many private companies have not provided and registered DAPs. But when a claim is made against them, this is the trigger that encourages them to develop a DAP.

4.3.3.2 Conformity Assessment of accessibility in Canada

The responsibilities for assessment of accessibility mainly are to:

At the National/Federal level

- The Canadian Human Rights Act establishes the high level accessibility principles for sectors regulated by the Federal government (Defence, inter-provincial transportation, banking, federal government facilities and services, telecommunications, etc.). The Act is available at <http://laws.justice.gc.ca/en/h-6/243963.html>
- The National Building Code (NBC) is the primary source of accessibility requirements for new construction and alteration to existing buildings. The 2010 Code is available for purchase at http://www.nationalcodes.ca/eng/national_codes_home.shtml. It should be noted that the

NBC is a model Code only – it is not law unless adopted by a Province or Territory. Most larger Provinces have their own Provincial Building Codes.

- The National Transportation Sector (as against the Provincial Transportation Sectors), are regulated by a series of Acts. A list of the transportation related Acts can be found at <http://www.tc.gc.ca/eng/acts-regulations/menu.htm>
- Industry Canada has developed an Accessible Procurement Toolkit which can be accessed at <http://www.apr.gc.ca/>. The Government of Canada's Public Procurement policies and process can be viewed at <http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre01-chapter01-eng.html>
- The Canadian Standards Association (CSA) is a private, not-for-profit organization which develops Standards for all aspects of Canadian society. Of particular interest are a suite of accessibility Standards under the B651 identifier including Standards for the built environment, banking machines, interactive self-service devices and point-of-sales terminals. There is also a CSA standard on Inclusive Design for an ageing population - CAN/CSA B659-08 – however this particular Standard is quite generic and lacking in specifics. The Government of Canada has adopted CAN/CSA B651-09 as a standard for accessibility for all of its facilities.

At the Provincial/Territory Level (10 Provinces and 3 Territories)

- Each Province/Territory has its own Human Rights Code – establishing accessibility principles for sectors regulated by the Provincial government (Transportation within provinces, land use, building development, employment, etc.
- Provinces and Territories either adopt the National Building Code or incorporate sections of the NBC into their own Provincial building codes. Accessibility provisions within the various Provincial Building Codes are not harmonised – there are many variations and inconsistencies. The British Columbia Building Code is considered to be one of the more progressive.
- The Province of Ontario is the first in Canada to develop an Accessibility Act – the Accessibility for Ontarians with Disabilities Act (AODA). This Act regulates accessibility for companies offering goods, service and facilities to persons in Ontario. Regulation are being developed and are in the process of being implemented in the following areas:
 - Customer Service (enacted)
 - Information and Communication (likely to be enacted by mid 2011)
 - Transportation (likely to be enacted by mid 2011)
 - Employment Practices (likely to be enacted by mid 2011)
 - Built Environment (date of enactment unclear – much controversy)

At the Municipal Level

- While accessibility of the building itself is regulated by Provincial Building Codes, the accessibility of the exterior site elements (parking, landscape areas, walkways, etc.) are regulated by Municipal bylaws. Each municipality in Canada has its own bylaws – so they are extremely varied. Some of the Municipalities who have been progressive with their accessibility programs are London (Ontario), Winnipeg (Manitoba) and Saanich (British Columbia).
- Many municipalities have developed their own accessibility standards – in direct response to the inadequate accessibility provisions within the Provincial Building Codes. Some of the most progressive accessibility standards development work is happening at the municipal level in Canada. Such municipal standards are typically mandatory for municipally funded

project only. Municipalities have no legislative authority to impose accessibility building standard. At this time, the most progressive Municipal accessibility standards is Winnipeg.

4.3.3.3 Conformance Assessment Schemes (CAS)

The building permit system assesses compliance with accessibility code requirements. Human rights commissions have the right to conduct conformance assessments and do so periodically. The Canadian Human Rights Commissions audited samples of federal offices, banks, bank machines, etc and published reports. They followed up periodically. The Ontario Human Rights Commission did the same but other provinces have not been so active. At the municipal level, many municipalities are asking their architects and other designers to complete a compliance checklist and 'sign-off' that everything has been completed satisfactorily.

4.3.3.4 Conformity Assessment of accessibility in United State of America

The USA framework concerning accessibility requirements (technical or functional):

There are a number of disability rights laws in existence within the USA. The most important of these with regard to accessibility is the Americans with Disabilities Act.

On July 26, 1990, President George Bush signed into law the Americans with Disabilities Act (ADA). This significant legislation extends civil rights to an estimated 43 million Americans with disabilities in much the same way that individuals are protected on the basis of race, colour, sex, national origin and religion. The ADA makes it illegal to discriminate on the basis of disability in the areas of employment, public services, public accommodations, transportation and telecommunications. The ADA was later updated in 2008 with changes effective 1st January 2009, a further revision was published in the Federal Register on 15th September 2010, which will take effect on 15th March 2011.

People with disabilities can no longer be denied employment just because they are disabled. In addition, the ADA requires that restaurants, movie theatres, libraries, doctors' offices, parks and millions of other public accommodations be accessible to people with disabilities. The services provided by state and local governments must also conform to ADA requirements.

The ADA applies to all people with physical or mental impairments that substantially limit one or more major life activities. Such activities include walking, talking, hearing, seeing, breathing, learning, performing manual tasks and caring for oneself. Other kinds of major life activities contained in the Equal Employment Opportunity Commission's Interpretive Guidelines include sitting, standing, lifting, and reaching. The law also applies to individuals who have a history of such impairment, as well as those who are perceived as having such impairment.

Attached to the ADA are the 1991 ADA Standards for Accessible Design, (28 CFR Part 36, revised July 1, 1994) issued by the Department of Justice. The Department of Justice have announced that the 2010 ADA Standards for Accessible Design must be used on and after 15th March 2012, which will be released soon. These guidelines are to be applied during the design, construction, and alteration of such buildings and facilities to the extent required by regulations issued by Federal agencies, including the Department of Justice, under the Americans with Disabilities Act of 1990.

The Department of Justice is responsible for enforcing the ADA.

The Department may file lawsuits in Federal court to enforce the ADA and may obtain court orders including compensatory damages and back pay to remedy discrimination. Under title III the Department may also obtain civil penalties of up to \$55,000 for the first violation and \$110,000 for any subsequent violation.

The Department sometimes resolves cases without filing a lawsuit by means of formal written settlement agreements or in some instances, the public accommodation, commercial facility, or State or local government promptly agrees to take the necessary actions to achieve compliance. In others, extensive negotiations are required.

The ADA requires the Department of Justice to provide technical assistance to businesses, State and local governments, and individuals with rights or responsibilities under the law. The Department provides education and technical assistance through a variety of means to encourage voluntary compliance. Activities include providing direct technical assistance and guidance to the public through the ADA Website and the ADA Information Line; developing and disseminating technical assistance materials to the public; and undertaking outreach initiatives.

The Department of Justice operates a free ADA Information Line to provide information and publications to the public about the requirements of the ADA. A 24 hour automated service, which allows callers to order publications, ask about filing a complaint or speak to specialists regarding technical questions (latter facility only available at specific times).

In this context, requirements for different building phase are as follow:

- **Building Regulations and Planning**

The construction or alteration of any freestanding structure over 10m² (108sq.ft.) in area is required to have a Building Permit. A building permit is a licence that is required prior to construction to ensure that the design meets with the standards set out in a particular state. It gives building officials the means to enforce the requirements of the standards.

Many states use the ADA Standards for Accessible Design or the International Building Code, but others have their own standards for accessibility. These standards are enforced by the state or local city or town authority. Accessibility is reviewed and approved at the same time as other aspects of the design i.e. when the project is submitted for a building permit and during the construction process. There is no requirement for a separate report to be submitted with regard to access at any stage.

- **Plan Reviewer**

The building plan reviewer, or examiner, reviews and inspects engineering and architectural drawings when a project is still in the design phase. They function as a form of quality control by double-checking calculations and verifying compliance with building codes. If plans are not code compliant the plan reviewer must work with the design team (i.e. architects and engineers) to develop solutions that are effective and follow the building codes. The plan reviewer interprets codes if their application is unclear.

- **Building Inspector**

Building inspectors examine all aspects of a building's construction to verify conformance with applicable building codes. According to the U.S. Department of Labor, "inspectors make an initial inspection during the first phase of construction and follow up with further inspections throughout the construction project." Building inspectors in some municipalities must perform periodic checks on buildings to verify continuing code compliance. These checks can be on certain building systems, such as elevators, or for whole public buildings such as schools or entertainment venues.

Bodies involved in accessibility of the built environment

Many states use the ADA Standards for Accessible Design or the International Building Code, but others have their own standards. The Department of Justice provides education and technical assistance through a variety of means. Activities include providing direct technical assistance and guidance to the public through the ADA Website and the ADA Information Line; developing and disseminating technical assistance materials to the public; and undertaking outreach initiatives.

Conformance Assessment Schemes (CAS)

All new buildings must meet the minimum requirements of the State's standards and CAS operates mainly through the building inspection process. However, whilst standards offer guidance on physical

provision they do not consider the policies and procedures adopted by the service provider to ensure discrimination doesn't occur.

4.4 Identification and analysis of the accessibility assessment schemes for construction products and other products used in built environment

In built environment are included many products that have a role to assure an accessibility of the persons that used building, shared area and public spaces. There are incorporated construction products as doors, windows and building hardware including shutters and blinds (outdoor and indoor), curtain walling, Sanitary appliances, Circulation Fixtures, Floorings, Internal and external wall and ceiling finishes and others.

Also for these products we can follow how and where is applied the functional approach of conformity according ISO 17000 that include the following phases:

1. Selection
2. Determination
3. Review and attestation
4. Surveillance

Construction products are covered by the essential requirements from former Construction Products Directive - CPD and new approved Construction Products Regulation - CPR. A transition period is developing between 2011 and 1 July 2013 when the new CPR will be mandatory. One of the main inputs of the CPR is accessibility requirement included as essential for construction works together with safety.

Other products included in built environment according the requirements of the design and used during life cycle of the building or shared areas are: lifts, escalators and moving Walks, *Sports, playground and other recreational facilities and equipment*, Domestic Appliances, Fire alarm/detection, fixed firefighting, fire and smoke control and explosion suppression products, Waste Water Engineering Products, Space heating, letter boxes and plates, furniture for office and households, street furniture and gardening product.

There are in forced by different regulation for these products to assure the safety requirements. Only lifts, escalators and moving walks are covered by a dedicated directive and there are assessment procedures in European standards that are in forced in all Europe. The conformity assessment scheme is the module H that is the most comprehensive and includes **project approval, type tests and certification of the quality assurance system of the manufacturer**. The notify body issue the Certificate of conformity and the manufacturer affixed the appropriate CE marking. Regular surveillance is performed by the notified body.

In this case, the level of confidence is maximum due to the great risks involved by the use of these products. The determination activities performed by the notified body are **project approval, type tests and certification of the quality assurance system**. The type tests have to be performed both in notified test laboratories and on site. The review and attestation activities are performed by the notified body.

There are many standardization mandates for different categories of products mentioned above but none of the resulting standards include accessibility requirements as those indicated in the Guide CEN/CLC Guide 6.

The construction products already mentioned are covered by the CPD but their system of attestation of conformity is 3 and rather 4. In these systems the manufacturer issued a declaration of conformity with the harmonised European standards. In system 3, manufacturer has to issue the declaration of conformity with the harmonised European standards based on testing in notified laboratory. The problem is that none of the European harmonised standards within CPD include requirements regarding accessibility.

In this situation we can appreciate that conformity assessment schemes are mostly by first party, the selection activities used harmonised EN and determination activities are testing, in case of system 3 performed in notified laboratories and for system 4, tests are performed by manufacturer in its premises or external. In both situations, manufacturers have the obligation to preserve records of the fulfillment of the essential requirements and to show them to request. The surveillance responsibility is to manufacturer too because they have to market only conforming products.

In case of construction products, situations will be significantly changed due to the new CPR that was approved by European Parliament in 9 March 2011. Accessibility is now included as one of the basic requirements and new guidelines are waiting. Another important change regarding the construction products is the way to express conformity. The new CPR asks for declaration of performance of the products instead of attestation of conformity..

If EU will promote an Accessibility Act as is foreseen in the Disability Strategy, there is the opportunity to develop standards and to support the assessment of accessibility requirements at least with those mentioned in Guide CLC 6 also for others products included in built environment.

4.5 Identification and analysis of the accessibility assessment schemes for transport related built facilities

4.5.1 Freedom of movement

EU guaranties the freedom of movement to all citizens. This means that anyone can move, work and live in every countries of the EU. Freedom of movement involves appropriate built infrastructure both on land, air or water adapted on the needs of disabled persons.

There are several EU regulations concerning the right of disabled passengers. In case of air transport, a Regulation on the right of persons with disabilities was adopted by EU since 5 July 2006 where focus is more on services of the disabled persons than on ground infrastructure or airplane. Also the Commission has adopted proposals in December 2008 on passenger rights in sea and inland waterway transport, and international coach/bus transport. Depending on the legislative process, these can be expected to come into force within a few years. **The most developed regulations regarding the assessment of built environment infrastructure are presented for the railways.**

A more detailed presentation of the conformity assessment requirements is provided below for the situation of the air transport (4.5.2) and railways (4.5.3).

4.5.2 Conformity assessment requirements in case air transport

In 5 July 2006, the European Union adopted a new Regulation on the rights of persons with disabilities and persons with reduced mobility travelling by air. The regulation is the first disability specific legislation adopted by the European Union ever and its requirements will hopefully lead to an end of the discrimination of air passengers with disabilities.

Any person with reduced mobility or sensory impairment, intellectual disability or any other cause of disability, age, and whose situation needs appropriate attention and the adaptation to his or her particular needs of the service made available to all passengers are covered by this Regulation.

The overall principle and aim of the Regulation is to guarantee equal treatment for all passengers, including those with a disability. This implies:

- **Boarding**
- **Assistance**
- **Mobility equipment and assistive devices**
- **Accessible information**
- **Complaints**

Regulation (EC) No 1107/2006 of the Parliament and of the Council concerning the rights of disabled persons and persons with reduced mobility when travelling by air stipulated the responsibility of the

managing bodies to assure all requirements that can fulfil the needs of the disabled persons. In annex A of this regulation are listed the assistance and arrangements necessary to enable disabled persons and persons with reduced mobility to:

- Communicate their arrival at an airport and their request for assistance at the designated points inside and outside terminal buildings mentioned in Article 5,
- Move from a designated point to the check-in counter,
- Check-in and register baggage,
- Proceed from the check-in counter to the aircraft, with completion of emigration, customs and security procedures,
- Board the aircraft, with the provision of lifts, wheelchairs or other assistance needed, as appropriate,
- Proceed from the aircraft door to their seats,
- Store and retrieve baggage on the aircraft,
- Proceed from their seats to the aircraft door,
- Disembark from the aircraft, with the provision of lifts, wheelchairs or other assistance needed, as appropriate,
- Proceed from the aircraft to the baggage hall and retrieve baggage, with completion of immigration and customs procedures,
- Proceed from the baggage hall to a designated point,
- Reach connecting flights when in transit, with assistance on the air and land sides and within and between terminals as needed,
- Move to the toilet facilities if required.

Where a disabled person or person with reduced mobility is assisted by an accompanying person, this person must, if requested, be allowed to provide the necessary assistance in the airport and with embarking and disembarking.

Ground handling of all necessary mobility equipment, including equipment such as electric wheelchairs subject to advance warning of 48 hours and to possible limitations of space on board the aircraft, and subject to the application of relevant legislation concerning dangerous goods has to be provided. Ground handling of recognized assistance dogs, when relevant also has to be provided.

Communication of information needed to take flights in accessible formats.

Even this regulation doesn't include explicitly requirements for the conformity assessment of the accessibility of the ground infrastructure of the airport, the airport managing bodies have to take all precautions to fulfil the above mentioned requirements and this mainly have an impact on built environment. In this case, any alteration of the existing built environment in the airport has to be planned and authorized according the national legislation for the construction works but the outcome to fulfil the requirement of the

4.5.3 Conformity assessment requirements in railway

4.5.3.1 Overview

High-speed rail transport in EU showcases a remarkable set of regulations, standards and conformity assessment procedures on accessibility that may have deep impact on quality for end users as well as procurers and manufacturers in EU. The TSI-PRM (Technical specification for interoperability for Persons with Reduced Mobility) is mandatory not only for new rolling stock but also infrastructure related to buildings, like platforms, zones of access, and includes an EC declaration of verification on accessibility as one of its main aspects. The complete system is a very good example of a close relation between

- A law/directive including a de facto standard, functionally and technically
- Conformity assessment procedures that are clearly described (consists of several modules depending on object, adaptation of existing buildings and structures)

- Responsibility as to who can assess (mainly third party)
- An EN standard on the detailed technical assessment is being developed (phase oriented)
- Declaration of verification, certification of conformity and suitability for use, audits and inspection

From the partners involved in the development of the TSI and the assessment standard it stands out clear that uniform requirements and conformity assessment procedures are rated as extremely important, if a standard is expected to work in practice, making it easier for procurers, construction companies and consultants to understand and meet requirements in all member states, and not least, providing the end users with equitable access of a certain quality across the EU. The level of detailing and careful wording addresses the fact that the users of the assessment standard include a wide range of professionals from designers in the early stages, to notified bodies carrying out final assessment control.

As such there is no mention of an official capacity building program associated with the TSI PRM, but authorities in some member states are by now offering courses on understanding the TSI PRM basics.

The EU-wide enforced procedures for conformity assessment that are an essential part of the TSI PRM are very good examples of a successful de facto standard guaranteeing a minimum accessibility standard to end users, and procurers with procedures applicable everywhere. Consequently, for phase II the TSI PRM is one of the highly recommendable models for handling of built environment elements; encompassing many of the essentials that should be present in effective conformity assessment.

4.5.3.2 Scope of the TSI-PRM

TSI covers the Conventional and High Speed Rail Infrastructure and passenger Rolling Stock subsystems as described in Annex I to Directive 2001/16/EC modified by Directive 2004/50/EC, only for the **Aspect 'Accessibility for Persons with Reduced Mobility'**. It also deals with some elements of the 'Telematics, Applications for Passengers' subsystem, such as, for example, ticketing equipment.

The objective of this TSI is to enhance the accessibility of rail transport to the persons with reduced mobility. Definition for 'Persons with Reduced Mobility' (PRM) means all people who have difficulty when using trains or the associated Infrastructure. This includes the following categories:

- Wheelchair users (persons who due to infirmity or disability use a wheelchair for mobility)
- Other mobility impaired including:
 - People with limb impairment;
 - People with ambulant difficulties;
 - People with children;
 - People with heavy or bulky luggage;
 - Elderly people;
 - Pregnant women.
 - Visually impaired.
 - Blind people.
 - Hearing impaired.
 - Deaf people.
- Communication impaired (meaning persons who have difficulty in communicating or understanding the written or spoken language, and including foreign people with lack of knowledge of the local language, people with communication difficulties and people with sensory, psychological and intellectual impairments).
- People of small stature (including children).

Impairments may be long-term or temporary, and may be visible or hidden.

This Directive include the accessibility of the public areas of the Infrastructure (including stations) controlled by the Railway Undertaking, Infrastructure Manager or Station Manager. Particular attention is to be devoted to:

- (i) The problems generated by the interface platform-train which require a holistic perspective between Infrastructure Rolling Stock;
- (ii) The needs for evacuation in the case of hazardous situations.

This TSI does not specify operating rules for evacuation, but only technical and professional qualification requirements. Purpose of technical requirements is to facilitate evacuation for all.

4.5.3.3 The essential requirements relate to:

- Safety;
- Reliability and availability;
- Health;
- Environmental protection;
- Technical compatibility.

These requirements include general requirements and requirements specific to each subsystem. In accordance with Directive 2001/16/EC modified by Directive 2004/50/EC Annex II Infrastructure and Rolling Stock are subsystems classified under 'structural areas'. The relevant subsystem descriptions are as follows, which in both cases specifically refer to the needs of PRM.

4.5.3.4 Infrastructure:

'The track, points, engineering structures (footbridges, tunnels, etc.), associated station Infrastructure (platforms, zones of access, including the needs of persons with reduced mobility, etc.), safety and protective equipment.'

The associated station infrastructure (platforms, zones of access) is covered by the scope of M420.

The criteria and requirements for assessment of conformity for TSI-PRM requirements are indicated in section 6 of the Directive. The conformity assessment approach is based on the use of modules similar with those from New Approach Directive.

4.5.3.5 Conformity assessment schemes used for TSI infrastructure

Conformity assessment schemes of the accessibility requirements for TSI subsystems are presented below.

4.5.3.5.1 Conformity assessment (general)

In accordance with Annex VI of the Directive 96/48/EC, the contracting entity, or its authorized representative established within the community (applicant) shall lodge an application for assessment of conformity of the Rolling Stock or Infrastructure Subsystem with a notified body of its choice.

This notified body shall have been notified to assess the Rolling Stock or Infrastructure Subsystem. The EC declaration of verification in accordance with Article 18(1) and Annex VI to Directive 2001/16/EC modified by Directive 2004/50/EC shall be drawn up by the applicant.

This EC declaration of verification is required to obtain the authorisation to place the Subsystem into service.

The Conformity Assessment of a Subsystem shall be performed according to one or a combination of the following modules according to clause 6.2.2 and annex E to this TSI (The modules are described in Annex F to this TSI):

Modules for the EC verification of subsystems

Module SB: Type examination for design and development phases

Module SD: Product quality management system for production phase

Module SF: Product verification for production phase

Module SG: Unit verification

Module SH2: Full quality management system with design examination for design, development and production phases

The approval process and the contents of the assessment shall be defined between the applicant and a notified body according to the requirements defined in this TSI and in conformance with the rules set out in section 7 of this TSI.

4.3.5.2 Conformity assessment procedures (modules)

The applicant shall choose one of the modules or module combinations indicated in Table 24.

The characteristics of the Subsystem to be assessed during the relevant phases are indicated in Annex E to the TSI directive, Table E.1 for Infrastructure subsystem. The applicant shall confirm that each subsystem produced complies with the type.

Table 26 – Conformity assessment modules allocation

<i>Subsystem to be assessed</i>	<i>Module SB + SD</i>	<i>Module SB + SF</i>	<i>Module SG</i>	<i>Module SH2</i>
Rolling Stock Subsystem	X	X	-	X
Infrastructure Subsystem	X	-	X	X

TSI –PRM establishes also the characteristic to be assessed during development phases of the infrastructure

The sub-system characteristics to be assessed in the different phases of design, development and production are presented below

Table 27 - Indication of the assessments of the Infrastructure subsystem (constructed and supplied as single entity)

Characteristics to be assessed	Design and development phase	Production phase		
	Design review and/or design examination	Construction assembling, mounting	Assembly (before putting into service)	Validation under full operation conditions
4.1.2.2 Parking facilities for PRM	x		x	
4.1.2.3 Obstacle-free routes				
4.1.2.3.1 General	x		x	
4.1.2.3.2 Route identification	x		x	
4.1.2.4 Doors and entrances	x		x	
4.1.2.5 Floor surfaces	x		x	
4.1.2.6 Transparent obstacles	x		x	
4.1.2.7 Toilets	x		x	
4.1.2.8 Furniture and free-standing devices	x		x	
4.1.2.9 Ticketing/Counter or	x		x	

Characteristics to be assessed	Design and development phase	Production phase		
	Design review and/or design examination	Construction assembling, mounting	Assembly (before putting into service)	Validation under full operation conditions
vending machine/Information counter/Ticket control machine/Turnstiles/Customer Assistance points				
4.1.2.10 Lighting	x		x	
4.1.2.11 Visual information: signposting, pictograms, dynamic information	x		x	x
4.1.2.12 Spoken information	x		x	x
4.1.2.13 Emergency exits, alarms	x		x	x
4.1.2.14 Geometry of bridges and subways	x		x	
4.1.2.15 Stairs	x		x	
4.1.2.16 Handrails	x		x	
4.1.2.17 Ramps, escalators, lifts, travelators	x		x	
4.1.2.18.1 Platform height	x		x	
4.1.2.18.2 Platform offset	x			
4.1.2.18.3 Track layout along the platforms	x			
4.1.2.19 Platform width and edge of platform	x		x	
4.1.2.20 End of platform	x		x	
4.1.2.21 Boarding aid devices for passengers using wheelchairs	x		x	
4.1.2.22 Level track crossing at stations	x		x	

Note: the numbering in characteristic column is corresponding to the TSI-PRM Directive.

A detailed description of the conformity assessment modules is illustrated to annex H.3.

Findings:

- The TSI-PRM covers the aspect 'Accessibility for Persons with Reduced Mobility' in a broad sense and only in normal operation of the trains;
- This directive is a good example for a document that includes both functional and technical requirements as well the conformity assessment criteria, modules and detailed assessment procedures
- The TSI covers many of the general built environment elements (table 27)
- The TSI already has got associated conformity assessment procedures

- The TSI is already a law in all MS
- It should seriously be considered to integrate many of the requirements and assessment methods in a general CEN built environment standard. Probably this would be regarded as a most welcome simplification and example of coordination for designers, architects, authorities etc.

4.6 Legal framework for public procurement as regards accessibility and conformity assessment for built environment

This clause describes the legal framework for public procurement in relation to accessibility, conformity assessment and the built environment. Clause B.6.1 sets out the general rules applicable to all public procurements. Clause B.6.2 describes the possibilities of including accessibility at different stages of the procurement procedure. Clause B.6.3 describes conformity assessment in relation to public procurements. Clause B.6.4 describes different forms of public procurement in the domain of design and construction of the built environment.

For practical advice on the inclusion of accessibility criteria in public calls for tender, the reader is referred to, e.g. The Build-for-All Reference Manual⁶.

4.6.1 General rules for all public procurements

4.6.1.1 Treaty obligations

Public procurement is subject to legislation in the European Union, with the main purpose to support the realization and maintenance of the Single Market. Public procurement is subject to principles of the EC Treaty and in particular to the principle of freedom of movement of goods, the principle of freedom of establishment and the principle of freedom to provide services.

All procurements in the Member States have to comply with a set of principles derived from the freedom principles of the EC Treaty: equal treatment, non-discrimination, mutual recognition, proportionality and transparency⁷. The provisions of the directive regulate the procedures for awarding of such contracts which are based on these principles so as to ensure the effects of them and to guarantee the opening-up of public procurement to competition.

The principle of *equal treatment* implies that all suppliers shall be given equal opportunities and conditions. For example, accessibility requirements of all products shall be verified and evaluated in an equal manner for all tenderers.

The principle of *non-discrimination* prohibits all discrimination based on locality. No contracting authority may, for example, give preference to a local company simply because it is located in the city where the authority is based.

The principle of *mutual recognition* means that products lawfully produced and marketed in one Member State should generally be admitted into circulation in other Member States, unless otherwise justified. For public procurement, this implies that the contracting authority must accept equivalent proof of compliance issued by recognized non-national bodies.

The principle of *proportionality* means that the contracting authority must not impose restrictions on tenderers by setting out more far-reaching requirements than necessary to meet the needs in the procurement in question. In addition, proportionality means that the personnel and financial resources spent on the procurement process should be reasonable in relation to the scope and cost of the subject-matter of the procurement.

The principle of *transparency* concerns the contracting authority's obligation to provide information on the procurement and on how it is going to be carried out, and convey that information to all

⁶The Build-for-All Reference Manual; Info-Handicap and the "Build-for All" project, Luxembourg, 2006
⁷Directive 2004/18/EC Recital 2.

potential tenderers. Regarding the assessment of how a requirement is complied with, transparency is ensured by referencing/using predictable and repeatable assessment procedures, such that anyone running a check would most likely get the same result.

4.6.1.2 The Directives on public procurement

Two directives regulate public procurement in the European Union:

- The Classical Directive: Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the co-ordination of procedures for the award of public works contracts, public supply contracts and public service contracts.
- The Utilities Directive: Directive 2004/17/EC Of the European Parliament and of the Council, 31st March 2004 Coordinating the Procurement procedures of entities operating in the water, energy, transport and postal services sectors.
- The Remedy Directive: Directive 2007/66/EC of the European Parliament and of the Council of 11 December 2007 amending Council Directives 89/665/EEC and 92/13/EEC with regard to improving the effectiveness of review procedures concerning the award of public contracts.

The Procurement Directives regulate the procedures to be followed when buying the required products, services or works, i.e. how to buy them. They do not prescribe the specific characteristics of the products or services to be purchased, i.e. they do not prescribe what to buy. (In fact, the Directives do not address the basic purpose of public procurement: to provide public entities with products and services enabling them to carry out their tasks to the benefit of citizens and enterprises.)

The Directives do contain provisions on conformity assessment, which are relevant for the purposes of this project.

(For simplification and readability reasons, further text in section B.6 refers to the Classical Directive, from now on referred to as “The Directive”. A summary of the Directive is available on http://europa.eu/legislation_summaries/internal_market/businesses/public_procurement/l22009_en.htm)

Non-mandatory European Commission recommendations supplement these mandatory rules. One important example is the Commission’s eGovernment Action Plan, which stresses the importance of extending the use of electronic procurement. The plan remarks that

“electronic procurement and invoicing could result in savings in total procurement costs of around 5% and reductions in transaction costs of 10% or more, leading to savings of tens of billions of Euros annually. In particular, SMEs can benefit from easier access to public procurement markets and increasing their ICT-capabilities and thereby competitiveness. The Action Plan concludes that a high level of take-up of eProcurement is therefore highly desirable. Following these recommendations, the Member States have committed themselves to giving all public administrations across Europe the capability of carrying out 100% of their procurement electronically (where legally permissible) and to ensuring that at least 50% of public procurement above the EC threshold is carried out electronically by 2010.”

The work on conformity assessment in phase II of the Mandate needs to take account of the outcome of the action plan on electronic procurement.

The aim of the Public Procurement Remedies Directives (Directives 89/665/EEC for the classical sector and 92/13/EEC for the utilities sector) is to provide procedures for seeking redress in cases where bidders consider contracts have been unfairly awarded.

Directive 2007/66/EC amends the Remedies Directives. It requires public authorities to wait a certain number of days before concluding a public contract. This gives rejected bidders the opportunity to start an effective review procedure at a time when unfair decisions can still be corrected. The

Directive also seeks to combat illegal direct awards of public contracts, which is the most serious infringement of EU procurement law. National courts will also be able to render these contracts ineffective if they have been illegally awarded without any transparency and prior competitive tendering.

The Classical, Utilities and Remedies Directives apply to public contracts above a certain amount of money, called threshold. In the Classical Directive the threshold is 162 000 Euro for products and most services. For most services in the domain of design and construction of the built environment, the threshold is 6 242 000 Euro.

4.6.1.3 National procurement regulations

For public contracts below the thresholds, national legislations apply. A study made by OECD⁸ gives information on how Member States provide a framework of legislation or guidance on how contracting authorities and entities should award contracts below the EU thresholds. Of the 22 Member States that replied, only in the UK and Ireland is guidance the exclusive means of instructing purchasers about below-threshold obligations. The Netherlands has voluntary regulations and guidance. Otherwise, Member States provide a below-threshold regime either through the regulations covering the above threshold requirements or through national regulations, or a combination of both.

4.6.2 Accessibility in the Procurement Directives

4.6.2.1 General provisions

The Directive encourages procurers to use accessibility criteria when defining the technical specifications of a desired product/service. Article 23, paragraph 1 specifies that:

“whenever possible these technical specifications should be defined so as to take into account accessibility criteria for people with disabilities or design for all users”.

The Directive leaves the accessibility criteria largely to the contracting authority's discretion. The words ‘*whenever possible*’ confirm the freedom of choice it is given to trade off costs against accessibility considerations. It should be noted that "whenever possible" is more far-reaching than "whenever appropriate" or "whenever necessary".

The Directive contains no equivalent to the concept of “undue burden”, a key concept in the US legislation on accessibility. Undue burden means significant difficulty or expense, which would exempt the contracting authority from pursuing such procurement. In determining whether an action would result in an undue burden, an agency shall consider all agency resources available to the program or component for which the product is being developed, procured, maintained, or used.

Accessibility can appear in the call-for-tender in four ways:

- ***As a qualification criterion***
- ***As included in a technical specification***
- ***As an award criterion***
- ***As a condition for performing the contract***

4.6.2.2 Accessibility as a qualification criterion

The first phase of evaluation of tenders is the selection, or qualification, phase. The objective is to exclude those tenderers who are not qualified for performing the contract. Tenderers who do not satisfy the qualification criteria will be excluded from the subsequent phases of the procedure.

⁸OECD (2010), “Public Procurement in EU Member States - The Regulation of Contract Below the EU Thresholds and in Areas not Covered by the Detailed Rules of the EU Directives”, *Sigma Papers*, No. 45, OECD Publishing.

There are two types of qualification criteria: one concerning the economic and financial standing of the tenderer (Article 47), and one concerning the technical and/or professional ability of the tenderer (Article 48). Qualification criteria are targeted to the tenderer as an organization.

Accessibility may be introduced as a criterion for evaluating the ability of the tenderer. Paragraph 2 of Article 48 contains an exhaustive list of means of proof, permissible to be required in the call-for-tender. For example, a list of contracts carried out over the past five years where accessibility considerations are included, whether the tenderer's staff includes accessibility experts, a description of the technical and educational and professional qualifications of the persons responsible for managing the work.

In two key decisions (Case C-532/06 *Lianakis*, Case 31/87 *Beentjes*) the EC Court of Justice has laid down that the qualification phase and the award of contract are two distinct phases governed by different rules. In particular, criteria concerning the tenderer in general, such as experience, organization, manpower and equipment are qualification criteria and cannot be used as award criteria, since they are not considered as linked to the subject-matter of the procurement. *For example, accessibility criteria such as whether the tenderer has an accessibility policy, or an organizational unit for accessibility, or whether accessibility is included in the quality management system, are qualification criteria.*

However, skills and education of those consultants who are named in the tender and appointed as those who are actually intended to carry out the work are criteria linked to the subject-matter of the procurement and hence can be used as award criteria.

4.6.2.3 Accessibility in technical specifications

Article 23, paragraph 1 specifies that technical specifications shall be set out in the contract documentation.

“Technical specification” means the characteristics of a product or service that the contracting authority wishes to buy. Annex VI, paragraph 1b, of the Directive provides a non-exhaustive list of possible technical specifications:

“the required characteristics of a product or a service, such as quality levels, environmental performance levels, design for all requirements (including accessibility for disabled persons) and conformity assessment, performance, use of the product, safety or dimensions, including requirements relevant to the product as regards the name under which the product is sold, terminology, symbols, testing and test methods, packaging, marking and labelling, user instructions, production processes and methods and conformity assessment procedures;”

The principles applicable to technical specifications (non-discrimination, equal treatment, transparency) are defined in Clause 29 of the preamble:

“The technical specifications drawn up by public purchasers need to allow public procurement to be opened up to competition. To this end, it must be possible to submit tenders which reflect the diversity of technical solutions.”

“The technical specifications should be clearly indicated, so that all tenderers know what the requirements established by the contracting authority cover.”

The key rule on technical specifications is stated in art. 23, paragraph 3, of the Directive.

“Without prejudice to mandatory national technical rules, to the extent that they are compatible with Community law, the technical specifications shall be formulated:

(a) Either by reference to technical specifications defined in Annex VI and, in order of preference, to national standards transposing European standards, European technical approvals, common technical specifications, international standards, other technical reference systems established by the European standardization bodies or — when these do

not exist — to national standards, national technical approvals or national technical specifications relating to the design, calculation and execution of the works and use of the products. Each reference shall be accompanied by the words ‘or equivalent’;

(b) Or in terms of performance or functional requirements; the latter may include environmental characteristics. However, such parameters must be sufficiently precise to allow tenderers to determine the subject-matter of the contract and to allow contracting authorities to award the contract;

(c) Or in terms of performance or functional requirements as mentioned in subparagraph (b), with reference to the specifications mentioned in subparagraph (a) as a means of presuming conformity with such performance or functional requirements;

(d) Or by referring to the specifications mentioned in subparagraph (a) for certain characteristics, and by referring to the performance or functional requirements mentioned in subparagraph (b) for other characteristics.”

This means that contracting authorities are free to formulate accessibility specification by referring either to standards or as performance/functional requirements. When there are no European or international standards, contracting authorities *must* formulate the accessibility specifications in performance or functional terms. Where referring to standards, each reference shall be followed by the words “or equivalent”.

4.6.2.4 Accessibility as an award criterion

Article 53 of the Directive sets out that the criteria on which the contracting authorities shall base the award of public contracts shall be either:

“(a) When the award is made to the tender most economically advantageous from the point of view of the contracting authority, various criteria linked to the subject-matter of the public contract in question, for example, quality, price, technical merit, aesthetic and functional characteristics, environmental characteristics, running costs, cost-effectiveness, after-sales service and technical assistance, delivery date and delivery period or period of completion, or

(b) The lowest price only.”

A key phrase here is "linked to the subject-matter". Public procurers are free to select the criteria on which they propose to base their award of the contract. However, the EC Court laid down in the Lianakis case that their choice is limited to criteria aimed at identifying the tender which is economically the most advantageous.

The list of criteria in alternative (a) is not exhaustive. Thus, accessibility can be used as an award criterion provided that it is linked to the subject-matter of the contract. As an award criterion, there is nothing unique about accessibility. The purpose of the award stage in the procurement process is to allow the contracting authority to compare the tenders and assess which tender best meets its needs. The chosen award criteria should help the contracting authority to do this. They should relate to the intrinsic qualities of each of the tenders.

4.6.2.5 Accessibility in conditions for performing the contract

4.6.2.5.1 Provisions in the Directive

Article 26 states that

“Contracting authorities may lay down special conditions relating to the performance of a contract, provided that these are compatible with Community law and are indicated in the contract notice or in the specifications. The conditions governing the performance of a contract may, in particular, concern social and environmental considerations.”

Such conditions do not need to be fulfilled at the time of tendering; however, the tenderer who will be awarded the contract must fulfil them. As indicated in the Directive, conditions for performance of the contract are mainly directed at conditions on the execution of services.

4.6.2.5.2 Buying Social

The European Commission published Autumn 2010 a guide, "Buying Social"⁹. The purpose of this Guide is to raise contracting authorities' awareness of the potential benefits of taking into account social considerations in their public procurement. It also gives practical advice on how to include social considerations in public procurement.

Buying Social defines Socially Responsible Public Procurement (SRPP) as

"'SRPP' means procurement operations that take into account one or more of the following social considerations: employment opportunities, decent work, compliance with social and labour rights, social inclusion (including persons with disabilities), equal opportunities, accessibility design for all, taking account of sustainability criteria, including ethical trade issues (6) and wider voluntary compliance with corporate social responsibility (CSR), while observing the principles enshrined in the Treaty for the European Union (TFEU) and the Procurement Directives."

The guide provides a nonexhaustive list of examples of social considerations potentially relevant to public procurement. One such example is

"Promoting 'accessibility and design for all' (12), such as:

— mandatory provisions in technical specifications to secure access for persons with disabilities to, for example, public services, public buildings, public transport, public information and ICT goods and services, including web based applications. The key issue is to buy goods and services that are accessible to all."

The guide gives advice on how to include social considerations in different phases of procurement: defining the requirements of the contract; selecting suppliers, service providers and contractors; awarding the contract; and contract performance. It states that

"social considerations, depending on their nature, can be included only at certain stages of the procurement procedure"

And that

"For example, social considerations regarding labour conditions are generally more appropriate to be included in the contract performance clauses, as in general they do not qualify as technical specifications or selection criteria, within the meaning of the Procurement Directives. On the other hand, it is generally more appropriate to include accessibility considerations in the technical specifications."

The guide addresses public works contracts in a reference to the Commission's interpretative Communication of 2001, which states that

'Contracting authorities have a wide range of possibilities for determining the contractual clauses on social considerations' and lists 'some examples of additional specific conditions which a contracting authority might impose on the successful tenderer'.

One of these is

"The obligation to implement, during the execution of the contract, measures that are designed to promote equality between men and women or ethnic or racial diversity, or provide equal access to persons with disabilities."

⁹Buying Social, A Guide to Taking Account of Social Considerations in Public Procurement, Luxembourg: Publications Office of the European Union, 2010

The guide concludes that

"Public contracts for works and services, in which it is possible to lay down the manner in which the contract is to be performed, provide the best opportunity for a contracting authority to take account of social concerns in the contract performance clauses. It would appear more difficult to envisage contractual clauses relating to the manner in which supply contracts are performed, since imposition of clauses requiring changes to the organisation, structure or policy of an undertaking established on the territory of another Member State might be considered discriminatory or to constitute an unjustified restriction of trade."

4.6.3 Conformity assessment in Procurement Directives

The Directive specifies rules on technical specifications and acceptance of proofs that tenders satisfy requirements set out in the technical specifications. Recital 29 of the preamble gives the motivation behind these rules:

"The technical specifications drawn up by public purchasers need to allow public procurement to be opened up to competition. To this end, it must be possible to submit tenders which reflect the diversity of technical solutions. Accordingly, it must be possible to draw up the technical specifications in terms of functional performance and requirements, and, where reference is made to the European standard or, in the absence thereof, to the national standard, tenders based on equivalent arrangements must be considered by contracting authorities."

"To demonstrate equivalence, tenderers should be permitted to use any form of evidence. Contracting authorities must be able to provide a reason for any decision that equivalence does not exist in a given case."

As mentioned before, Article 23, paragraph 3 specifies that technical specifications shall be formulated either by reference to standards, or in terms of functional or performance requirements. In addition, certain characteristics can be specified by standards and other in terms of functions and performance. Where referring to standards, each reference shall be followed by the words "or equivalent".

Paragraph 4 specifies that, where a contracting authority refers to standards,

"cannot reject a tender on the grounds that the products and services tendered for do not comply with the specifications to which it has referred, once the tenderer proves in his tender to the satisfaction of the contracting authority, by whatever appropriate means, that the solutions which he proposes satisfy in an equivalent manner the requirements defined by the technical specifications."

In paragraph 5, the inverse situation is specified. Where a contracting authority refers to functional and performance requirements, it cannot reject a tender for products and services which comply with standards addressing these requirements.

"In his tender, the tenderer must prove to the satisfaction of the contracting authority and by any appropriate means that the work, product or service in compliance with the standard meets the performance or functional requirements of the contracting authority."

Both paragraph 4 and 5 specify that

"an appropriate means might be constituted by a technical dossier of the manufacturer or a test report from a recognised body".

In paragraph 7, recognised bodies are defined as

"test and calibration laboratories and certification and inspection bodies which comply with applicable European standards."

In addition, paragraph 7 specifies that

“contracting authorities shall accept certificates from recognised bodies established in other Member States.”

The Directive does not specify very much *what* the contracting authority may require. Rather, it specifies *how* the requirements should be formulated and what the authority must accept from the tenderer. A technical specification may, but not must, include requirements on conformity assessments, i.e. that compliance to requirements set out in the technical specification is verified in the tender by means of a conformity assessment procedure.

It is not clearly stated in the Directive that a requirement set out in the technical specification must be verified. However, it could be argued that refraining from control of compliance conflicts with the principle of equal treatment. In addition, a decision by the EC Court (Case C-448/01 Wienstrom) lays down that

“in order for the criterion to be acceptable, it should be susceptible of control, which would imply that the contracting authority requires – through the production of certificates for example – elements enabling him to control the information forwarded by the bidder in relation to the award criteria.”

As follows from the definitions of conformity assessment in the standard ISO/IEC 17000, an assessment can be performed either by the supplier (the first party), the customer (the second party) or someone else (a third party).

A verification that the tender conforms to the stated requirements can always be made by the contracting authority itself, provided that the authority has the necessary knowledge and equipment to carry out such verification in a way that treats the tenders equally. Where the authority does not have the adequate knowledge and equipment, it can use a consultancy service to carry out the verification. In both cases, this is a second party attestation.

If the contracting authority does not want to carry out the verification during the evaluation of the tenders, e.g. because it would be too time-consuming, the authority may in call-for-tender require that the supplier provides a proof, an attestation, that a certain requirement is complied with. In the sense of ISO/IEC 17000, the authority may require either a first party attestation, a supplier’s declaration of conformity or a third party certification.

Where requirements on conformity assessments are specified, they shall refer to standards “or equivalent”, or be in terms of functions and performance.

From paragraph 4 follows that a specific conformity assessment scheme, even if it is a formal standard, cannot be specified as mandatory. The tenderer has the option to use another method, provided he can prove that it gives equivalent results. The CE mark is an exception. The CE mark provides a presumption of conformity with the mandatory essential requirements of the New Approach Directives. Therefore, when the contracting authority decides to buy a product covered by a New Approach Directive requiring the CE marking, it does not need to specify ‘or equivalent’.

From paragraphs 4 and 5 follows that a test report from a recognised body is an allowed but not mandatory way of proving compliance with the requirements set out in the technical specification. The term “test report” is not defined in the Directive, but most likely an accredited third party certificate is a valid test report. In addition, it seems to imply that a supplier’s declaration, based on an inspection made by a recognised body, can always be presumed to be accepted by the contracting authority. On the other hand, a first party attestation without any specification of the assessment method is not an acceptable test report.

The Directive is not specific as regards what kind of proof a contracting authority can require. Hence, the authority has freedom to choose proof of conformity from a first party attestation to an accredited third party certification. Requiring verification made by a third party is allowed as long as equivalent verifications made by bodies in other Member States are accepted (the principle of mutual recognition). Since the Directive gives no guidance on what should be meant by an equivalent

verification, each contracting authority must elaborate its own interpretation in order to ensure that the principle of equal treatment is followed.

The extended use of electronic procurement means that conformity attestations (primarily pre-market attestations), including attestations on accessibility, should be able to be stored and submitted electronically. Work is in progress on designing approaches on how to handle certificates, declarations of conformity and other documents electronically.

It could be noted that different standards define accessibility and usability differently. The standard under development, ISO DIS 21542, *Building construction — Accessibility and usability of the built environment*, defines accessibility as follows:

(accessibility) “means that people, regardless of disability, age or gender, are able to gain access to buildings or part of buildings, into them, within them and exit from them”

NOTE Accessibility includes ease of independent approach, entry, evacuation and/or use of a building and its services and facilities, by all of the building's potential users - with an assurance of individual health, safety and welfare during the course of those activities.”

It defines usability as “characteristic of the *built environment* whose degrees of convenience and risk in use can be determined by measurement or other agreed means”

On the other hand, standards on interactive systems, e.g. ISO 9241-20 *Accessibility guidelines for information/communication technology (ICT) equipment and services*, define accessibility as “usability of a product, service, environment or facility by people with the widest range of capabilities”. It defines usability as “extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use”.

4.6.4 Specific legislation on procurements in the domain of the built environment

The Directive distinguishes between numbers of contract types:

- “Public works contracts” are public contracts having as their object either the execution, or both the design and execution, of building or civil engineering works.
- “Public supply contracts” are public contracts other than public works contracts having as their object the purchase or rental of products.
- “Public service contracts” are public contracts other than public works or supply contracts having as their object the provision of services.

4.6.4.1 Public works contracts

The Directive defines “public works contracts” as

“public contracts having as their object either the execution, or both the design and execution, of works related to one of the activities within the meaning of Annex I or a work, or the realization, by whatever means, of a work corresponding to the requirements specified by the contracting authority. A “work” means the outcome of building or civil engineering works taken as a whole which is sufficient of itself to fulfil an economic or technical function.”

Annex I is a list of services. Examples are

- Construction of new buildings
- Construction of civil engineering constructions, such as bridges, tunnels, pipelines
- Construction of highways, roads, airfields and sports facilities
- Installation of electrical wiring and fittings
- Plumbing

- Floor and wall covering
- Painting and glazing
- Etc.

It should be noted that architectural and engineering activities, as well as project management for construction, are not included in public works. They are "public service contracts"¹⁰.

In addition, the Directive regulates a specific procedure of relevance for this project: "Design contests" means

"those procedures which enable the contracting authority to acquire, mainly in the fields of town and country planning, architecture and engineering or data processing, a plan or design selected by a jury after being put out to competition with or without the award of prizes."

Apart from the thresholds, there are only minor differences in procedures for public works contracts and other service contracts. However, Article 34 regulates a specific type of public works contract: particular rules on subsidized housing schemes.

Recital 9 of the preamble of the Directive sets out that

"In view of the diversity of public works contracts, contracting authorities should be able to make provision for contracts for the design and execution of work to be awarded either separately or jointly. It is not the intention of this Directive to prescribe either joint or separate contract awards. The decision to award contracts separately or jointly must be determined by qualitative and economic criteria, which may be defined by national law."

Article 16 contains an important exclusion from the Directive:

"This Directive shall not apply to public service contracts for:

- (a) the acquisition or rental, by whatever financial means, of land, existing buildings or other immovable property or concerning rights thereon; nevertheless, financial service contracts concluded at the same time as, before or after the contract of acquisition or rental, in whatever form, shall be subject to this Directive;"

When a public entity looks for new premises to hire, for example office premises for people engaged to work in a temporary project, it may have to ensure due to national legislation, that these premises are accessible for employees and visitors. Such rental is subject to national procurement legislation. However, temporary rebuilding to accommodate disabled employees is a public works contract.

4.6.4.2 Different types of procurements for the built environment

4.6.4.2.1 Construction products

For requirements on construction products as well as conformity assessment, the Construction Products Directive (89/106/EC) applies.

Construction products may only be placed on the market if they are fit for their intended use. In this regard, they must be such that works in which they are incorporated satisfy, for an economically reasonable working life, the essential requirements with regard to mechanical strength and stability, safety in the event of fire, hygiene, health and the environment, safety in use, protection against noise and energy economy and heat retention.

The essential requirements are defined in the first instance in interpretative documents drawn up by technical committees and are then elaborated further in the form of technical specifications. The latter may consist of either harmonised European or European technical approvals.

¹⁰See Annex II, Category 12, in Directive 2004/18/EC.

Where neither a European standard nor guidelines for European technical approval yet exist, construction products may continue to be assessed and marketed in accordance with existing national provisions conforming to the essential requirements.

It is up to the manufacturers or their representatives established in the Community to attest, either on the basis of their own resources or through an approved certification body, that their products conform to the requirements of a technical specification in keeping with the attestation of conformity procedures set out in the Directive.

Accessibility is not an essential requirement in the sense of the Directive. The Directive does not regulate accessibility in any way. This implies that it does not impose any particular freedom or restrictions to public procurers of construction products with respect to accessibility, compared with other products.

4.6.4.2.2 Design services

Procurement of design services apply to projects where the customer/employer wishes to keep the design phase and construction phase apart. This may apply to e.g. rebuilding of existing buildings or facilities or to the design of new buildings or facilities. Accessibility requirements can be stated upon

- The designer (company), its technical and professional ability (which can be verified within the procurement).
- The subject-matter of the procurement, i.e. the design service as such.
- The object to be designed. Functional and technical accessibility requirements can be stated for the object to be designed. The realization of these requirements appears in the result of the design process, i.e. the design. They can however not be verified within the procurement, since they are not award criteria.

A distinction should be made between procurement of design services and procurement of design. For the latter, which is assumed to be exceptional (apart from design contests, see below), the result of a design process is the subject-matter of the procurement and hence submitted in the tender. In that case, accessibility requirements can and must be verified within the procurement.

4.6.4.2.3 Construction services

Procurement of construction services relate to projects where the design is carried out directly by the customer/employer or by specialist consultants engaged directly by the customer/employer. That design forms the basis for the tender for construction. Accessibility requirements can be stated upon:

- The constructor (company), its technical and professional ability (which can be verified within the procurement).
- The subject-matter of the procurement, i.e. the construction service as such.
- The object to be built. Here, the accessibility requirements must be included in the design specification, which is a part of the call-for-tender but is not a basis for awarding of contract. In other words, the accessibility of the object to be built is in its entirety determined in the design specification, and the procurement process does not have any impact. The procurement officer should not add, delete or change requirements on the object. The verification that the appropriate accessibility requirements are stated takes place during the design phase (before the procurement). Verification that the object to be built complies with the accessibility requirements in the design specification takes place during the building control process, i.e. after the procurement process is finalized.

4.6.4.2.4 Design + construction services

This is a project where one and the same contractor takes responsibility for both design and construction of the facility in accordance with specifications set out by the contracting authority. In the call-for-tender the employer describes the functions and qualities of the intended facility. The

tenders should contain a design proposal enabling the employer to assess whether the requirements and recommendations can be fulfilled. The selected tenderer (the contractor) develops the detailed drawings and descriptions of the facility.

Accessibility could be included in the described functions and qualities, however not in detail, since the tenderer is supposed to submit an outlined proposal, not a detailed specification. Consequently, the fulfillment of the accessibility requirements can and shall be evaluated as part of the procurement process. As in procurement of separate design and construction services, assessment of the compliance with detailed accessibility requirements takes place in the building control process.

In addition, accessibility requirements may be stated upon

- The contractor (company), its technical and professional ability in relation to both design and construction (which can be verified within the procurement).
- The subject-matter of the procurement, i.e. the construction service as such.

4.6.4.2.5 Design + construction + operation and maintenance services

This is a project resulting in a long-term contract, where one and the same contractor takes responsibility not only for design and construction of the facility, but also for operation and maintenance. For accessibility, this type of project is equivalent to design + construction procurements. For the operation and maintenance, the contractor must be able to ensure that the accessibility is preserved throughout the contract time.

4.6.4.2.6 Design contests

The Directive defines a design contest as

“those procedures which enable the contracting authority to acquire, mainly in the fields of town and country planning, architecture and engineering or data processing, a plan or design selected by a jury after being put out to competition with or without the award of prizes.”

“The jury shall be composed exclusively of natural persons who are independent of participants in the contest.”

Provisions for design contests are set out in articles 66-74 of the Directive. Design contests can be organized either as part of a procedure leading to the award of a public service contract, or result in prizes and/or payments to participants.

Design contests can be applied for any kind of service. There is no limitation to the domain of the built environment. It follows from the text of the Directive that a design contest can be a part of a procurement of design + build services.

Clearly, accessibility of the object to be designed can be an award criterion for selecting the winner of a design contest.

4.6.4.2.7 Consultancy services

Procurements of technical consulting in any domain, including the built environment, are public service contracts and should follow the ordinary provisions of the Directive.

Services in the domain of the built environment are, for example, architectural services, conformity assessment services, engineering services, urban planning services and technical experts on accessibility. It is to be noted that accessibility can be a qualification criterion both for the consultancy company and for its staff, provided that accessibility is linked to the subject-matter of the procurement. As pointed out in section B.6.2.2, criteria concerning the company in general can only be used as qualification criteria. On the other hand, skills and education of those consultants

who are named in the tender and appointed as those who are actually intended to carry out the work can be used as award criteria.

4.7 Conclusions and recommendations

4.7.1 Conclusions

An outcome of the analysis of conformity assessment schemes in European Member States shows that

- Limited or no Conformity Assessment is being applied to the early procurement phases of construction projects such as brief development, site selection and appointment of design and construction teams
- Conformity Assessment is mainly limited to building control activities at various stages during the design and construction stages by Building Control Authorities (BCAs)
- Self assessment of conformity is increasingly being used
- There is very limited Conformity Assessment of buildings and environments in use
- Existing building inspection activities are in place in all states – the coverage of BCA inspections may differ a lot from state to state as well as within states
- Few countries have formal training procedures in place or assess the competences of those charged with carrying out conformity assessment.

Notwithstanding the foregoing, some European Member States report significant outcomes regarding the accessibility of the built environment as a direct result of the implementation of the requirements of Anti-Discrimination, Rights based or Equality Acts.

The functional accessibility requirements arising from the obligations under the UN Convention on the Rights of Persons with Disabilities appear principally to be having an impact on the services provided to disabled people and not on the building works process (planning, construction works and completion).

Further outcomes that were highlighted in the reports from several different countries were that:

- Attestation of conformity to an accessibility standard does not guarantee that the object is fully accessible.

The most crucial element of a conformity assessment scheme is the normative document specifying the requirements. The accessibility of an object is determined by the requirements, not by the procedure for demonstrating that the requirements are fulfilled. Furthermore, the demonstration applies only to the specified requirements, nothing else. For elements of the built environment, many design solutions and constructions may well conform to functional and technical requirements specified in a standard, without being good solutions.

- Accessibility should be mainstreamed into existing business processes.

Accessibility is one of many required desirable qualities of elements of the built environment. The market players (developers, procurers, designers, builders etc.) all have their established business models, business processes, work methods, sourcing strategies, procurement strategies etc. They want to manage accessibility in the same way as they manage other qualities, e.g. the essential requirements laid down in the construction directive. Hence, accessibility should be incorporated into existing processes, not added onto those processes. This is an application of the mainstreaming strategy.

- Accessibility standards and conformity assessment schemes to be produced must take a wide diversity of procurement approaches into account.

The project teams have not within the timeframe of the project been able to study in any detail the prevailing procurement strategies applied by public entities in the Member States. The project teams are aware that there is a great diversity of approaches among public entities, depending on size, organization, geographical structure, building industry structure etc. In addition, the project teams believe that this diversity is less dependent on countries and more on the type and size of entity doing the procuring. Some public entities are big urban cities, some are small rural municipalities. The latter seldom have in-house competencies on e.g. ground investigation, design or construction. They can be expected to procure consultancy services to a greater extent than big cities. Furthermore, for small municipalities most contracts on public works will fall below the threshold amount, where the national procurement legislation (if any) will apply. The toolkit to be produced in phase II has to take this diversity into account.

An important finding in relation to construction products:

- Very few standards for construction products covered by the former CPD include any requirements regarding accessibility and usability
- As of 9 March 2011, a new regulation for construction products was approved by the EU, and accessibility was included as a basic requirement for construction works.
- Greater conformity assessment of products such as electronic and IT equipment, intercoms, alarms, public address systems etc may have a significant impact on the accessibility of buildings and environments in particular for people with sensory and learning impairments
- How the added basic requirement “accessibility” will be further explained within ‘essential characteristics’ and its influence on European standardisation is now under development. More information will be included after the Open Meeting and with support from EC DG ENTR. The report includes an overview which CEN/TCs are concerned and should implement accessibility requirements within their standards.

Conformity assessment is not just an appendix to a set of requirements. Making conformity assessment possible and clear is rooted in the very formulation of the basic requirements. Many documents examined, however, either lack precision in their requirements, or make them far too prescriptive, possibly leading to very different interpretations by notified bodies or certifiers. Documents and schemes should take into account the complexity of many building projects as well as the application of requirements to existing building and should allow for flexibility in their use, application and assessment. The phase II toolkit should assist in this.

If a new European accessibility standard is to make life easier to the procurer and project manager, then:

- Direct links to each stage of the building process are essential, particularly in the conformity assessment part. Avoiding costly mistakes means checking for conformity in time, at the right stage, and if the standard itself does not provide for this, then the toolkit could. As many building regulations leave it to the project manager to guess at which stage to highlight critical aspects, a phase II toolkit delivering the backbone of the what and when questions would be welcomed.
- A toolkit that offered free-of-charge, open format word processing or spreadsheet documents, digitally storable on projects, in editable checklist form, with direct inclusion of all requirements from the basic accessibility standards could be a useful down-to-earth instrument for all stakeholders in procurement, from design to final assessment stages.

If designed correctly these kinds of checklists would be highly usable in any scenario for phase II, be they based on self-assessment or third party assessment. Some countries and municipalities do offer basic online tools, but they are seldom designed for dynamic use, digital building permit applications or first or third party assessment purposes. Consequently, in the majority of construction projects each and every organization, consultant or individual has to develop homemade tools, and this in

itself represents an obstacle to quality management and control. The toolkit in phase II could be a source of these simple, but more supportive documents.

- A detailed assessment standard or toolkit does not make sense without a matching accessibility standard, written with assessment in mind
- Development of the two basic European standards therefore is a prerequisite for successful conformity assessment on a common European basis
- Detailed EN accessibility standards are indispensable, too, for determining construction products accessibility requirements, as these in general will have to be derived from the EN built environment standards.

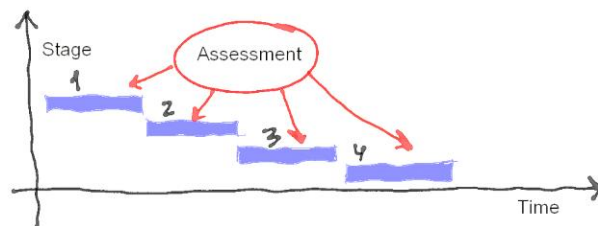


Figure 6 – Tools and stages to be linked

Even though philosophies on accessibility and universal design seem to be converging in EU, capacity building programs that can relate to common EU standards and a toolkit would

- make assessment much easier for the procurers, project managers and consultants
- help establish a common knowledge basis in the EU for procurers, consultants and professionals
- form the basis for a common approach to assessment and procedures

It has hitherto been assumed that the mandate 376 Toolkit should form the basis for a similar Mandate 420 version, but this is not entirely recommendable, as

- Procurement of buildings by its nature is different from procuring products.
- Most of the toolkits recommended in M 376 do not deliver editable formats

Development of the toolkits should not necessarily be split in two, but at least should be developed in parallel and shaped to fit their individual purposes. For the longer term and dynamic process of building projects with collaboration between many partners and colleagues editable documents should be provided.

To assist the procurer the toolkit ideally would

- provide links to the different national building regulations, as these in many cases override an EN standard and vice versa, and full knowledge of what to assess against is not always clear, even to professionals.

In addition the standards will be useful for a European framework providing what the UN Convention asks for as a minimum level of accessibility for the EU. In the case of construction products, this framework is already provided by the new CPR that also offers the advantage of being adopted in national legislation without any modification.

4.7.2 Recommendations

This part of the report primarily includes proposals that refer to the aspects related to conformity assessment of accessibility to the built environment. In order to understand team B's recommendations it is essential to take into consideration the standard(s) regarding functional and/or technical accessibility requirements that is/are the outcome of team A's proposals.

The functional and technical requirements regarding accessibility are the objects of conformity that will be assessed in a conformity assessment scheme for accessibility. Another key element fundamental to an effective conformity assessment scheme is the competence of the personnel, due to nature of the activities to be performed. All activities included in any conformity assessment scheme are services and the quality of any service is mainly based on the competence of the personnel.

In this framework, the team B recommendations as outcome of phase I of the Mandate 420 are the development of:

1. A European standardisation document describing the conformity assessment requirements in relation to the activities, roles and responsibilities of the stakeholders (designers, architects, inspectors, consultants, construction companies, surveillance bodies and clients) and objective evidence associated with these (accessibility statements, inspection reports etc). This document has to be closely linked to the standard(s) with functional and/or technical requirements for accessibility, to ensure the presumption of conformity with accessibility requirements
2. A European standardisation document (technical specification, technical report or a CEN Workshop Agreement (CWA)) that describes the competence of the personnel involved in conformity assessment activities for accessibility of the built environment. In this regard there is a precedent in CEN standardisation where a CWA is under preparation 'Curriculum for training professionals in Universal Design'.

A toolkit for the use of standardisers to promote the accessibility requirements in the relevant standards both for construction products and for services related to built environments; this should take particular account of the requirements of the Guide CEN 6 or Guide ISO 71 and any related standards.

3. European standards for construction products that include explicitly those characteristics relevant for the accessibility requirements and ways to demonstrate the conformity of these (annex similar to CE marking)
4. A toolkit for the use of procurers, involved in the public procurement of the built environment; this toolkit has to provide information regarding:
 - a. The two EU Accessibility Standards
 - i. Standard relating to functional requirements of specified user groups,
 - ii. Standard relating to technical specifications to meet the functional requirement
 - b. National legislation referring to accessibility (based on the Inventory collected by Project Team A, and continually updated),
 - c. EU Directives referring to accessibility of the built environment,
 - d. A European standardisation document that refers to the conformity assessment scheme for accessibility
 - e. Meanings of presumption of conformity with accessibility requirements and the related objective evidences
 - f. Documents which assist with the technical issues of assessing compliance with the requirements in the accessibility standard, including existing buildings, heritage sites etc.
 - g. A short introduction to the philosophy of Design for All / Universal Design and description of the diverse user groups,

- h. National /international accessibility guidelines in common use (based on the Inventory collected by Project Team A, and continually updated),
- i. National / International examples of Good Practice in Accessible Built Environments

5 Bibliography

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT		
INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
		x=yes	x=yes	x=yes	x=yes	x=yes	x=yes	x=yes	x=yes	h=high; m=medium; l=low	h=high; m=medium; l=low	
	No of each type	40	36	58	58	52	74	126	125	114	82	High
										63	58	Medium
										70	72	Low
EUROPEAN STANDARDS - UNIVERSAL	EUROPEAN STANDARDS - UNIVERSAL											
EUROPEAN	EUROPEAN											
ISO	ISO	International Organization for Standardization (28 February 2010), BS ISO 21542 "Building construction - Accessibility and usability of built environment", Draft for Consultation.					x	x		h	h	Contains balanced set of requirements and recommendations, plus an extra level for adapting of existing buildings
EUROPEAN UNION (EU) MEMBER COUNTRIES	EUROPEAN UNION (EU) MEMBER COUNTRIES											
AUSTRIA	AUSTRIA											
	B-VG	Österreichische Bundesverfassung Art. 7 Abs. 1 / Austrian Federal Constitution (www.ris.bka.gv.at)								l	l	Art.7, Abs. 1 since 1997: "Nobody shall be discriminated due to his disability. The Republic (Federation, countries, municipalities and villages) commits themselves to ensure the equal treatment of disabled and non-disabled persons in all spheres of every day life."
	BGStG	Austrian Equal Treatment Law - Bundes-Behindertengleichstellungsgesetz BGStG 2006 (www.ris.bka.gv.at)					x	x		l	l	Strong reference on ÖNORM B 1600 included
	ASchG	ArbeitnehmerInnenschutzgesetz (www.ris.bka.gv.at)					x	x		l	l	(5) Workplaces in buildings have to be accessible if required. Especially exits and entrances, horizontal and vertical circulation, doors and

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												sanitary rooms which can be used by disabled employees.
AStV	Arbeitsstättenverordnung (Workplace Regulation) http://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10009098									I	I	§ 15. (1) When employees with mobility impairments are employed, the work place has to be adapted ... if necessary.
BEinstG,	Federal law on equal treatment of persons with disabilities on the work-place, Behinderten-Einstellungsgesetz 2010					x				I	I	Premises with more than 25 persons have to employ at least one disabled person per 25. If they fulfill not this obligation they have to pay a balance tax of 230 €/month/person. § 7b. (1) In connection with a service relationship (...) as well as in the work environment in general (...) no one shall be discriminated against either directly or indirectly because of disability.
BVergG	Bundesvergabegesetz2006 (Public Procurement Law) http://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20004547									I	I	§ 87. (1) Tender documents have to refer to the corresponding regulations, standards concerning barrier free building. (...) (3) Par. 1 also applies to tender offers for the design and development of annex and alteration of buildings and parts of buildings, as far as the total costs do not rise disproportionately and an adequate necessity is given.
RVS 03.02.12	RVS-Richtlinie 03.02.12 Fußgängerverkehr (RVS-Guideline 03.02.12 Pedestrian traffic) www.fsv.at (Forschungsgemeinschaft Straße und Verkehr)							x	x	h	m	
RVS 02.02.36	RVS-Richtlinie RVS 02.02.36 - Alltagsgerechter barrierefreier Straßenraum / RVS-Guideline 02.02.36 - Guideline for accessible public space for everyday-life (www.fsv.at) (Forschungsgemeinschaft Straße und Verkehr)							x	x	h	h	Very new guideline - will be published in 1-2 months.
B-PT	Leitfaden für barrierefreien Öffentlichen Verkehr- Anforderungen an barrierefreie Bus-							x	x	h	m	mainly for accessible public transport: bus and tram stations

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	und Straßenbahnhaltstellen / Guideline for barrier free public transport - Requirements for barrier free bus- and tramway stations http://www.bmvit.gv.at/verkehr/gesamtverkehr/barrierefreiheit/downloads/leitfaden_haltestellen.pdf											
B-IS	Barrierefreie Infrastruktur - Planungsrichtlinie (Barrier free infrastructure - Designguideline), ÖBB 2003/06 http://www.kremser.wonne.cc/oebb/oebb-dokumente/2_barrierefreie-infrastruktur.pdf							x	x	h	m	Guideline for the design of barrier free railway infrastructure (Official Notification of the Federal Ministry of Traffic, Innovation and Technology). Note: ÖBB (Austrian Federal Railway) has always had its own regulations on building and is not subject to general building regulations. A notification (Federal Ministry of Economy, Family and Youth) from the 1980s regulates the observation of ÖNORM B 1600 by every federal authority is obligatory.
OIB HC	OIB Harmonisation Concept, clause 4 "Safety in use and accessibility" (Zielorientierte Bautechnische Anforderungen, 4. Nutzungssicherheit und Barrierefreiheit) www.oib.or.at							x	x	h	l	The OIB Harmonisation concept has been developed for the 6 essential requirements for building construction as in the EU-Building Products Directive used but further improved while they are including 'accessibility'. Contains also a list of buildings which have to be designed accessible. These OIB-Guidelines have been developed for implementation within the 9 federal building regulations in Austria. The list of different use of buildings is more or less in line with the UN Convention.
OIB Guideline 4	OIB-Richtlinie 4 "Nutzungssicherheit und Barrierefreiheit" / OIB-Guideline 4 "Safety in use and accessibility" (including reference to ÖNORM B 1600) www.oib.or.at							x	x	h	l	Referencing to the main accessibility requirements clauses of ÖNORM B 1600. This Guide has been developed for implementation within the 9 different building regulations in Austria. Higher accessibility requirements can stay in the relevant building regulation. Due to the fact that 6 from 9 countries have already incorporated the OIB Guideline 4 in their building regulation I have used in the Inventory only the reference to Vienna Building Code and regulation.
B-BauVO	Burgenländische Bauverordnung 2008 BauVO, LGBL. Nr. 63/2008 www.bauordnung.at	x	x							h	l	OIB Guideline 4 incorporated.
K-BauVO	Kärntner Bauvorschriften 16.04.2008	x	x							m	l	
NOEBTV	Niederösterreich. Bautechnikverordnung	x	x	x	x					l	l	

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INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
	1996 (revision 2007) www.bauordnung.at											
OOE BTV	Oberösterreichische Bautechnikverordnung 1999			x	x	x				m	l	
OOE BauTG	Oberösterreichisches Bautechnikgesetz 19.04.2008 www.bauordnung.at	x	x			x				h	l	OIB Guideline 4 incorporated.
S-BauTG	Salzburger Bautechnikgesetz 24.03.2009			x	x					l	l	
Stmk. BauG	Steiermärkisches Baugesetz 21.08.2008 www.bauordnung.at	x	x							h	l	OIB Guideline 4 before incorporation.
T-TBauV	Tiroler Technische Bauvorschriften, 19.04.2008 www.bauordnung.at			x	x					h	l	OIB Guideline 4 incorporated.
T-BO	Tiroler Bauordnung, 29.09.2008 www.bauordnung.at	x	x							h	l	
V-BauTVO	Vorarlberg - Verordnung über die technischen Erfordernissen von Bauwerken, 23.04.2009 www.bauordnung.at			x	x					h	l	OIB Guideline 4 incorporated.
WBTV	Wiener Bautechnikverordnung WBTV, 07.09.2008 www.bauordnung.at			x	x					h	m	OIB Guideline 4 incorporated. All buildings with habitable rooms (all offices, > 2 flats etc.) have to be built accessible.
W-BO	Wiener Bauordnung (Techniknovelle 2007) 11.04.2008	x	x							h	m	OIB Guideline 4 is incorporated. All buildings with habitable rooms (except single family houses, houses for 2 families, row-houses) have to be built accessible. Architects have to confirm in the building permit proceedings that they have considered in their design all accessibility requirements. At the completion announcement a final statement has to be given by the architect or by a civil engineer that the execution has been done according accessibility requirements (based on ÖNORM B 1600 as state of the art). Due to the liberalisation of the building regulation no further building controls are applied for private builders. Only in the responsibility of the City of Vienna if they act as a building owner the building authority act as controllers.
ÖNORM A 3012	Visual guiding systems public					x	x			h	h	

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	information - Orientation supported by directional arrows, graphic symbols, text, light and colour (www.as-institute.at)											
ÖNORM B 1600	Building without barriers - Design principles www.as-institute.at					x	x			h	h	First publication of this accessibility standard in 1977. In the new revised version - will be published 2011-04-01 an own chapter for existing buildings is incorporated.
ÖNORM B 1601	Special buildings for handicapped and old persons - Design principles www.as-institute.at					x	x			h	m	This standard can be applied for special buildings used by disabled persons as medicine practices, elderly homes, special houses for disabled persons, hospitals, workplaces for persons with disabilities, senior homes etc.
ÖNORM B 1602	Barrier free buildings for teaching and training and possible accompanying facilities (www.as-institute.at)					x	x			h	m	ÖNORM B 1602 has to be applied together with ÖNORM B 1600 which is the basic standard.
ÖNORM B 1603	Barrier free buildings for tourism - Design principles (www.as-institute.at)					x	x			h	m	ÖNORM B 1603 has to be applied together with ÖNORM B 1600 which is the basic standard.
ÖNORM EN 81-70	Safety rules for the construction and installation of lifts - Particular applications for passenger and good passengers lifts - Part 70: Accessibility to lifts for persons including persons with disability (consolidated version) (www.as-institute.at)					x	x			h	h	All new lifts and lifts under refurbishment are usually constructed according ÖNORM EN 81-70. In Vienna and Austria the focus is laid more on requirements for people with mobility impairment. Induction loop system is very seldom executed.
ÖNORM CEN/TS 15209	Taktile Bodenindikatoren gefertigt aus Beton, Ton oder Stein					x	x			m	m	This document is not really a standard: all relevant systems within Europe are therein listed.
ÖNORM V 2100	Technical aids for visually impaired and blind persons - Tactile references on control panels for pedestrians (www.as-institute.at)					x	x			h	h	
ÖNORM V 2100	Technical aids for visually impaired and blind persons - Tactile					x	x			h	h	

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	references on control panels for pedestrians (www.as-institute.at)											
ÖNORM V 2102-1	Technical aids for visually impaired and blind persons - Tactile ground surface indicators - Part 1: For pavements in buildings and in the public area at speeds not higher than 80 km/h (www.as-institute.at)					x	x			h	h	Applied in all streets in Vienna. Several pilot projects in different places of the City under test with disabled persons for further development and improvements in public spaces.
ÖNORM V 2104	Technical aids for blind, visually and mobility impaired persons - Safety devices for construction and dangerous sites (www.as-institute.at) and http://www.wien.gv.at/verkehr/bau-stellen/absicherung.html and information about 'Safety for Vienna's construction sites' in http://www.wien.gv.at/verkehr/org-anisation/pdf/baustellen.pdf					x	x			h	h	Obligatorily required for the safety of all construction sites in the City of Vienna. Special Information leaflet for Safety of construction sites in Vienna with reference to accessibility requirements for disabled persons.
ÖNORM B 8115-3	Sound insulation and architectural acoustics in building construction - Part 3: Architectural acoustics					x	x					Referenced within ÖNORM B 1600
DFA	Barriere:Frei! - Handbuch für barrierefreies Wohnen / Handbook for accessible living, www.designforall.at and Federal Ministry of Social Affairs, Works and Consumer Protection www.bmask.gv.at (free download and brochure order)							x	x	h	h	Several checklists included for entrances, living rooms, sanitary rooms, sleeping rooms, kitchen etc. Most requirements from ÖNORM B 1600 are included - especially concerned housing
G-BB	Planungsgrundlagen Barrierefreies Bauen - Barrier free buildings, Graz handbook: http://www.graz.at/cms/beitrag/10							x	x	h	h	All requirements from ÖNORM B 1600 are included

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INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
	027121/421952 (free download)											
G-Swim	Schwimmbecken für ALLE Menschen / Swimming facilities for All: Information leaflet published by the construction building authority of Graz, Accessibility of the built environment/ Consulting department for persons with disabilities (http://www.graz.at/cms/beitrag/10027270/421952/)							x	x	m	l	Based on ÖNORM B 1600 and ÖNORM B 1603 requirements.
G-AH	Anpassbarer Wohnbau / Adaptable Housing: Information leaflet - Graz (http://www.graz.at/cms/beitrag/10027270/421952/)							x	x	m	m	Based on ÖNORM B 1600 requirements
G-FP	Selbstrettung für alle Menschen - Barrierefreier Brandschutz / Self-Evacuation for All - Accessible Fire Protection: Information leaflet - Graz(http://www.graz.at/cms/beitrag/10027270/421952/)							x	x	m	l	
Net-WC	Öffentliche WC-Anlagen / Accessible public toilet - Information leaflet from the Austrian Network of Access Consultants (http://www.graz.at/cms/beitrag/10027270/421952/ and www.oear.or.at)							x	x	m	l	These information leaflets from the Austrian Network of Access Consultant support architects and plumbers etc. who are working on the site. They are very easy to read and understand.
Net-Lift	Aufzüge / Lifts - Information leaflet from the Austrian Network of Access Consultants (http://www.graz.at/cms/beitrag/10027270/421952/ and www.oear.or.at)							x	x	m	l	These information leaflets from the Austrian Network of Access Consultant support architects and plumbers etc. who are working on the site. They are very easy to read and understand.

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Net-Platf	Schrägaufzüge und Hebebühnen / Inclined and vertical platform lifts - Information leaflet from the Austrian Network of Access Consultants (http://www.graz.at/cms/beitrag/10027270/421952/ and www.oear.or.at)							x	x	m	l	These information leaflets from the Austrian Network of Access Consultant support architects and plumbers etc. who are working on the site. They are very easy to read and understand.
Net-Play	Spielplätze für alle / Playground for All: - Information leaflet from the Austrian Network of Access Consultants (http://www.graz.at/cms/beitrag/10027270/421952/ and www.oear.or.at)							x	x	m	l	These information leaflets from the Austrian Network of Access Consultant support architects and plumbers etc. who are working on the site. They are very easy to read and understand.
S-BB	Salzburg: Planungsgrundlagen und Praxisbeispiele - Text mit Zeichnungen							x	x	h	l	
BELGIUM												
AD	Toegankelijkheidsadvies gegeven door een adviesbureau toegankelijkheid in Vlaanderen							x	x	h	h	Specific advice on one building, given by a specialist on accessibility, for making new and existing buildings more accessible
ADW	Wet van 10 mei 2007 ter bestrijding van bepaalde vormen van discriminatie (BS 30 V 07) - artikel 4 redelijke aanpassingen van de arbeidspost voor personen met een beperking									l	m	The regulation for adapting existing workplaces for people with disabilities
BN	Brailleenormen - brailleliga - http://www.brailleliga.be/nl/documentatie/andere/default.asp							x		l	m	Guidelines for adjusting buildings for visually impaired people
DS	Dossiersamenstelling: 16, 2°, c) zo het een geheel of deels voor het publiek toegankelijk gebouw betreft,									h	h	This determines the file composition of a building license

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	een beschrijving van de al dan niet vergunningsplichtige voorzieningen om integrale toegankelijkheid te bereiken voor de personen met verminderde beweeglijkheid. Hierbij wordt bijzondere aandacht besteed aan die voorzieningen die verder gaan dan de wettelijk vastgelegde normen; + ART. 16 13° een mobiliteitsstudie											
DTAH	BS 08/5/2009 - 20 MAART 2009 Decreet houdende de toegankelijkheid van publieke plaatsen voor personen met een assistentiehond									l	l	Regulation on accessibility for guide-dogs
EN 81-70	EN 81-70:2003 Veiligheidsregels voor het vervaardigen en het aanbrengen van liften — Bijzondere toepassingen voor personenliften en personen-goederenliften — Deel 70: Toegankelijkheid van liften voor personen inclusief personen met een handicap 6.8.2005	x	x							m	l	European safety-rules for elevators including accessibility of elevators for people with disabilities,
FED75	Federale wet van 17 juli 1975 betreffende de toegang van gehandicapten tot gebouwen toegankelijk voor het publiek. (KB van 9 mei 1977)									l	l	This federal regulation (Belgium) has been replaced by a regulation on the level of a region (Flanders)
GSV	Besluit van de Vlaamse Regering van 5 juni 2009 tot vaststelling van een gewestelijke stedenbouwkundige verordening betreffende toegankelijkheid	x	x							h	h	The regulation on accessibility at the level of a region (Flanders)
HBTGP	Handboek Toegankelijkheid publieke							x	x	l	h	Guidelines for accessible public buildings

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	gebouwen											
MGW	Ontwerpgids Levenslang Wonen (1999) en ontwerpgids Meegroeiwonen (2009)							x	x	l	h	Guidelines for lifetime housing
MOPPMH	Ministeriële omzendbrief van 3 april 2001 betreffende het voorbehouden van parkeerplaatsen voor personen met een handicap. (B.S. 05.05.2001)									h	l	Regulation on parking for people with disabilities
NBN ISO/TR9527	Geregistreerde Belgische technisch rapport NBN ISO/TR9527:1994 - Ontwerprichtlijnen.					x	x					Designstandards wich are dated.
RBLL	Richtlijnen voor de aanpassing van gebouwen voor visueel gehandicapten, Blindenzorg Licht en Liefde - http://www.blindenzorglichtenliefde.be/801_TG.HTM								x	l	m	Guidelines for adjusting buildings for visually impaired people
TB	Digitale toegankelijkheidsbrochure - http://www.blindenzorglichtenliefde.be/toegbrochure/index.htm								x	l	m	Guidelines for adjusting buildings for visually impaired people
TOEVL	Premie uitgereikt door toerisme vlaanderen voor toegankelijke toeristische accommodaties								x	l	m	Financial support for accessible touristic accommodations
TVWTCB	WTCB-Dossiers – Katern nr. 6 – 4e trimester 2004 - Toegankelijkheid van trappen Randbemerkingen bij § 2.4.2 van TV 198 + WTCB-Dossiers – Katern nr. 2 – 2e trimester 2005 - Veiligheid en toeganke- lijkheid van gebouwen + WTCB-Dossiers – Nr. 4/2006 – Katern nr. 4 – Toegankelijkheid van			x	x					l	m	Technical support on a few themes on accessibility of buildings, external joinery, and evacuation of people with disabilities. Main part of the documents give a brief overview of existing regulations, standard, ...

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	buitenschrijnwerk (deel 1) + WTCB-Dossiers – Nr. 1/2007 – Katern nr. 12 - Toegankelijkheid van buitenschrijnwerk (deel 2) + WTCB-Dossiers – Nr. 1/2007 – Katern nr. 8 - Evacuatie van personen met beperkte mobiliteit bij brand											
VADF	Vademecum Fietsvoorzieningen dateert van 2002, herzien in 2006 en 2008, http://www.mobielvlaanderen.be/vademecums/vademecumfiets01.php							x	x	m	l	Guidelines for bicyclefacilities
VADTPD	Vademecum 'Toegankelijk Publiek Domein'							x	x	h	l	Guidelines on accessibility of public domain
VADV	VADEMECUM VOETGANGERSVOORZIENINGEN 2003 http://www.mobielvlaanderen.be/vademecums/vademecumvoetganger01.php							x	x	m	l	Guidelines for pedestrian facilities
VCRO	Vlaamse Codex Ruimtelijke Ordening (decreet van 16 juli 2010 (B.S. 9/8/2010)): Art. 2.3.1. De Vlaamse Regering kan gewestelijke stedenbouwkundige verordeningen vaststellen voor een deel van of voor het hele gewest. Die verordeningen bevatten de nodige stedenbouwkundige voorschriften om te zorgen voor: de toegang voor personen met een functiebeperking tot al dan niet bebouwde									h	h	This is the base of planning in Flanders.

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	onroerende goederen of delen ervan toegankelijk voor het publiek, tot installaties en wegen,											
VD	besluit van de Vlaamse regering van 29 april 1997 houdende vaststelling van een algemene bouwverordening inzake wegen voor voetgangersverkeer (Voetgangersdecreet) bvr 29/4/1997 b.s. 7/5/1997	x	x							h	l	Building code for roads for pedestrians
WENK	15 Wenkenbladen toegankelijkheid - example: http://www.entervzw.be/assets/files/Hogeschole.pdf							x	x	l	h	Guidelines for accessibility for several buildingtypes, public domain,...
ZS	De zilveren sleutel							x	x	l	h	Guidelines for living for the elderly
CWATUPE	Code wallon de l'aménagement du territoire, urbanisme, patrimoine et de l'énergie http://mrw.wallonie.be/dgatp/dgatp			x	x	x	x			m	h	
	Un espace publique pour tous							x	x	m	h	
	Un Logement pour tous » Pour une Wallonie accessible							x	x	m	h	
	Cahier de prescriptions techniques pour l'accessibilité et l'adaptation des logements sociaux pour personnes handicapées							x	x	m	h	
	Fiches techniques pour faciliter la réalisation de plans, ANLH-ACCESA 10 fiches (recto/verso)							x	x	m	h	
	Une ville pour tous, Pour une Wallonie accessible							x		l	l	
	Design For All : « AAoutils – Architecture et Accessibilité :							x	x	m	h	

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	outils pour une formation,											
RRU	Règlement régional d'urbanisme - http://www.rru.irisnet.be/fr/indexfr.htm			x	x	x	x			m	h	
	BULGARIA											
	CANADA											
CSA, CSA B651	Canadian Standards Association - CSA B651 Accessibility of the Built Environment Standard http://www.shopcsa.ca/onlinestore/							x		h		
CSA B44	Canadian Standards Association - CSA B44 Elevator Standard http://www.shopcsa.ca/onlinestore/							x		h		
CSA B355	Canadian Standards Association - CSA B355 Passenger Lift Standard http://www.shopcsa.ca/onlinestore/							x		h		
CSA B651.1	Canadian Standards Association - CSA B651 Accessible Design for Automated Banking Machines http://www.shopcsa.ca/onlinestore/							x		h		
CSA Z614	Canadian Standards Association - CSA Z614 Accessible Play Structures http://www.shopcsa.ca/onlinestore/							x		m		
NBC	National Building Code http://www.fedpubs.com/subject/housing/natbuilding.htm	x	x							h		
TB	Treasury Board Policy Real Property Accessibility Guidelines http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/tech/accssblt/index-eng.html									h		
TC	Transport Canada				x				x	m		

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	http://www.tc.gc.ca/eng/acts-regulations/menu.htm											
CTA	Canadian Transportation Agency http://www.otc-cta.gc.ca/doc.php?sid=25&lang=eng				x				x		l	
OBC	Ontario Building Code (Provincial Code) https://www.publications.serviceontario.ca/ecom/	x	x								h	
CoT ADG	City of Toronto Accessibility Design Guidelines http://www.toronto.ca/diversity/pdf/accessibility_design_guidelines.pdf							x			m	
CoW FADS	City of Windsor - Facility Accessibility Design Standards http://www.citywindsor.ca/002276.asp							x			m	
CoL FADS	City of London - Facility Accessibility Design Standards http://www.london.ca/d.aspx?s=/Accessibility/accessibilitystandards.htm							x			m	
AODA	Accessibility for Ontarians with Disabilities Act 2005 http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_05a11_e.htm			x	x						m	
BCBC	British Columbia Building Code (Provincial Code) http://www.bccodes.ca/bccode_building.htm	x	x								h	
VBBL	City of Vancouver Building By Laws 2007 http://www.bccodes.ca/vancouver_bylaws.htm										m	
ABBC	Alberta Building Code 2006	x	x								h	

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	(Provincial Code) http://www.lrc.education.gov.ab.ca/											
CADG	Calgary Access Design Guidelines http://www.calgary.ca/DocGallery/BU/dba/development/access_design_guidelines.pdf							x		m		
QCC	Quebec Construction Code 2006 (Provincial Code) http://www.pubgouv.com/cnr/const_rcod_qc.htm	x	x							h		
NSBCR	Nova Scotia Building Code Regulations (2009) (Provincial Code) http://www.gov.ns.ca/just/regulations/regs/bcregs.htm	x	x		x					h		
CYPRUS												
SUABW-2010	Approved Prototype for the Safe Use and Accessibility of Building Works, April 2010. Ministry of the Interior				x	x				h	h	This approved 'Model of Planning' constitutes an integral piece of the Regulation of Roads and Buildings (Modification) Law 2010, article 8 (3) "Safety in the use", that constitutes the harmonisation of the Democratic Republic of Cyprus with the European Directive 89/106/[EU]. It concerns the planning and the construction of each road and building in order that their use does not involve unacceptable dangers of accidents, providing simultaneously safety in use and circulation of persons with reduced mobility and persons with disabilities.
CZECH REPUBLIC												
DENMARK												
BR 2010	BR 2010 Building regulations, http://www.ebst.dk/br10byggningsreglementer	x	x	x	x					h	h	
GMAARBC	Guide to Municipal Authorities on Accessibility Requirements in Building Control (GMAARBC)			x	x			x	x		h	Handles selected difficult aspects of reasonable accommodation in existing buildings

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SBi 230	SBi 230 Guideline on building regulations (www.sbi.dk)							x	x	l	l	When used in combination with BR 2008 checklists
BR 2010 Checklists	www.sbi.dk/tilgaengelighed/tjekliste_r			x	x			x	x	h	h	Principle of combined building regulation and guideline checklist system very useful for contracts
DS 105	DS 105 Outdoor areas for All							x	x	l	l	
DS 3028	DS 3028 Accessibility for All					x	x			h	l	
HIT	Handbook on Accessibility							x	x	m	m	
DS 105.b	DS 105.b Recreative Areas for All							x	x	l	l	
SBireport 236	User-friendly waste disposal with emphasis on disability and accessibility							x	x	m		Differentiation between requirements and recommendations to be improved
Access to churches	Access to churches, http://tilgaengelighed.km.dk/							x	x	l	h	
ESTONIA												
EE Build Act	Estonia Building Act											
EE Plan Act	Estonia Planning Act											
FINLAND												
LUBA	Land Use and Building Act									l	l	
NB F1	The National Buildingcode of Finland. F1 Barrierfree Building, Regulations and guidelines 2005, www.miljo.fi/byggbestämmelser	x	x							m	l	
NB F2	The National Buildingcode of Finland.F2 Safety in use buildings Regulations and guidelines 2001. www.miljo.fi/byggbestämmelser	x	x							m	l	
NB G1	The National Buildingcode of Finland. G1 Housing design Regulations and guidelines 2005. www.miljo.fi/byggbestämmelser	x	x							m	l	
SuRaKu	The Public Works Department.Helsinki City Board. SuRaKu-Criteria. www.hel.fi							x	x	h	l	

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	SCW	Supervision of construction work										
France	FRANCE											
France	Act N°2005-102 of the 11 of February 2005	Act on equal rights and opportunities, participation and citizenship of the persons with disabilities										
France	2008/233	decree amending the construction and housing code and relating to the evacuation facilities in establishments open to the public, and to the safety provisions of high-rise buildings										
France	2007/545	Order laying down the provisions for the implementation of Articles R.111-18 to R.111-18-7 of the Construction and Housing Code on the accessibility for disabled persons of collective residential buildings and individual houses during their construction.										
France	2007/544	Order laying down the provisions for the implementation of Articles R.111-19 to R.111-19-3 and R.111-19-6 of the Construction and Housing Code on the accessibility to disabled persons of establishments open to the public and installations open to the public during their construction or their creation.										
France	2006/627	Order laying down the provisions for the implementation of Articles R.111-19-8 and R.111-19-11 of the Construction and Housing Code on										

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France	2006/626											
France	2006/306											
France	2006/305											
France	2006/304											

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	the accessibility for disabled persons of collective residential buildings during their construction											
France	2005/643											
France	NF P91-350					x	x					
France	NF P91-351					x	x					
France	BP P96-100							x	x			
France	BP P96-101							x	x			
France	BP P96-102							x	x			
France	BP P96-104							x	x			
France	BP X35-072							x	x			
France	BP X35-075							x	x			
	GERMANY											
	GG Grundgesetz											I. Grundrechte Artikel 3, Absatz 3:

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	www.bundesregierung.de											Niemand darf wegen seiner Behinderung benachteiligt werden.
BGG Behinderten- gleichstellungsgesetz	Behindertengleichstellungsgesetz (BGG) vom 27. April 2002; letzte Änderung vom 1. Januar 2008, BGBl. I S. 1468 und BGBl. I S. 3024, 3034; gültig ab2002-05-01; www.gesetze-im-internet-de											Gesetz zur Gleichstellung behinderter Menschen und zur Änderung anderer Gesetze in diesem Zusammenhang
Gleichstellungsgesetze der Länder	Beispiele: Bayern:www.stmas.bayern.de/behinderte/politik/baybgg.htm Brandenburg: www.mdje.brandenburg.de/Landesrecht/gesetzblatt/texte/K87/87-02.htm Sachsen-Anhalt:www.sachsen-anhalt.de/rcs/LSA/pub/ Berlin: www.berlin.de/sengessozv/lfbheh/010.php											
Musterbauordnung (MBO) 2002 (model building regulations)	model building regulation (MBO) § 50 construction of accessible buildings								x	I		as recommendation to the 16 German federal states
LBO	Landesbauordnungen (building regulation of the German federal state); Landesbauordnung Baden-Württemberg											Architects have to confirm during the building license proceedings that they have considered in their design all accessibility issues. A final statement has to be given by them or by a civil engineer that the execution has been done according accessibility. Herstellung von Barrierefreiheit ist auch im Nachhinein einklagbar in Bezug auf die im jeweiligen Bundesland eingeführten technischen

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	Bayerische Bauordnung, Baugesetzbuch Bauordnung für Berlin Brandenburgische Bauordnung Bremische Landesbauordnung Hamburgische Bauordnung Hessische Bauordnung Niedersächsische Bauordnung Bauordnung für das Land Nordrhein-Westfalen Landesbauordnung Mecklenburg-Vorpommern Landesbauordnung Rheinland-Pfalz Landesbauordnung Saarland Sächsische Bauordnung Bauordnung des Landes Sachsen-Anhalt Landesbauordnung für das Land Schleswig-Holstein Thüringer Bauordnung											Baubestimmungen. Regelungen zum barrierefreien Bauen findet man in der Bauordnung des jeweiligen Bundeslandes. Inwieweit die DIN 18024-1,-2, DIN 18025-1,-2 in dem jeweiligen Bundesland rechtlich verbindlich ist, bestimmt die jeweilige Landesbauordnung.
Landesbauordnungen Hessen and Schleswig-Holstein (building regulation of the German federal state Hessen)	Example 1: New buildings	x								h		all 4 standards (DIN 18024-1,-2, DIN 18025-1,-2) are implemented
Landesbauordnungen Hessen and Schleswig-Holstein (building regulation of the German federal	Example 2: existing buildings									m		all 4 standards (DIN 18024-1,-2, DIN 18025-1,-2) are implemented

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	state Schleswig-Holstein)											
	Landesbauordnung Nordrhein-Westfalen (building regulation of the German federal state NRW)	x								I		no standard of the 4 standards (DIN 18024-1,-2, DIN 18025-1,-2) is implemented
	Liste der Technischen Baubestimmungen ('Acknowledged technical rules for works')				x					h		This list contains technical rules for the planning, design and building of construction works and their parts. Contains among others DIN 18024-1,-2, DIN 18025-1,-2
	Implementation of the Model list in the German federal states											may be that in some German federal states does not contain e.g. DIN 18024-1,-2, DIN 18025-1,-2
	MVersStättV, 06-2005	x	x							I		Is implemented in building codes of the 16 German federal states
	Gaststättengesetz GastG (Regulation on the requirements for restaurants)	x								I		

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	ist; Stand: Neugefasst durch Bek. v. 20.11.1998 I 3418; zuletzt geändert durch Art. 10 G v. 7.9.2007 I 2246											
DIN Standards												Standards are not in themselves regulatory in nature and their use is voluntary. Although standards are in effect recommendations, they are widely used because of the benefits they bring and because they contain a concentration of qualified technical information. Standards only become mandatory if they are referred to in private contracts or agreements, or in laws or regulations and their use is stated as a requirement. Standards can prevent legal disputes, because they set out unambiguous specifications.
DIN 18040-1; 2010-10	Construction of accessible buildings - Design principles - Part 1: Publicly accessible buildings	x	x			x	x			h		not before after publication and implementation in the building code
DIN 18024-2:1996-11 Note: To be replaced by DIN 18040-1: 2010-10	Construction of accessible buildings - Part 2: Publicly accessible buildings and workplaces, design principles						x					
DIN 18040-2; 2011-XX	Construction of accessible buildings - Design principles - Part 2: Dwellings	x	x			x	x			h		not before after publication and implementation in the building code
DIN 18025-1 1992-12 Note: To be replaced by DIN 18040-2: 2011-XX	Accessible dwellings; dwellings for wheel chair users, design principles						x					
DIN 18025-2 1992-12	Accessible dwellings; design principles						x					

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INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
Note: To be replaced by DIN 18040-2: 2011-XX												
DIN 18024-1 1998-01- Revision under preparation (future DIN 18070)	Barrier-free built environment - Part 1: Streets, squares, paths, public transport, recreation areas and playgrounds - Design principles								x			
DIN 32975:2009-12	Designing visual information in the public area for accessible use								x			
DIN 32976:2007-08	Braille - Requirements and dimensions								x			
DIN 32981: 2002-11	Special devices for blind and partially sighted persons on traffic signals - Requirements								x			
DIN 32984: 2000-05; Draft DIN 32984: 2010-02	Ground surface indicators in public traffic areas								x			
DIN SPEC 18913: 2010-08 CEN/TR 15913:2009; will be added in DIN EN 13200-1: 2004-05; Spectator facilities — Layout criteria for viewing area for spectators	Spectator facilities - Part 1: Layout criteria for spectator viewing area - Specification								x			

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INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
	with special needs											
DIN Technical Report 124: 2002	Products in Design for All								x			
DIN-Fachbericht 142 2005-05	Orientation systems - Requirements on orientation systems in open buildings								x			
BGR 181	BG-Regel — Fußböden in Arbeitsräumen und Arbeitsbereichen mit Rutschgefahr								x			
GUV-I 8527	GUV-I 8527) , GUV-Informationen — Bodenbeläge für nassbelastete Barfußbereiche								x			
RILSA 2010	RiLSA (2010), Richtlinien für Lichtsignalanlagen – Lichtzeichenanlagen für den Straßenverkehr; (FGSV-Nr. 321)								x			
EFA 2002	Empfehlungen für Anlagen des Fußgängerverkehrs								x			
RASt 06	Richtlinien für die Anlage von Stadtstrassen: 2006								x			
FGSV under preparation (2010?)	Hinweise für barrierefreie Verkehrsanlagen								x			
Deutsche Bahn	Konzernrichtlinie der Modulfamilie 813 - "Personenbahnhöfe planen"								x			
Richtlinie für taktile Schriften zu beziehen unter www.gfuv.de	Richtlinie für taktile Schriften, Broschüre des Deutschen Blinden- und Sehbehindertenverbandes								x			

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GREECE												
CG, 2001	The Constitution of Greece, 2001											Refers in particular to equal rights of all citizens: articles 4, 5A, 21, 22, 25 and 116.
Circ. 8303/2008 MININT.	Government Circular. Ministry of Interior. 8303/08.02.2008. Accessibility Network for People with Disabilities removing barriers from common areas.							x	x	m	m	Government Circular for municipalities, (THESEAS programme 2005-2009), to implement legal framework ref. DGPA 1998 MINENV. for outdoor areas.
Circ. 1537/2009, MININT.	Government Circular 20-01-2009 Protocol no. DIADP/P.AMEA/F.3/6/1537 Ministry of Internal Affairs and Public Administration Accessibility Programme for Municipalities.							x	x	m	m	Government Circular for municipalities. Continuation in 2009-2010 of THESEAS programme, Circ. 8303/2008.
Circ. 21826/2007 MININT.	Accessible Beaches			x						m	m	
DG, 2001 MINHSW	Design Guidelines «Access for people with special needs in public spaces». MINISTRY OF HEALTH AND SOCIAL WELFARE-2001							x	x	h	h	
DGAB, 2003 MINDEV.	“Design Guidelines for accessible beaches”. Ministry of Development 2003. Also see Circular 21826/2007 MININT.							x	x	h	h	Best Practice example
DG-OEK, 2006	Designing for People with Disabilities and others who need good accessibility. Technical requirements and guidelines for the design and construction of accessible houses and housing estates for all. Internal document, Workers’ Housing Organisation, (OEK) Department of Architectural Studies, 2006. Ministry of Labour.							x	x	h	h	Design Guide for accessible housing used by state housing organisation, OEK.

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INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
DGPA, 1998. MINENV	"Design Guidelines. Planning for All". Office for People with Special Needs, Ministry of Environment, Planning and Public Works, 1998. http://www.minenv.gr/1/16/162/16203/g1620300.html							x	x	h	h	This was the first major functional-technical guideline on accessibility and all subsequent laws refer to this document.
ELOT EN 81.80-2004 ELOT EN 81.2-2000 ELOT EN 81.1-1999	Standards for construction, operation, etc. of lifts See: http://www.elot.gr/170_ELL_HTML.aspx					x	x			h	h	ELOT is the acronym for the Greek National Standards Organisation
HG 2004	HERMIS Guide 2004, ATHOC and Athens Chamber of Commerce							x	x	l	m	Used for the preparation of the Olympic Games in Athens and Olympic Cities to improve access to shops. Businesses which achieved the required access standards were listed in the Guide. Not followed up since 2004.
J-TAP, 2008	"JASON" Programme. Typical Action Plan for Restoring Accessibility at the Local Level. Guideline, ESAMEA. National Organisation of Disabled Peoples' Associations							x	x	h	h	Provides a structured method for disabled people to demand their access rights and for local authorities to identify problems and give solutions to accessibility problems.
L-2831/2000 art.28 GBR,MINENV.	Law. General Building Regulations 2831/2000 art.28. Ministry of Environment, Planning and Public Works. Special arrangements for people with special needs. Amendment of Law about General Building Regulations no. 1577/1985.	x	x	x	x							For Public Procurement: this is the law and must be followed in every case. Refers to the Accessibility Design Guidelines DGPA, 1998. MINENV for technical specifications.
L-2696/1999 & L-3542/2007 MINTRANS.	The Highway Code 2007. Law 3542/2007 Updating of N.2696/1999/FEK 57A/23.03.99. Ministry of Transport & Communications.			x	x							For Public Procurement: this is the law and must be followed in every case.
MCAPSI, 2009.	Methodology for Checking							x	x	h	h	Access checking tool and design guidelines for public buildings, outdoor

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MININT.	Accessibility in Public Services and Infrastructures. 2009. Ministry of the Interior.											spaces and transport, referring to all access legislation. Also relevant for conformity checking.
MD 2072/1992, MINH.	Law 2072/1992, Ministerial Decision of Ministry of Health and Social Care and Ministry of Labour, Rehabilitation Centres and Day Care Centres.			x	x							For Public Procurement: this is the law and must be followed in every case. Is expected to be partly amended by the new law on National System of Health and Social Welfare 2010.
PD 27/1999	Building Code Presidential Decree. (Official Gazette 580D/27.7.1999)	x	x	x	x							For Public Procurement: law must be followed where it applies.
MD 52487/2001, MINENV.	Building Code MD 52487/2001 (Official Gazette 18 / B / 15.1.2002) Ministry of Environment, Planning and Public Works. Special arrangements for services for disabled people in existing buildings.	x	x	x	x							For Public Procurement: law must be followed where it applies. Refers to: DGPA, 1998. MINENV "Design Guidelines. Planning for All".
MD 52907/2009 MINENV.	MD 52907-Ministry of Environment and Climate Change. Special arrangements for common spaces of housing estates/areas for the circulation of pedestrians, in order to serve the needs of people with disabilities. Official Gazette 2621 B/ 31-12-09	x	x	x	x							For Public Procurement: this is the law and must be followed in every case.
MD 94643/2007. MINH	Ministerial Decision. Ministry of Health and Social Care, 94643/2007. Concerning Health conditions and permits for catering businesses, restaurants, cafeterias etc.			x	x							For Public Procurement: law must be followed where it applies. This decision covers the gap of the general building regulation concerning the obligation for accessibility in catering businesses restaurants, cafeterias etc.
Circ. 66803/2008. MINH	Government Circular 16/5 /2008 No. 66803 for implementing the law 94643/2007. Min Health.							x	x			Government Circular for catering businesses and shops requiring accessible toilets. Implementation of MD 94643/2007.
MD 32803/1308/199	Ministerial Decision 32803/1308/1997			x	x							

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7	Law on construction and operation of lifts.											
MD 3899/253/2002	Ministerial Decision 3899/253/F.9.2/2002 Law on installation, operation, maintenance and safety of lifts.			x	x							General law on lifts
PD. 57/2010	Law on the adjustment of Greek legislation to EU Directive 2006/42/EK (Lifts and other mechanisms)			x	x							For Public Procurement: this is the law and must be followed in every case.
PD 16/1996	Presidential Decree 16/1996. Minimum requirements for Health and Safety of Workplaces.			x	x							For Public Procurement: this is the law and must be followed in every case.
PD 43/2002 MINDEV.	Presidential Decree 43, Government Gazette No. 43/7-3-2002 Classification of main hotel types, in categories (star system) and their technical requirements, pages 449 – 772. Ministry of Development.			x	x							For Public Procurement: law must be followed where it applies.
PD 79/2004, MINTRANS.	Ministry of Transport and Communications, Presidential Decree 79/2004. Defining the conditions and requirements for establishing and operating bus stations and terminals (infrastructure) for long-distance buses and other vehicles.			x	x							For Public Procurement: law must be followed where it applies. Technical specifications are only partially described.
HUNGARY												
MSZ EN 81-70	MSZ EN 81-70:2006 "Safety rules for the construction and installations of lifts. Particular applications for passenger and good passengers lift. Part 70: Accessibility to lifts for persons including persons with					x	x					

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	disability"											
MSZ ISO 9386-1:2002	MSZ ISO 9386-1:2002 "Power-operated lifting platforms for persons with impaired mobility. Rules for safety, dimensions and functional operation. Part 1: vertical lifting platforms"					x	x					
MSZ EN 81-40	MSZ EN 81-40:2009 "Safety rules for the construction and installations of lifts. Special lifts for the transport of persons and goods. Part 40: Stairlifts and inclined lifting platforms intended for persons with impaired mobility"					x	x					
MSZ EN 24203-5:2007	MSZ 24203-5:2007 "Requirements for design of institutions for education. Part 5: Schools for the handicapped"					x	x					
CEN/TS 15209	CEN/TS 15209 "Tactile paving surface indicators produced from concrete, clay and stone"					x	x					
ÚT 2-1.208:2009	Hungarian Road Society (2009) Road Technical Specification. "Traffic Facilities in Roads for Disabled Persons"			x	x							
HRS-12DG	Hungarian Road Society (2000) Design Guideline, "12. Traffic Facilities in Roads for Persons with Impaired Disability"							x	x			
APS	Public Foundation for Equal Opportunities of Persons with Disabilities (2009) "Guide for providing equal opportunities on acces to public services"							x	x			

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	http://www.fszk.hu/api/szakmai_an_yagok/segedlet_v6_2009_ebook.pdf											
DGABE	Ministry of Local Government (2007) "Design Guideline for Accessible Built Environment"							x	x			
AWARD	Tempus Public Foundation, Lifelong learning programme Leonardo da Vinci Project (2009) "AWARD Accessible Word for All, Respecting Differences" www.mfk.unideb.hu/profzold							x	x			
LH	Motiváció Foundation (2003) "Living home"							x	x			
LW	Motiváció Foundation (2008) "Living workplace 1-2." http://www.motivacio.hu/sites/default/files/Elo_munkahely_01_kotet.pdf and http://www.motivacio.hu/sites/default/files/Elo_munkahely_02_kotet.pdf							x	x			
SLS	MAHADI (2010) "Special Labor Safety of Accessible Work Environment" http://www.mahadi.hu/kiadvany/kiadvany.pdf							x	x			
AFPBE	Act LXXVIII of 1997 on Formation and Protection of Built Environment											
ADP	Act XXVI of 1998 on "Rights and Provision of Equal Opportunities for Disabled Persons"											
OTEK	National Building Regulation											
AETPEO	Act CXXV of 2003 on Equal Treatment and Promotion of Equal											

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	Opportunities											
	IRELAND											
EEA	Employment Equality Act 1998 to 2008 (www.equality.ie)											
ESA	Equal Status Acts 2000 & 2004 (www.equality.ie)											
DA 2005	Disability Act 2005 (www.oireachtas.ie)											
PA	Planning & Development Act 2000											
BCA	Building Control Acts 1990 - 2007 (www.environ.ie)											
BCR 2009	Building Control (Amendment) Regulations 2009 (www.environ.ie)			x								Introduced requirements for Disability Access Certificates (DACs)
Pt M 2000	Building Regulation 2000 Part M - Access for People with Disabilities - and Technical Guidance Document (www.environ.ie)			x	x			x	x	m	l	Current building regulation for access, performance based, with limited technical guidance
Pt M 2009 Draft	Building Regulation 2009 Part M - Access and Use - and Technical Guidance Document Draft (www.environ.ie)			x	x			x	x	h	l	Draft regulation due to be published 2010 with more comprehensive guidance
BfE 2002	Building for Everyone 2002 (www.nda.ie)							x	x	h	l	Comprehensive good practice guidance - but mainly based on anecdotal evidence and experience, with limited research to back it up.
BfE 2010 Draft	Building for Everyone 2010 Draft (www.nda.ie)							x	x	h	l	Revised version of BfE - consultation draft
PSEE	Promoting Safe Egress and Evacuation for People with Disabilities (www.nda.ie)							x		l	l	Used in conjunction with building regulations and standards related to fire
GAPT	Recommended Accessibility Guidelines for Public Transport Operators in Ireland (www.nda.ie)							x		l	l	Simple guidelines for public transport operators
GAMT	Guidelines for Accessible Maritime Passenger Transport (www.nda.ie)							x		l	l	Non technical guidelines for maritime transport providers
IWA	Irish Wheelchair Association Best							x	x	m	l	Mainly focused on wheelchair accessibility

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	Practice Access Guidelines (www.iwa.ie)											
NCBI	National Council for the Blind of Ireland Recommendations for Signage, Floor Surfaces, External and Internal Environments(www.ncbi.ie)							x	x	m	l	Guidance specifically for people with vision impairment
HDG	Housing Design Guidelines for Occupational Therapists (www.aoti.ie)							x	x	m	m	Suitable for use only in relation to adapted and accessible housing
LGMSB	Good Practice Guidelines on Accessibility of Streetscapes LGMSB (www.lgmsb.ie)							x	x	l	l	Limited to pedestrian crossings
ITALY												
LATVIA												
LV Constr Law	Latvian Construction Law											
LITHUANIA												
LT Constr Law	Lithuanian Construction Law											
LUXEMBOURG												
Loi du 29 mars 2001	Accessibilité des lieux ouverts au public +Règlement grand-ducal du 25 janvier 2008 modifiant le règlement grand-ducal du 23 novembre 2001 portant exécution des articles 1 et 2 de la loi du 29 mars 2001 portant sur l'accessibilité des lieux ouverts au public.									m	m	
Loi du 22 juillet 2008	Accessibilité des lieux ouverts au public aux personnes handicapées accompagnées de chiens d'assistance									l	l	
Guide of practice	Accessibilité au transport aérien pour les personnes à mobilité					x			x	m	l	

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	réduite et les personnes handicapées											
GDN	Guide des normes							x	x	m	m	
MALTA												
NETHERLANDS												
DBD 2003	DUTCH BUILDING DECREE 2003	x	x							m	m	
POLAND												
PORTUGAL												
	Decreto Lei 18/2008 de 29 de Janeiro											Legislation regulating Public Calls for Tender
	Decreto - Lei 163/2008 de 8 de Agosto											
ROMANIA												
Law 50/1995	Romanian law regarding quality in buildings											
NP 051 - 2001	Adaptation of the civil buildings and their urban surroundings to the requirements of the people with impairment	x	x							h	h	
SLOVAKIA												
SLOVENIA												
SPAIN												
NATIONAL												
LIONDAU	-Law on Equal Opportunities, Non Discrimination and Universal Accessibility- Ley de Igualdad de Oportunidades, No Discriminación y Accesibilidad Universal									l	m	
RD 505/2007	-basic conditions of accessibility in									l	m	

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	public spaces and buildings- Real Decreto por el que se regulan las condiciones básicas de accesibilidad y no discriminación para el acceso y la utilización de los espacios públicos urbanizados y edificaciones											
RD 1544/2007	-Basic conditions of transport accessibility- Condiciones básicas de accesibilidad y no discriminación para el acceso y utilización de los modos de transporte para personas con discapacidad.									l	l	
CTE/DB-SUA	- Use and Accessibility Security- Documento Básico de Seguridad de Uso y Accesibilidad (Código Técnico de la Edificación)	x	x							m	h	
CTE/DB-SI	-Fire Safety- Documento Básico de Seguridad en caso de Incendio (Código Técnico de la Edificación)	x	x							m	m	
Orden VIV/561/2010	-Accessibility in public spaces urbanized- Documento técnico que desarrolla las condiciones básicas de accesibilidad y no discriminación para el acceso y la utilización de los espacios públicos urbanizados			x	x					l	m	
Orden 18/06/1985	-Guide dogs- Orden de 18 de junio de 1985 sobre uso de perros guía para deficientes visuales			x						l	l	
UNE 170001:2007	Universal accessibility:											
UNE 170001:2007	Part 1: MGLC criteria to facilitate accessibility to the environment					x	x			m	m	
UNE 170001:2007	Part 2: Accessibility management system					x	x			l	l	

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UNE 170002:2009	Accessibility requirements for signs					x	x			h	h	Especially interesting for maintaining and improving
UNE-EN 81-70:2004	UNE-EN 81-70:2004 on the 'Accessibility to lifts for persons including persons with disabilities'					x	x			m	m	
UNE 41500 IN:2001	Accessibility in building and urbanism. Design general criteria					x	x			l	m	
UNE 41510:2001	Accessibility in the urbanism					x	x			l	m	
UNE 41512:2001	Accessibility in beaches and its environs					x	x			l	m	
UNE 41520:2002	Accessibility in building. Horizontal communication elements					x	x			l	m	
UNE 41522:2001	Accessitility in building. Accesses to the buildings					x	x			l	m	
UNE 41523:2001	Accessibility in buildings. Sanitary spaces					x	x			l	m	
CATALUÑA												
DEC135/1995	Decreto 135/1995 de desarrollo de la Ley de Accesibilidad de Cataluña			x	x					l	l	
LEY 10/1993	Ley 10/1993 de acceso al entorno de las personas con perros guía en Cataluña			x						l	l	
VALENCIA												
ORDEN 9/06/2004	Accesibilidad en el medio urbano en Valencia			x	x					m	m	
ORDEN 25/05/2004	Accesibilidad en la edificación de pública concurrencia en Valencia			x	x					m	m	
LEY 9/2009	Ley de Accesibilidad al Transporte en Valencia									l	l	
MADRID												
DCM 13/2007	Reglamento Técnico de Accesibilidad de Madrid			x	x					m	m	
ANDALUCÍA												

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RAA D293/2009	Reglamento que regula las normas para la accesibilidad en las infraestructuras, el urbanismo, la edificación y el transporte en Andalucía.			x	x					h	h	
CASTILLA Y LEÓN												
RACyL D217/2001	Reglamento de Accesibilidad y Supresión de Barreras en Castilla y León			x	x					l	m	
CANARIAS												
D 227/1997	Reglamento de la Ley de Accesibilidad de Canarias			x	x					l	m	
Anejos D 227/1997	Manual del Reglamento de Accesibilidad de Canarias				x					m	h	
Ley 8/1995	Ley de accesibilidad y supresión de barreras físicas y de la comunicación de Canarias											
GALICIA												
D 35/2000	Reglamento de desarrollo de la Ley de Accesibilidad de Galicia			x	x					l	m	
SWEDEN												
PBL, BVL, BVF	The Planning and Building Act (PBL) The Act on Technical Requirements for Construction works, etc. (BVL) The Ordinance (1994:1215) on Technical Requirements for Construction Works, etc. (BVF) www.boverket.se									l	l	You cannot really choose different levels for adapting a building. If a building is altered in some other way, the same requirements as for new buildings shall be satisfied but consideration shall be paid to the proportions of the alteration and the standard of the building. What can be chosen in existing building is to only remove easily eliminated obstacles. . See HIN
BBR	The National Board of Housing, Building and Planning (Boverket) Building regulations" (2008). Www.boverket.se	x	x							h (as a specification for what has to be achieved)	l	Consideration taken only to people with limited mobility or orientation capacity, (impaired vision, hearing or cognitive ability.) People with allergy to some extent covered by health- chapter. As tech spec: Not a criteria for awarding public contracts since the regulations always have to be fulfilled when buildingwork is done. As guidance: You cannot

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												really choose different levels for adapting a building. If a building is altered in some other way, the same requirements as for new buildings shall be satisfied but with consideration taken to the proportions of the alteration and the standard of the building. What can be chosen in existing building is to only remove easily eliminated obstacles. . See HIN
ALM	The National Board of Housing, Building and Planning (Boverket) Accessibility and usability in public spaces. BFS 2004:15 - ALM" www.boverket.se	x	x							h (as a specifiction for what has to be achieved)		As tech spec: Not a criteria for awarding public contracts since the regulations always have to be fulfilled .
HIN	The National Board of Housing, Building and Planning (Boverket) Removal of easily eliminated obstacles - code of statues" BFS 2003:19 - HIN 1 www.boverket.se	x	x							h (as a specifiction for what has to be achieved)	m	
BÄR	The National Board of Housing, Building and Planning (Boverket) . Boverkets Ändringsråd. (Rebuilding) www.boverket.se							x		l	l	
SS 763520	Swedish Standards institute . Hissar - personhissar. (About elevators . Measures suitable for transportation of stretchers)											
SS 914221	Swedish Standards institute Byggnadsutformning Bostäder Invändiga mått (Dwellings- measures indoors.) www.sis.se						x			h	m	Referred to in BBR. As tech spec: Include different level but what level should be achieved is probably specified and therefore not a criteria for awarding public contracts As guidance: Here are different levels, one minimum and one higher. If you want higher level than the minimum, this could be used.
SS 25268	Swedish Standards institute. Byggakustik - Ljudklassning av utrymmen i byggnader - Vårdlokaler, undervisningslokaler, dag- och						x			h		Referred to in BBR

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT		
INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
	fritidshem, kontor (Acoustics). www.sis.se											
SS 25267	Swedish Standards institute. Byggakustik - Ljudklassning av utrymmen i byggnader - Bostäder (Acoustics,dwellings). www.sis.se						x			h		Referred to in BBR
SS 2097-7	Swedish Standards institute. SS 2097-7, Hissar - Lågfartshissar - Säkerhetsregler för plattformshissar (Platform lift). www.sis.se						x			l		
SS-EN 12464-1	Swedish Standards institute. SS-EN 12464-1. Ljus och belysning – Belysning av arbetsplatser – Del 1: Arbetsplatser inomhus. (Lighting workplaces.) www.sis.se						x			h		Not sure if accessibility aspects have been considered enough.
SS 437 01 46	Swedish Standards institute. SS 437 01 46. Elinstallationer i byggnader – Uttag och andra anslutningspunkter – Omfattning och placering. (Electrical installations). www.sis.se						x			h		
AFS 2009:02	Swedish Work Environment Agency. Arbetsplatsens utformning. (Workingplaces). www.av.se			x	x					l		
VGU	Swedish transport Administration . Vägar och gators utformning . VGU. (Roads and streets). http://www.skl.se/web/VGU_1.aspx							x	x	h		Construction of roads and streets. Accessibility issues are included.
SFA	Swedish Forest Agency. Access to the forests for disabled people. Rapport 2005:1 . www.svo.se/forlag/rapporter/1678.pdf							x	x	h		
HS	Handisam. Break the barriers. www.handisam.se							x	x	m	l	Guidelines for governmental authorities. Also include groups like persons with allergy.

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT		
INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
SKL	Sveriges kommuner och landsting. Mer åt fler på lekplatsen, (playgrounds)							x	x	I		
BI	Sv Byggtjänst . Bygg ikapp. (More detailed requirements as a complement to building regulations). Wwww.byggtjanst.se.							x	x	I	I	
SWITZERLAND												
BehiG	Schweizerisches "Behindertengleichstellungsgesetz" (BehiG) "Federal Act on the Elimination of Discrimination against People with Disabilities (DDA, SR 151.3)"									h	h	The law has to comply with all new buildings as well as renovation projects: - all public and private buildings open to the public, public transport, buildings with 50 workplaces or more and residential buildings with 8 apartments or more. With renovation projects additional charges of up to 20% of the total renovation costs or 5% of the building insurances worth are considered to be reasonable. Further details are referred to in the cantonal building regulations. Das Gesetz muss bei sämtlichen Neu- und Umbauten eingehalten werden: - alle öffentlichen und privaten Bauten mit Publikumsverkehr, öffentliche Transportangebote, Bauten mit mehr als 50 Arbeitsplätzen, Wohnbauten mit mehr als 8 Wohnungen. Bei Umbauten gelten Mehrkosten von 20 % der Umbausummen oder 5% des Gebäudeversicherungswertes als zumutbar und verhältnismässig. Für Details wird auf die Kantonalen Bauvorschriften verwiesen.
BehiV	"Behindertengleichstellungsverordnung"									h	h	Die BehiV legt fest wie das BehiG anzuwenden ist.
VböV	"Verordnung behindertengerechte Gestaltung des öffentlichen Verkehrs" (VböV) Ordinance on the Adaptation of Public Transport to the Needs of People with Disabilities (PTAO, SR 151.34) www.bav.admin.ch/mobile									h	h	Legt im Detail fest was im Sinne des BehiG zum öffentlichen Verkehr gehört und wo der Zugang gewährleistet sein muss.

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT		
INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
VAböV	"Verordnung über technische Anforderungen an die behindertengerechte Gestaltung des öffentlichen Verkehrs" (VAböV) DETEC Ordinance on the Technical Requirements for Engineering Public Transport to Meet the Needs of People with Disabilities (PTTRO, SR 151.342)									h	h	Die VAböV verweist für Bauten auf die SIA 500 und regelt ergänzend die öV-Spezifischen technischen Anforderungen.
Kant. Baugesetze	Kant. Baugesetze und Bauverordnungen in 26 Kanone	x								h	h	Most of the cantonal building laws and regulations insist on compliance with the standard SIA 500. With residential buildings most cantonal regulations go further than the minimal national requirements. In most cases "adaptable residential building" in accordance with SIA 500 is to be followed from a minimum 4 or 6 apartments. Die meisten Kant. Baugesetze und Verordnungen verlangen die Einhaltung der Norm SIA 500. Bei Wohnbauten gehen die meisten kant. Regelungen weiter als die minimalen nationalen Vorschriften. Mehrheitlich ist der "Anpassbare Wohnungsbau" gemäss SIA 500 ab 4 oder 6 Wohneinheiten zu befolgen.
SVG	Schweizerisches Strassenverkehrsgesetz									h	h	In addition to law and the regulation technical requirements it mostly refers to the VSS standard. Neben einigen technischen Regelungen in Gesetz und Verordnung wird mehrheitlich auf VSS-Normen verwiesen.
Kant. Strassenverkehrsgesetze	Strassenverkehrsgesetze in 26 Kantonen									h	h	Neben einigen technischen Regelungen im Gesetz wird mehrheitlich auf VSS-Normen verwiesen. In addition to lawful technical requirements it mostly refers to the VSS standard.
SIA 500	Norm SIA 500 "Obstacle free buildings"							x		h	h	For matters of WHAT and HOW has to be built most laws and regulations refer to the standard SIA 500. It contains requirements for buildings open to the public as well as residential buildings, buildings with work places and specific regulations for theaters, restaurants, hotels and buildings for recreational activities. Für das WIE und WAS gebaut werden muss verweisen die meisten

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT			
		Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments	
												Gesetze und Verordnungen auf Norm SIA 500. Sie enthält Anforderung für öffentlich zugängliche Bauten, Wohnbauten, Bauten mit Arbeitsplätzen sowie auch spezifische Anforderungen für Theater, Restaurant, Hotel, Freizeitbauten, etc.	
VSS Normen	30 - 40 VSS-Normen für den Strassenraum							x		h	h	For matters of WHAT and HOW has to be built external environment and in road space most laws and regulations refer to the VSS standard. Für das WIE und WAS gebaut werden muss im Strassenraum verweisen die meisten Gesetze und Verordnungen auf VSS-Norm.	
Guideline SWP	Richtlinie "Strassen, Wege, Plätze"								x	m	m	Additions and explanations to the VSS standard. Ergänzungen und Erläuterungen zu den VSS-Normen.	
Guideline APW	Richtlinie "Hindernisfrei - Anpassbarer Wohnungsbau"								x	m	m	Additions and explanations to the SIA standard. Ergänzungen und Erläuterungen zur SIA-Norm.	
Guidelinie HoReFe	Richtlinie "Hotel, Restaurant, Ferienwohnungen"								x	l	l	Additions and explanations to the SIA standard. Ergänzungen und Erläuterungen zur SIA-Norm.	
Technical Sheets	20 Technical Sheets for different issues								x	m	m	Additions and explanations to the standards. Ergänzungen und Erläuterungen zu den Normen.	
UNITED KINGDOM													
AAT	Department for Transport (2008), 'Access to Air Travel for disabled persons and persons with reduced mobility - Code of Practice'.						x	x	x	x	h	h	This is a government code of practice that is mandatory for all those involved in the provision of air travel to take into account. Would be used alongside BS8300 and, if appropriate, Part M.
ATSDGDP	Department for Transport (2008), "Accessible train and station design guide for disabled passengers: A code of practice".						x	x	x	x	h	h	This is a government code of practice that is mandatory for all those involved in the provision of railway services to take into account. Would be used alongside BS8300 and, if appropriate, Part M.
BB102	Department for Children, Schools and Families (2008), "Building Bulletin 102: Designing for disabled children and children with special educational needs: guidance for mainstream and special schools".								x	x	h	h	All new schools are built to this standard. Would be used in association with BS8300 and, if appropriate, Part M.
BS8300	British Standards Institute (2009), BS 8300 "Design of buildings and their						x	x			h	h	

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT		
INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
	approaches to meet the needs of disabled people – code of practice.”											
BS9999	British Standards Institute (2008), BS 9999 'Code of practice for fire safety in the design, management and use of buildings'.					x	x			h	h	
CADW	CADW (2002), Overcoming the Barriers'.							x	x	l	l	
CAE	Centre for Accesible Environments and the Royal Institutions of British Architects, (2004) 'Good Loo Guide' .							x	x	m	m	
CIRIA	CIRIA (2004), "Buildings for all to use 2 – improving the accessibility of public buildings and environments".							x		l	m	
CLG 1	CLG (2007), Approved Document (B) Fire Safety - Volume 1: "Dwelling Houses".	x	x							h	h	
CLG 2	CLG (2007), Approved Document (B) Fire Safety - Volume 2: "Buildings other than dwellings"	x	x							h	h	
CLCM	Bright and Cook (2010), "The Colour, Light and Contrast Manual"					x	x	x	x	h	h	
Countryside Agency	The Countryside Agency, (2005) 'By all reasonable means'							x	x	m	m	
Countryside for All	Fieldfare Trust (2003) "Countryside for All - Good Practice Guide".							x	x	m	m	
DCfW	Design Commission for Wales DCfW (2008), "Design and Access Statements - Why, What and How".							x		h	h	
DCLG	Department of Communities and Local Government (DCLG), "Planning and Access for Disabled People – A Good Practice Guide".							x		h	h	
EH1	English Heritage (2004), 'Easy Access							x	x	h	h	

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INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
	to Historic Buildings'											
EH2	English Heritage (2005), 'Easy Access to Historic Landscapes'							x	x	h	h	
Footway	Design Manual for Roads and Bridges – "Footway Design Volume 7"								x	l	l	
GD1	Guide Dogs for the Blind Association, UCL (2008), "Testing proposed delineators to demarcate pedestrian paths in a shared space environment".							x		l	l	
GD2	Childs CR, DK. Boampong, H. Rostron, K. Morgan, T. Eccleshall, N. Tyler (2009), "Effective Kerb Heights for Blind and Partially Sighted People" (research commissioned by Guide Dogs).							x	x	l	l	
GD3	Guide Dogs for the Blind Association GDBA (2009) "Inclusive Streets Design Principles"							x	x	m	m	
Green Guide	Department for Culture, Media and Sport (2009), "The Green Guide - Guide to Safety at Sports Grounds".							x	x	h	h	
HBN A	HBN (2008), Health Building Note 00-02, "Sanitary Spaces", Department of Health Estates and Facilities Division.			x	x			x	x	h	h	
HBN B	HBN (2009), Health Building Note 00-03, "Clinical Support Spaces", Department of Health Estates and Facilities Division			x	x			x	x	h	h	
HBN C	Department of Health Estates and Facilities Division, HBN (2008),			x	x			x	x	h	h	

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT		
INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
	Health Building Note 00-04, "Circulation and Communication Spaces"											
HBN D	Department of Health Estates and Facilities Division, HBN (2008), Health Building Note 04-01, "Adult In-Patient Facilities",			x	x			x	x	h	h	
HZ	Institute of Highway Incorporated Engineers (2002), ' Home Zone, Design Guidelines'.							x	x	h	h	
ICI/UR	ICI Paints and The University of Reading (2007), 'Colour and Contrast'.							x	x	l	m	
Inclusive Mobility	Department for Transport (2002), "Inclusive Mobility: A guide to best practice on access to pedestrian and transport infrastructure".							x	x	h	h	
JMU1	JMU et al, (2007), "Designing for Disabled People in Home Zones"							x	x	m	m	
JMU 2	JMU (2005), 'The Accessible Office'							x	x	l	m	
LTH	Habinteg (1997), 'Lifetime Homes Standards'.					x	x			h	h	
Manual for Streets	CLG, DfT, WAG (2007), "Manual for Streets".			x	x	x	x	x	x	h	h	
Part M - ADM	Office of the Deputy Prime Minister (2004), "Approved Document Part M of the Building Regulations - Access to and use of Buildings".			x	x					h	h	
PCPA	PCPA (2004), "Planning and Compulsory Purchase Act"									h	h	
RNIB	Royal National Institute for the Blind RNIB (1995) "Building Sight: A handbook of building and interior							x		l	m	

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT		
INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
	design solutions to include the needs of visually impaired people".											
See it Right	Royal National Institute for the Blind RNIB (2006), 'See it right'.								x	m	m	
SE Access	Sport England Publications (2001), "Access for Disabled People".								x	x	h	h
SE General	Sport England (April 2010), 'Accessible Sports Facilities'.								x	x	h	h
SE Swim	Sport England (March 2008), 'Swimming Pools'.								x	x	h	h
Sign DesignGuide	Sign Design Society and JMU (2000), "Sign Design Guide"								x	x	h	h
TP	Department for Transport (June 2007), 'Guidance on the use of tactile paving surfaces'.								x	x	h	h
TPT	Thomas Pocklington Trust/Habinteg (2008), 'Housing for people with sight loss'.								x	x	h	h
WHDG	Habinteg (2006), 'Wheelchair Housing Design Guide'.								x	x	h	h
	INTERNATIONAL - UNIVERSAL											
	INTERNATIONAL											
ANS	American National Standards Institute, Inc. / International Code Council (2003), "American National Standard, Accessible and Usable Buildings and Facilities".								x	x		
IBC	The International Code Council (2009), "International Building Code - Chapter 11: Accessibility".			x								
	INTERNATIONAL											

CEN 207 Bibliography		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE		ESTIMATE ON POTENTIAL SUITABILITY IN PUBLIC PROCUREMENT		
INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
- NON-EU MEMBER COUNTRIES												
AUSTRALIA												
DS2010	2010 "Disability (Access to Buildings) Standards"			x	x							
NEW ZEALAND												
NZSS 4121	2001, "New Zealand Standard Specification No 4121"			x	x							
PWAP	Christchurch City council (2002), "Parks and Waterway Access Policy".							x	x			
SINGAPORE												
BCA 1	Building and Construction Authority, BCA (2007), "Code on Accessibility in the Built Environment".			x	x							
BCA 2	Building and Construction Authority, BCA (2007), "Universal Design Guide".							x	x			
SOUTH AFRICA												
SANS 10400	SANS 10400-S: South African National Building Regulations - Part S. "Facilities for Persons with Disabilities"			x	x							
UNITED STATES OF AMERICA (USA)												
ADA	Department of Justice, Americans with Disabilities Act (1st July 1994), "ADA Standards for Accessible Design".			x	x							
ADAAG	United States Access Board (23 July 2004), "Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines".							x	x			

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INVENTORY ABBREVIATION	DOCUMENT NAME (and link)	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings	Comments
ADA(Med)	Department of Justice, Americans with Disabilities Act (May 2010), "Access To Medical Care For Individuals With Mobility Disabilities".			x	x							
ADA(Stadium)	Department of Justice, Americans with Disabilities Act, "Accessible Stadiums".			x	x							
ANS	American National Standards Institute, Inc. / International Code Council (2003), "American National Standard, Accessible and Usable Buildings and Facilities".					x	x					

ANNEX A

Objective of the Mandate

A.1 Objective of the Mandate M/420

In December 2007 the Commission issued a mandate M/420 [EC, 2007] to CEN, CENELEC and ETSI. The key objectives of this mandate were

The main objective of the Mandate M/420 is to:

- Facilitate the public procurement of accessible built environment following the Design for All principles by developing a set of standards/Technical specifications that will contain
 - I. A set of functional European accessibility requirements of the built environment and
 - II. A range of minimum technical data to comply with those functional requirements.
- Provide a mechanism through which the public procurers have access to an online toolkit, enabling them to make easy use of these harmonised requirements in procurement process.

The work in the mandate shall make a distinction between the design of buildings including access to / from the building, i.e. the accessibility of the infrastructure, or the accessibility of floors and rooms inside the building, open venues, civil engineers work and construction products.

It is important to note that the Construction Products Directive (CPD) addresses safety requirements for construction works. When assessing the need for accessibility requirements related to 5 construction works, all safety requirements contained in the existing standards must be respected.

There may be instances where existing Community legislation addresses accessibility issues, as with the example of the construction products Directive above, but also in other spheres such as rail travel passenger ships, buses and coaches and airports. Part of the work carried out under this mandate is to seek out such instances and take due account of them.

The mandate is to be carried out in two phases:

- Phase I: Inventory and feasibility of European and International accessibility standards in the built environment
 - Team A: an inventory of existing standards, building codes, technical regulations and guidance documents for accessibility to the built environment
 - Team B: Inventory of European and international accessibility requirements and assessment of existing testing and conformity schemes
- Phase II – Standardization activities.

The first technical report requested in Phase I should cover

- **An inventory of existing standards**, building codes, technical regulations and guidance documents for accessibility to the built environment
- **An analysis of gaps** identified in these areas where no standards, building codes, technical regulations or guidance documents exists or where the existing standards, etc. need to be complemented to have a comprehensive European standard. This analysis should distinguish between
 - Functional accessibility requirements and
 - A range of minimum technical performance criteria to comply with those functional requirements
- **A proposal for a standardization work programme** for the development of two European standards
 - A European standard that contains a set of functional European accessibility requirements of the built environment making the distinction between design and products to be used as either technical specifications or as criteria for awarding public contracts (in the sense of the Public Procurement Directives).

- A European standard/Technical Specifications that describe the range of minimum technical details to comply with those functional requirements

In CEN BT WG 207 meeting in Brussels at 18 January 2011 it was agreed upon to deliver only one joint report for both teams including common sections covering executive summary, introduction, conclusions and all referencing materials in Annexes. The specific inventories, analysis of gaps and proposals for a standardization programme is included in separate sections for Team A and Team B subjects.

ANNEX B History of the report

B.1 Project Team A

Document history			CEN/BT WG 207 N XX
V. 01	August 2010	Interim draft developed for Milestone A	N 15
V. 02	November 2010	Pre final draft report PT A	N 20
V. 01	2011-04-11	Draft Joint report PT A + PT B	N XX
V. 02	2011-05-31	Draft joint report PT A + PT B for Public Commenting Period	N XX

The PT A members involved in this report are:

Function	Name	Abbreviation	E-Mail
PT A Leader	Monika KLENOVEC	MK	klenovec@designforall.at
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PT A Expert	Keith BRIGHT	KB	info.kbc@btinternet.com
PT A Expert	Peter CONELL	PC	Peter.Connell@arup.com
PT A Expert	Katerina PAPAMICHAIL	KP	papamikat@yahoo.gr
PT A Expert	Elisabet SVENSSON	ES	Elisabet@handisam.se

For the data collection and country expert reports Team A has been supported by PT B members. Vice versa PT A members collected also the conformity assessment schemes information to support PT B works.

B.2 Project Team B

Document history			CEN/BT WG 207 N XX
V 0.0.1	August 2010	Interim draft developed for Milestone A	N 14
V.0.0.2	November 2010	Pre final draft report PT B	N 19
V. 01	2011-04-11	Draft Joint report PT A + PT B	N XX
V. 02	2011-05-31	Draft joint report PT A + PT B for Public Commenting Period	N XX

The project team B members involved in this report are :

Function	Name	Country	E-Mail
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PT B Expert	Fionnuala ROGERSON	Ireland	fionnuala.rogerson@rogerson.ie
PT B Expert	Clas THORÉN	Sweden	clas.thoren@gmail.com

B.3 New approach in January 2011 – two reports combined to one joint report

Based on the comments of Inma Placencia-Porrero (European Commission) on the pre-final reports of PT A and PT B - delivered in November 2010 - which have been discussed with the two PT leaders on 2011-01-17, on the day before the 3rd CEN/BT WG 207 meeting in Brussels, it was decided and confirmed in the CEN/BT WG 207 meeting on the next day that the 2 reports should be combined to a joint report with several Annexes where PT A and PT B should refer to. This decision was taken due to the huge reports and references to the same data collections and documents by both project teams.

The joint report should be shortened and focusing in separated chapters on PT A and PT B recommendations and conclusions. All background information, data collection, country reports and not direct to standardization related issues, conclusions and recommendation are now transferred to Annexes. Only the Introduction and the Executive Summary are common chapters dealing with both PT A and B works.

ANNEX C Terminology and Definitions

C.1 The key definitions of concepts used in this report

Team A refers to ISO/FDIS 21542, which includes all necessary definitions on accessibility of the built environment.

The following definitions are used for a better understanding of this report (mainly concerning project team B issues). These definitions are coming from international standards and guides as ISO 17000 and Guide 71 are adapted to the use of this report from other relevant documents.

C.1.1 Accessible design

Design focused on principles of extending standard design to people with some type of performance limitation to maximize the number of potential customers who can readily use a product, building or service. This may be achieved by

- Designing products, services and environments that are readily usable by most users without any modification,
- Making products or services adaptable to different users (adapting user interfaces), and
- Making standardized interfaces compatible with special products for persons with disabilities.

(ISO/IEC Guide 71 = CEN/CENELEC Guide 6)

NOTE: Terms such as design for all, barrier-free design, inclusive design and trans-generational design are used similarly but in different contexts.

NOTE: Accessible design is a subset of universal design where products and environments are usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

C.1.2 Assistive technology

Piece of equipment, product system, hardware, software or service that is used to increase, maintain or improve the functional capabilities of individuals with disabilities.

(ISO/IEC Guide 71 = CEN/CENELEC Guide 6)

NOTE 1: This can be acquired commercially off-the-shelf, modified or customized. The term includes technical aids for persons with disabilities. Assistive devices do not eliminate an impairment but may lessen the difficulty an individual has in carrying out a task or activity in specific environments.

NOTE 2: The new terminology used in ISO 9999:2007 is “support technologies”. The project team has decided to continue using “assistive technology” as it is the term used in the referenced documents.

C.1.3 Conformity assessment

Demonstration that specified requirements relating to a product, process, system, person or body are fulfilled.

(EN ISO/IEC 17000:2004)

C.1.4 Conformity assessment scheme

Conformity assessment system related to specified objects of conformity assessment, to which the same specified requirements, specific rules and procedures apply.

(EN ISO/IEC 17000:2004)

C.1.5 Conformity assessment system

Conformity assessment system related to specified objects of conformity assessment, to which the same specified requirements, specific rules and procedures apply.

(EN ISO/IEC 17000:2004)

C.1.6 Attestation

Issue of a statement, based on a decision following the review that fulfilment of specified requirements has been demonstrated.

(EN ISO/IEC 17000:2004)

C.1.7 Inspection

Examination of a product design, **product**, process or installation and determination of its conformity with specific requirements or, on the basis of professional judgment, with general requirements

NOTE Inspection of a process may include inspection of persons, facilities, technology and methodology.

(EN ISO/IEC 17000:2004)

C.1.8 Testing

Determination of one or more characteristics of an object of conformity assessment, according to a **procedure**.

(EN ISO/IEC 17000:2004)

C.1.9 Certification

Third-party **attestation** related to products, processes, systems or persons.

NOTE 1 Certification of a management system is sometimes also called registration.

NOTE 2 Certification is applicable to all objects of conformity assessment except for **conformity assessment bodies** themselves, to which **accreditation** is applicable.

(EN ISO/IEC 17000:2004)

C.1.10 Declaration

First-party **attestation**

(EN ISO/IEC 17000:2004)

C.1.11 Contracting authority

The state, regional or local authorities, bodies governed by public law, associations formed by one or several of such authorities or one or several of such bodies governed by public law.

(Directive 2004/18/EC Article 1)

C.1.12 Customer

Person, company, or other entity that buys goods and services produced by another person, company, or other entity.

C.1.13 Product

Result of a process.

(ISO 9000:2005)

NOTE: ISO 9000:2005 denotes four generic product categories: services (e.g. transport); software (e.g. computer program, dictionary); hardware (e.g. mechanical part); processed materials (e.g. lubricant). Many products comprise elements belonging to different generic product

categories. Whether the product is then called service, software, hardware or processed material depends on the dominant element.

C.1.14 Public procurement

Process starting with a decision by a contracting authority to acquire a product from an external supplier, ending with the signing of a contract with the awarded supplier.

(Source: Project Team)

C.1.15 User

Person who interacts with the product, service or environment.

(ISO/IEC Guide 71 = CEN/CENELEC Guide 6)

NOTE: Users may be customers, but often they are users of products, services or an environment purchased, provided or offered by customers. Employees are users using products and environments provided by their employer.

ANNEX D European Framework

D.1 European legal framework for accessibility of the built environment

D.1.1 Treaty obligations regarding accessibility

Article 13¹¹ of the EU Treaty provides for measures against discrimination inter alia on the grounds of disability. In November 1999 the European Commission adopted an anti-discrimination package based on Article 13 of the EU Treaty which led to a Directive in the field of employment and occupation prohibiting discrimination on all grounds listed in Article 13. The Directive on Equal Treatment in employment and education (2000/78) includes *“the obligation to provide reasonable accommodation for people with disabilities”* for trainings and *“the provision of measures to accommodate the needs of disabled people at the workplace in combating discrimination on grounds of disability”*.

An accessible built environment is fundamental in enabling disabled people to maximise their opportunities in the workplace, and adopting an ethos of Design for All is critical in preventing or minimising any obstacles or barriers that may prevent that.

D.1.2 Implementation of the UN Convention on the Rights of Persons with Disabilities and other relevant UN activities

The Convention on the Rights of Persons with Disabilities and its Optional Protocol was adopted on 13th December 2006 at the United Nations Headquarters in New York, and was opened for signature on 30th March 2007. Many countries have already signed the Convention including all European Member States. It is the first comprehensive human rights treaty of the 21st century and is the first human rights convention to be open for signature by regional integration organizations. The Convention entered into force on 3rd May 2008. The Convention marks a "paradigm shift" in attitudes and approaches to persons with disabilities.

The treaty views disability as a result of the interaction between an inaccessible environment and a person, rather than an inherent attribute of an individual. It replaces the old “medical model” of disability by a social and human rights model based on the fact that it is society that “disables” persons with disabilities from exercising their human rights as citizens.

The Convention is intended as a human rights instrument with an explicit, social development dimension. It adopts a broad categorization of persons with disabilities and reaffirms that all persons with all types of disabilities must enjoy all human rights and fundamental freedoms.

Guiding Principles of the UN Convention

There are eight guiding principles that underlie the Convention and each one of its specific articles. For accessibility in the built environment the principle of *“Equality of opportunity”* and *“Accessibility”* are the most important ones.

Accessibility (Art. 9)

Accessibility appears both as a general principle (article 3) as well as a stand-alone article (article 9)

Accessibility is essential to enable persons with disabilities to live independently and participate fully in life – it is therefore an end in itself as well as a means to enjoy other rights. Accessibility is relevant to a wide range of issues for the built environment and infrastructure:

- **Physical accessibility** – buildings, transport, etc. – a ramp might make the world of difference – access to schools, access to courts, access to hospitals, access to the workplace are essential to the enjoyment of human rights
- **Information and communication accessibility** – e-accessibility is very important given the importance of the internet to access information, but also accessibility to documentation

¹¹ http://europa.eu/legislation_summaries/institutional_affairs/treaties/amsterdam_treaty/a10000_en.htm

(Braille) or to aural information (sign language)

Considering accessibility in the design of new buildings, web-sites etc might not incur added cost, yet re-fitting can be expensive.

- Access must be ensured to:
 - Justice (article 13)
 - Living independently and being included in the community (article 19)
 - Information and communication services (article 21)
 - Education (article 24)
 - Health (article 25)
 - Habilitation and rehabilitation (article 26)
 - Work and employment (article 27) - human resource policies and practices
 - Adequate standard of living and social protection (article 28)
 - Participation in political and social life (article 29)
 - Participation in cultural life, recreation, leisure and sport (article 30)

In the UN Convention on the rights of persons with disabilities¹², accessibility is specifically required, namely in the General principles, in the General obligations and in several articles. In particular, article 9 addresses, among others, accessibility in the built environment, transportation, and information and communication, making specific reference to the role of standards to achieve its goals. Both the EU and almost all its Member States have signed the Convention and, as a consequence, need to comply with those requirements.

After two years of signage the UN Covention and its Optional Protocol the first countries have to deliver their states report which may be followed later by an action plan. Additionally shadow reports may be delivered by disability organisations to give the full picture.

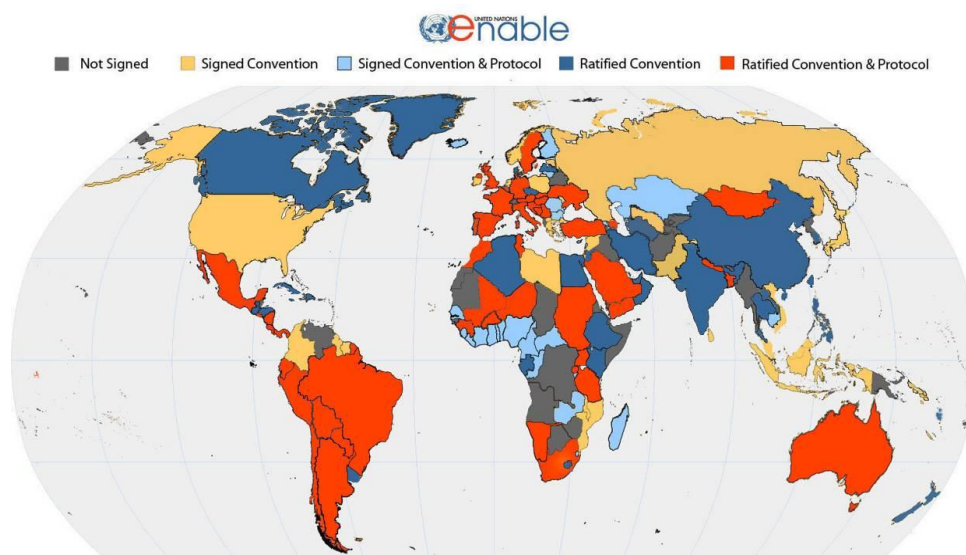


Figure D.1.2.1 - Map of signatures and ratifications of the Convention and its Optional Protocol¹³

¹²UN Convention on the rights of persons with disabilities <http://www.un.org/esa/socdev/enable/conventioninfo.htm>

¹³<http://www.un.org/disabilities/documents/maps/enablemap.jpg>

D.1.3 Community legislation on requirements for accessibility of the built environment

D.1.3.1 Construction Product Regulation

The Construction Product Regulation (305/2011/EC-CPR) is replacing the former Construction Product Directive (98/106/EEC-CPD) and establishes harmonised conditions for the marketing of construction products. The new CPR¹⁴ provides more clarification of the use of CE-marking and introduces simplified procedures.

The 'essential characteristics' are those properties of the construction products which are influencing the basic requirements for works.

In the previous CPD "accessibility" was missing among the essential requirements. In the new adopted **CPR** "accessibility" has been added in basic requirement No. 4 "Safety and accessibility in use". It will be interesting how "accessibility" will be further explained in support documents of CPR.

More information about recent developments on new CPR will be added after the Open Meeting in cooperation with EC DG ENTR.

Private sector businesses create economic growth with sustainable development

Last October the Commission adopted a Communication implementing the Community Lisbon programme with a strategy for the simplification of the regulatory environment (COM (2005) 474 final). The main role of industrial policy is to provide the right framework conditions for enterprise development and innovation in order to make the EU an attractive place for industrial investment and job creation. It is evident that it is primarily private sector businesses that create economic growth, not the public sector. In exploiting such opportunities, **corporate social responsibility and sustainable development play a key role**. Within social sustainability accessibility should be an integrative part.

Accessibility related criteria for the intended end-use of the construction works?

For the intended end-use of the construction works several essential characteristics to the basic work requirements "**Safety and accessibility in use**" have to be considered. The construction must be designed and built in such a way that i.e. considering '**Safety in case of fire**' all occupants (including people with disabilities, elderly and children) can leave the works or be rescued by other means. Considering '**Safety in use**' that people with their diversity (including disabled people, frail elderly people and children) can use the works independently, comfortable and safe without any risks for falls and slippery based on implementation of '**Design for All-Criteria**'. The implementation of the '**Adaptable Housing Concept**' would provide living homes for all ages and could help to keep elderly people longer in their accessible homes even when they are using walking aids or wheelchairs. Less building of expensive nursing homes will be necessary when people have adaptable sanitary facilities which is the major reason to transfer to a nursing home. Care services at home are less expensive, an economic better solution and prevent increasing health costs for caring facilities.

For the **Sustainability concept** – as already started within **CEN/TC 350 "Sustainability of construction works"** – three areas (columns) have to be considered: economy – ecology – social. For the social area accessibility of the construction work is an essential part and a first draft on the "Assessment of buildings - Part 3: Framework for the assessment of social performance" is under work.

Accessibility more a design and execution criteria than a product criteria?

Accessibility in the built environment is in general is more a design criteria than a construction product criteria although there are some related products as doors, window with opening devices, sanitary products and equipment, different floor materials etc. which have an impact on the accessibility and comfortable and safe end-use of the construction works.

After the design of a building and its official permit at the building authority the project continues with the call for bidders, and after signing all contracts by the architect or procurer the execution of

¹⁴ CPR ref.: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:088:0005:0043:EN:PDF>

the whole works starts. This period of the project from the first breaking ground until final occupancy of the users is the most critical one. Even if the design has covered all needs and requirements for accessibility according the building regulations and the recommended Access Statement it is often a matter of **less or even missing building control activities** that at the end accessibility is not covered correctly to meet the needs of all users including people with disabilities.

Developing models for building control tools (confirmation with accessibility requirements) in the different steps of the project based on EN standards will help to increase awareness on the correct execution of works concerning accessibility and is the goal of this project in phase II. The governments are seeking to reduce regulatory burden and bureaucracy and have at the same time more pressure to increase their control functions. Therefore self-confirmation systems, independent inspection systems and others exist all over European MS. CEBC Consortium has published 2 important reports in this area: Study into “Self Confirmation in Building Control in Europe from 2010 and the previous report on “Building Control Systems in Europe” from 2006.¹⁵

New Mandate 473 “Design for all”

The new Mandate 473 “Design for all” will support an overall approach considering all European standardisation activities which cover also design standards for the built environment which are not under the CPR e.g. furniture and interior design, signage..

Education of architects, construction engineers, workers on accessibility – a missing link?

In the field of education of architects, construction engineers etc. there is an urgent need to implement mandatory courses on accessibility and inclusive design. In an online survey to 336 European universities with architectural curricula only 10 % responses have been received after a reminder. Only half of the answering universities have lectures on accessibility and Design for All / Universal Design obligatorily introduced.¹⁶

UIA – Union Internationale des Architectes has established a WP “**Architecture for All**” in different regions. For Europe Region 1 and 2 are relevant and they work in cooperation with ACE the European Organisation of Architects on this item. Different activities have been started to raise more awareness on accessibility among architects and within national chambers of architects.

D.1.4 The European Disability Strategy 2010 – 2020

The Commission has identified eight main areas where key actions are identified. These areas are accessibility, participation, equality, employment, education and training, social protection, health and external action. The actions in the main areas need to be underpinned by implementation instruments as

1. awareness raising,
2. financial support with optimal use of funding instruments in post-2013 programmes,
3. statistics and data collection and monitoring,
4. mechanism required by the UN Convention

In the list of actions a European Accessibility Act is mentioned briefly in the new disability strategy. It says: “*consult Member States and other stakeholders on a possible European Accessibility Act in 2011*”.

Awareness raising on accessibility is a very important goal and yet started in the built environment with the “**Access City Award**” in 2010 where European cities over 50.000 inhabitants can deliver their applications to be awarded in each year. The **Eurocities WG on “Barrier-free cities for all”** – where the representatives belong to the group of major public procurers – are highly interested in the

¹⁵ http://www.cebc.eu/index.php?option=com_content&view=category&layout=blog&id=1&Itemid=2

¹⁶ See <http://www.designforall.at/Publikationen.aspx>: *Barrierefreie Bauen – Ausbildung und Beratung in Österreich / Barrier-free buildings – education and consultancy in Austria* (including the online survey among European universities for architects.

outcome of Mandate 420 project and should also be part of this project in phase II due to their practical experience and knowledge about the implementation of accessibility.

Another private initiative raises awareness among architects which is highly recommended and needed. Within the “**World Architecture Festival**” in Barcelona (each year in the beginning of November) a special “**Accessibility Award**” has been sponsored by ONCE last year and will be continued also this year.

D.2 Economic importance

Europe is promoting a “Design for All” approach to the built environment in which all buildings and public spaces are accessible to all those who use them. In terms of cost, it is well known that whilst ensuring appropriate accessibility early in the design process can result in negligible increase in costs for the overall project, introducing ad-hoc alterations to address poor accessibility later in the process will not only be costly but can also lead to the provision of a less than satisfactory end product. These limitations in accessibility are likely to be experienced by all those using the buildings or spaces, but especially by people with disabilities.

The accessibility market is often described as a niche market. However, considering the fact that the majority of European countries have a population of which between 20% and 37% have explicit accessibility requirements, it becomes obvious that there is an enormous market for accessible built environments and products in all countries. In 1999, out of a total European population of about 800 Million people approximately 100 million have disabilities, of whom between 37 and 50 million are registered as disabled with visible or hidden disabilities, unique or multiple, permanent or temporary.

Elderly people, just as others (e.g. expectant mothers, persons temporarily injured, etc) can experience handicapping situations. In fact age and disability are intimately linked and they may concern everybody at one moment or another during their life.

Table D.2.1 – Elderly in Europe

Elderly in Europe (in million) Europe	1950	1975	2000	2025	2050
East	21.6	41.4	56.6	69.0	82.0
North	11.6	16.9	19.4	28.3	31.5
South	12.3	20.4	31.6	42.1	46.9
West	21.1	32.3	39.7	57.4	60.8
Total	66.3	110.9	147.6	196.8	200.8
<i>Source : world population ageing – pages 80-87</i>					

In terms of housing, many older people want to stay in their homes as long as possible, and look to healthcare services to support them in doing so. For them, accessible, comfortable and safe dwellings are essential. Consider the “adaptable housing concept” for all dwellings as mentioned above.

To meet the needs of an ageing society and for all unforeseen situations, accidents etc. which can affect everyone at some stage in their lives, the concept of *adaptable housing* should be considered a mainstream strategy in all new housing projects.

It is suggested that 91 % of European Citizens agree to spend more money in eliminating physical barriers for people with disabilities¹⁷. This level of support for positive action is important when

¹⁷Euro barometer "Discrimination in the European Union" 2007 on disability matters

considering the relationship between disability and ageing and when planning actions necessary to cope with the demographic trends. Additionally the current ageing society in Europe, and especially the generation born around 1968 (“Baby Boomers”) constitute an important market share with an unequal share of disposable incomes.

D.3 European Projects on Accessibility in Public procurement and in standards

D.3.1 ECA – European Concept of Accessibility

This “European Concept for Accessibility - ECA 2003” is the result of exemplary co-operation between a number of partners who share a strong commitment to the improvement of accessibility in the built environment as an essential condition for guaranteeing equal opportunities and full participation for ALL European citizens.

On this website several documents on accessibility in the built environment are available and can be downloaded: www.eca.lu; e.g.

ECA for administrations

This “ECA for Administrations” is the result of exemplary co-operation between a number of partners all over Europe who share a strong commitment to the improvement of accessibility in the built environment as an essential condition for guaranteeing equal opportunities and full participation for ALL European citizens

Safe Egress and Evacuation for People with Disabilities

This publication is available for free download from <http://www.nda.ie/egress> or contact publications@nda.ie

Other documents for discussion provided by different accessibility experts:

- Accessibility audit of old cities
- Special toilets for adults assistance
- Urban planning and accessibility of urban spaces
- Shared space

D.3.2 Build-for-all

www.build-for-all.net. The aim of this EU-Project was to promote accessibility for all to the built environment and infrastructure.

Build for All Reference Manual

The Build-for-All Reference Manual aims to provide assistance for the inclusion of accessibility criteria in public calls for tender under the Public Procurement Directive of the European Union. This Manual includes, in Part 1, a Handbook and, in Part 2, a Toolkit, that can be consulted independently from each other. Visit also www.build-for-all.net

D.3.3 Stand4All

Stand4All developed and implemented training courses for persons with disabilities and for members of standardization committees. The project established an enlarged European network of CEN/CENELEC Guide 6 experts and accessibility experts in the field of standardization. The Stand4All objectives were:

- To facilitate the participation of user organisations in the standardization process;
- To increase the uptake of CEN/CENELEC Guide 6 in the field of standardization;
- To prepare more users (representatives of organisations for persons with disabilities or elderly persons) for participation in European standardization;

- To help standardisers take into account the needs of elderly persons and persons with disabilities.

More information can be found here: <http://ftb-esv.de/stand4all/stand4all.html>

D.4 European Projects on education of planners, construction engineers etc.

Erasmus Intensive Programmes

The VUT Bratislava has organised in close co-operation with the Technical University in Vienna and other European universities and students (2-3 students from each university) a 14 days workshop with many lectures from all participating lecturers. Professors and a final project work.

In 2007 the topic was “**Tourism for All**” and in 2008 “**Culture for All**”. About 30 persons have attended each course.

Schindler Award

The Schindler Award is an architecture competition that challenges young architects to place "Access for All" at the center of their design philosophy. Open to students and schools of architecture in Europe, the Award recognizes urban designs that are characterized by inclusiveness and barrier-free mobility for people of all ages and capabilities. The competition is held under the patronage of the Schindler Group, and is an excellent opportunity for graduating architects to have their designs judged by a professional jury.

See more: www.schindlerawarde.com

BEST summer courses on “Universal Design – Architecture for All”

This summer course offers the possibility to become acquainted with Universal Design and its basic principles. Additionally there was the chance to visit the beautiful city of Vienna, sit next to the blue Danube and spend a weekend on the Austrian mountains. First course was organised in July 2005 and second one in 2006 by the Best organisation and Vienna University of Technology, architectural department.

See more: <http://www.best.eu.org/student/courses/event.jsp?activity=ceosufp>

ANNEX E

European Guides and Standards on accessibility

E.1 EN Guides and Standards relevant for accessibility in the built environment

To meet the requirements for accessibility in the built environment standards developers have to follow the recommendations stated in CEN/CENELEC Guide 6 (= ISO/IEC Guide 71) *“Guidelines for standards developers to address the needs of older persons and persons with disabilities”*. (Wikipedia)

The adoption of CEN/CENELEC Guide 6 resulted from a European mandate to the European standardization organisations, and the European Commission is funding projects to promote the use of this Guide which contains guidance for the creation and the revision of standards to ensure greater accessibility of products and services.

CEN/CENELEC Guide 6 has three goals:

1. To inform how human abilities (and disabilities) affect the usability of products, services and the built environment,
2. To describe how requirements in standards relate to accessibility and usability of products and services,
3. To raise awareness about the benefits of accessible design.

In 2006 CEN sent a questionnaire on the use of Guide 6 to its technical committees. The results showed that 3 out of 275 CEN committees used the Guide 6. ANEC decided within WG “Design for all” to propose to CEN how to take an initiative to change the situation. In 2007-2008, NEN - the Dutch standardization organisation - and Standard Norge carried out a feasibility study within the European Mandate M/371. One of the findings was that the implementation of Guide 6 faced some difficulties. For this reason, NEN and CEN started an action to promote the use of Guide 6, and in December 2007 NEN proposed the installation of a CEN/CENELEC/BT/WG Accessibility for All. ANEC also supported the creation of such a working group. This led to the creation of the CEN/CENELEC/BT/WG *CEN/CENELEC Guide 6 Implementation Mechanism*. The working group held a preliminary meeting on 29 October 2008 and its first official meeting on 8 April 2009.

In August 2008, the European Commission published a call for tenders on the subject of “Training of Stakeholders on consultations on standardization”. The main goal of this call is promoting the use of Guide 6. The outcome can be found within the Stand4all project. www.stand4all.eu where trainings for user representatives and standardization experts in Madrid, Brussels, London and Dublin have been organised and an E-learning tools have been provided for further trainings.

Finding and conclusions:

In the Construction Products Directive no requirements and legal obligations for accessibility in the built environment is included although forced through the EU Disability Strategy. This may be an important reason why CEN/TCs are not considering the requirements within Guide 6. Due to the missing Directive no CEN Consultant is checking the draft standards before publication if all essential requirements are sufficiently dealt with.

Another reason could be based on the functional requirements stated in Guide 6 (clause 8 “Factors to consider”). If standard developers are not experts in the field of accessibility they cannot use these functional requirements accordingly. The ISO/TR 22441 gives little further guidance but is also a very unbalanced document - in some areas very scientific and others are missing – and not really usable. Further guidance could be taken from ISO/FDIS 21542 *“Accessibility and usability of the built environment”* requirements if incorporated within CEN according the Vienna agreement procedure.

But anyway it needs legal and obligatorily proceedings similar than within the other essential requirements stated in the Construction Products Directive – now under revision. It’s essential that the new regulation includes accessibility within sustainable construction works for the social performance.

See also standardization projects within CEN/TC 350 “*Sustainable building construction*” where accessibility is already considered within a preliminary work item “**Assessment of the social performance of buildings**”.

In 2004 PT A leader has elaborated a project for the Austrian Consumer Council (with copy to ANEC) on the implementation of CEN/CENELEC Guide 6 in CEN standardization for the Austrian Consumer Council (member of ANEC) comparing the scopes of relevant CEN/TCs with the functional requirements out of “Factors to consider” from Guide 6 which should be considered in the development of different draft standards:

Project: “Design for All” baseline requirements for CEN sectors and CEN/TC’s – Review of CEN/TC’s and their draft standards demanding the provision for accessible design based on CEN/CENELEC Guide 6.

Findings and conclusions:

- The previous CPD had ‘accessibility’ not considered in their essential requirements. New CPR has now included ‘accessibility’ in basic requirement No. 4 “**Safety and accessibility** in use”. It will be interesting how accessibility will be further explained and described in support documents and how it is going to affect CEN standardization work. More information about recent development in the framework of CPR will be included after the Open Meeting.
- Mandatory proceedings should be established within CEN standardization for the implementation of accessibility requirements.
 - Already published EN standards have to be revised according accessibility requirements.
 - Draft standards have to be checked before enquiry stage by a mandatory procedure.
 - Either special trained CEN Consultants or Accessibility Consultants (network of accessibility consultants to be established) could observe this process and provide technical guidance, comments and proposals before the enquiry proceedings.
- Regarding the insufficient implementation of CEN/CENELEC Guide 6 until now it may be more effective for standards developers to have supportive guidance by an independent accessibility expert for this technical field which needs a lot of special knowledge.
- To speed up the process EC is asked for funding a network of accessibility consultants who could check relevant EN standards and drafts according accessibility requirements and make proposals for revision.
- This Network of accessibility consultants could also offer trainings and seminars for public procurers within the construction works area and other interested parties to improve knowledge and skills on ‘Design for all’ requirements.

The introduction of an independent “accessibility consultant” in the standards developing process could be a successful, efficient and less costly way to give clear guidance and make comments to the drafted standards which have to be taken into account by the TC’s on the basis of mandatory proceedings.

E.1.1 Building design standards

For accessibility requirements no relevant design standard for the built environment exists within CEN standards. Due to the fact that ISO/TC 59 SC 16 “Accessibility and usability of the built environment” develops a new building standard no further actions have been taken by CEN since the first attempt to work together according the Vienna agreement failed.

Only on an informal level a strong commitment initiated by PT A leader and lobbied by ANEC convinced more European experts to contribute with their expertise in the development of this ISO standard as representatives from European Standards organisations.

In other areas within CEN/TCs on buildign design standards where accessibility should be included only less accessibilty approach can be seen.

Within **CEN/TC 33 “Doors, windows, shutters, building hardware and curtain walling”** one technical report exists with relevance for door fittings usable for children, elderly and disabled people. Its implementation ans use within European Member States should be checked later.

Doors, windows, shutters, building hardware and curtain walling - Published standards

Standard reference	Title	Directive (Citation in OJEU*)	Sales Points
CEN/TR 15894:2009	Building hardware - Door fittings for use by children, elderly and disabled people in domestic and public buildings - A guide for specifiers	-	More

Within **CEN/TC 136 “Sports, playground and other recreational facilities and equipment”** (see 8.3.2.2) there is one work item under discussion “Play for all”.

Within **CEN/TC 169 “Light and lighting”** the revised standard *EN 12665:2011 “Light and lighting - Basic terms and criteria for specifying lighting requirements”* has been published this year. It should be checked if requirements for vision impaired people have been considered therein.

In **CEN/TC 178 “Paving usits and kerbs”** this CEN/TS 15209 has to be further checked concerning its implementation within European Member States. It should also be considered that relevant standardisation work is also going within **ISO/TC 173 “Assistive products for persons with disabilities”** where ISO/DIS 23599 “Assistive products for blind and vision impaired persons -- Tactile walking surface indicators” has already been published for Enquiry and the voting is already closed.

Paving units and kerbs - Published standards

Standard reference	Title	Directive (Citation in OJEU*)	Sales Points
CEN/TS 15209:2008	Tactile paving surface indicators produced from concrete, clay and stone	96/48/EC (No) 2001/16/EC (No) 89/106/EEC (No)	More

Within **CEN/TC 315 “Spectator Facilities”** these standards have to be checked later if accessibility for all is considered including children, elderly persons and persons with disabilities:

Spectator facilities - Published standards

Standard reference	Title	Directive(Citation in OJEU*)	Sales Points
CEN/TR 13200-2:2005	Spectator facilities - Layout criteria of service area - Part 2: Characteristics and national situations	-	More
CEN/TR 15913:2009	Spectator facilities - Layout criteria for viewing area for spectators with special needs	-	More
EN 13200-1:2003	Spectator facilities - Part 1: Layout criteria for spectator viewing area - Specification	-	More
EN 13200-3:2005	Spectator facilities - Part 3: Separating elements - Requirements	-	More
EN 13200-4:2006	Spectator facilities - Part 4: Seats - Product characteristics	-	More
EN 13200-5:2006	Spectator facilities - Part 5: Telescopic stands	-	More
EN 13200-6:2006	Spectator facilities - Part 6: Demountable (temporary) stands	-	More

Within **CEN/TC 325 "Prevention of crime in urban planning and building design"** several standards, technical specifications have been already published about building design. The PT A leader has made some efforts in the past to raise more awareness on implementation of CEN/CENELEC Guide 6 requirements which was also stated in a resolution but not followed by further actions.

The published standards have no requirements according accessibility considered.

Prevention of crime by urban planning and building design - Published standards

Standard reference	Title	Directive(Citation in OJEU*)	Sales Points
CEN/TR 14383-2:2007	Prevention of crime - Urban planning and building design - Part 2: Urban planning	-	More
CEN/TR 14383-5:2010	Prevention of crime - Urban planning and building design - Part 5: Petrol stations	-	More
CEN/TR 14383-7:2009	Prevention of crime - Urban planning and building design - Part 7: Design and management of public transport facilities	-	More
CEN/TR 14383-8:2009	Prevention of crime - Urban planning and building design - Part 8: Protection of buildings and sites against criminal attacks with vehicles	-	More
CEN/TS 14383-3:2005	Prevention of crime - Urban planning and building design - Part 3: Dwellings	-	More
CEN/TS 14383-4:2006	Prevention of crime - Urban planning and design - Part 4: Shops and offices	-	More
EN 14383-1:2006	Prevention of crime - Urban planning and building design - Part 1: Definition of specific terms	-	More

CEN/TC 350 "Sustainability of construction works":

[EN 15643-1:2010 "Sustainability of construction works - Sustainability assessment of buildings - Part 1: General framework"](#)

A preliminary work item (00350015) on *"Sustainability of construction works - Assessment of social performance of buildings – Methods"* is under development and should be further studied within our project if it is usable for public procurers.

CEN/TC350 - Current Work Programme

Framework level	prEN 15643-1 Sustainability Assessment of Buildings - General Framework (TG)				
	prEN 15643-2 Framework for Environmental Performance (TG)	prEN 15643-3 Framework for Social Performance (WGS)	prEN 15643-4 Framework for Economic Performance (WG-9)	Technical Characteristics	Functionality
	Framework for Methods of Assessment of Environmental Performance (ISO/FDIS 21931-1)			Service Life Planning – General Principles (ISO 15686-1)	
Building level	prEN 15978 Assess. of Environ. Performance (WG7)	Preliminary WI Assessment of Social Performance - Methods (WGS)	Assessment of Economic Performance (WG-9)	CEN Standards on Energy Performance of Buildings Directive (EPBD)	
	WI 003 Use of EPDs (WG7)		Life Cycle Costing (ISO 15686-5)		
Product level	prEN 15804 Environmental Product Declarations (WG3)	(?)	(?)	Service Life Prediction (ISO 15686-2), Feedback from Practice (ISO 15686-7), Reference Service Life (ISO 15686-8)	
	EPD of Build. Products (ISO 21930)				
	prEN 15942 Comm. Format B-to-B (WG3)				
	prCEN/TR15941 Generic data – (WG3)				

Figure E.1.1 - CEN/C 350 – current work programme

CEN TC350 - Current Schedule for Work

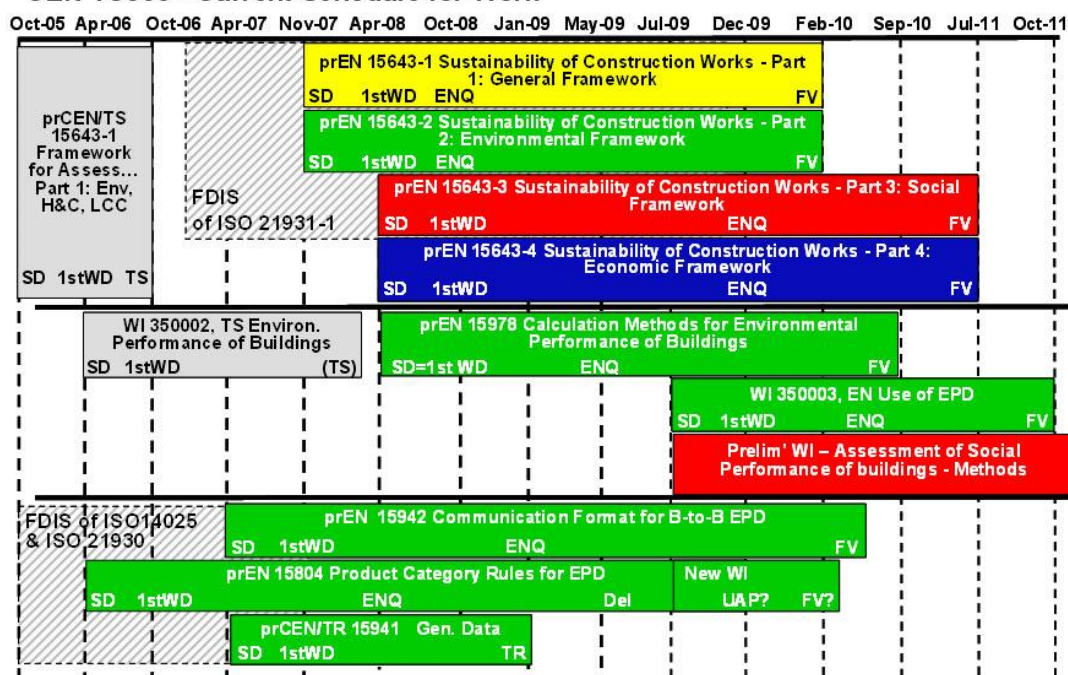


Figure E.1.2 - CEN/C 350 – current schedule for work

(more information on www.cenorm.be and BSI-Website: <http://www.bsigroup.com/Standards-and-Publications/Committee-Members/Construction-committee-members-area/M350-Standards/?id=158921>)

E.1.2 Building product standards

Overview on mandated projects within CEN standardization are given in E.4.

Enclosed are actual projects described and summarized by PT A leader which will be completed in phase II.

E.1.2.1 CEN/TC 10 "Lifts, escalators and Moving Walks"

E.1.2.1.1 EN 81-70 "Accessibility to lifts for persons including persons with disability"

EN 81-70 "Accessibility to lifts for persons including persons with disability", Harmonised Standard under the LD, states that "This European Standard specifies the minimum requirements for the safe and independent access and use of lifts by persons, including persons with the disabilities mentioned in annex B, Table B.1." According to Clause 0.2, National Building regulations may supersede the requirements of EN 81-70.

According to art 1.2 and 1.6.1 of Annex 1 (EHSRs) of Directive 95/16/EC of 29 June 1995 on the approximation of the laws of the Member States relating to lifts (LD):

- **"lifts cars must be designed and constructed in such a way that its structural features do not obstruct or impede access and use by disabled persons and so as to allow any appropriate adjustments intended to facilitate its use by them"** and
- **"the controls of lifts intended for use by unaccompanied disabled persons must be designed and located accordingly"**.

Findings

- application various across Europe: EN 81-70 is not used for all general lift for persons
- the lift requirements for mobility impaired persons are considered frequently but less awareness about requirements for sensory disabilities
- lift car type 1 should be deleted in next revision or be restricted for refurbishment in existing buildings only with minor public frequency

It seems that the application of EN 81-70 varies across Europe, despite it being a Harmonised Standard, which results in different conditions of safe access by people with disabilities. CEN/TC 10 WG 1 has offered its technical view on this issue and made clear that every lift provided for the use of persons should always follow the application stated in EN 81-70 where disabled persons are included. It is the application standard for lifts used by persons – but is this the reality in practice in Europe? This lift type seems to be used more in special buildings for disabled or elderly people as in hospitals, senior homes etc. than in buildings for public use or within housing. The convenor of CEN/TC 10 will start an enquiry among European member states to have clearer view on the implementation of this lift for persons.

In some countries the requirements stated in this standard are reduced to mobility impaired users only and fewer requirements for sensual impaired people are executed.

The reason can be detected in paragraph 04. Negotiations in the Introduction where it is stated:

- *"It is assumed that negotiations have been made for each contract between the customer and the supplier/installer about:*
- *the intended use of the lift"*

In the Scope it is clearly stated: *"This European Standard specifies the minimum requirements for the safe and independent access and use of lifts by persons, including persons with the disabilities mentioned in annex B, Table B.1."* This normative Annex describes all disabilities included in the scope of this standard which are

- Physical disability: mobility impaired, impaired endurance, equilibrium, impaired dexterity and
- Sensory disability: impaired vision, impaired hearing, impaired speech
- Intellectual disability: learning difficulty (reduced understanding of controls)
- Not included are combinations

- Physical disability + extreme dexterity impairment/size related disability
- Allergies
- Phobia, claustrophobia

Another weak point of this standard is the small lift car type 1 (1000 mm x 1250 mm) which is really not the 'state of the art' and excluding i.e. persons with powered wheelchairs. In southern Europe this small lift type is widely used in residential houses which exclude not only powered wheelchairs but even elderly people with walking aids who could not leave a lift backwards.

ANEC already expressed its concerns to CEN TC 10 "Lifts" which submitted the issue to the Lifts Working Group. However, we believe that the alignment of the LD with the NLF should provide an occasion for the strengthening of the provisions on the application of harmonised standards under the LD. Considering that one of the aims of the NLF is to strengthen market surveillance in the EU, we call for the implementation of Article R31ofDecision 768/2008 on a common framework for the marketing of products to the LD to particularly tackle the issue of implementation of Harmonised Standards and their relationship with (national) building codes and regulations as far as accessibility issues are concerned.

Finally, European legislation is effective only if its enforcement is ensured. Sadly, legislators tend not to consider market surveillance when discussing new laws. As ANEC stressed in a common position paper with Orgalime in April 2009 (see <http://tinyurl.com/cx73dw>), there is an urgent need for establishing a European framework for market surveillance in order to ensure the availability of sufficient resources and a coherent approach to market surveillance activities across all 27 Member States. This alignment gives an opportunity to introduce more demanding requirements on market surveillance activities of Member States (such as the need to check a minimum number of products of a certain kind agreed at the European level) and to agree common definitions. However, this would be useful only if the lack of resources of market surveillance authorities is addressed. We note that a study prepared for the European Parliament in October 2009 concluded that most Member States did not plan to commit further resources to market surveillance despite the requirements of Regulation 765/2008 (see <http://tinyurl.com/ydujk7h>).

E.1.2.1.2 EN 81-40 Stairlifts and inclined lifting platforms intended for persons with impaired mobility

This European standard deals with safety requirements for construction, manufacturing, installation, maintenance and dismantling of electrically operated stairlifts (chair, standing platform and wheelchair platform) affixed to a building structure, moving in an inclined plane and intended for use by persons with impaired mobility:

travelling between fixed levels, over a staircase or an accessible inclined surface;

with hold-to-run control;

with rated speed not exceeding 0.15 m/s.

Findings

It should be considered that this platformlift can be only used by person with wheelchairs with a sufficient hand function otherwise a hold-to-run control cannot be operated during the long run with slow speed. A person using a walking aid also may be excluded using this kind of facility. Leaving the lift car a reverse movement is required which is impossible for elderly frail people in the narrow car space.

The safety requirements in the Lift Directive are higher than the safety requirements in the Machinery Directive where platform lifts are considered. For the intended user it should be not a safety issue to use a lift or a platform lift. Equal safety requirement levels have to be stated in both Directives for persons with disabilities!

E.1.2.1.3 prEN 81-41 Vertical lifting platforms intended for use by persons with impaired mobility

Due to an appeal from Germany this standard is not yet published as harmonised standard and under further discussion. In public buildings this facility should be always under the control of a competent person.

Findings

The same as mentioned above for EN 81-40.

Before liberalisation of building regulations in the MS these platform lifts had restricted permit requirements for installation. The travel height was usually less than 3 meter – even only up to 2 meter and more or less installed only for adaptation works in existing premises or for individual persons with disabilities to reach their dwelling. Now the standard allows using these platforms also for travel heights with more than 3 meters and in public buildings.

Due to marketing competition with the lift suppliers these platform lifts are more often used now in residential buildings due to their lower costs. The slow speed and the hold-to-run control is a big disadvantage and exclude persons with powered wheelchair. When the lift car is too small even persons with walking aids will be excluded. It has to be considered that maintenance costs are similar than for normal lifts. It is the question if the 'intended end-use' of these products – as required in the CPD - usable by persons with disabilities and elderly frail persons is sufficiently fulfilled. For special application where the user is known or within existing buildings where a lift cannot be installed a platform lift may be the best solution to overcome level differences. A European standard with clear quality, construction and safety requirements with CE-marking is anyway a big step forward compared with the previous products with different levels of quality and safety.

E.1.3 Addressing the problem of non-compliance with existing product requirements

In order to strengthen market surveillance in Europe, the New Legislative Framework (NLF) was adopted in 2008 and entered into force at the beginning of this year. It contains, a set of measures enhancing the functioning of the internal market in goods (Regulation 765/2008/EC on accreditation and market surveillance and Decision 768/2008/EC establishing a common framework for the marketing of products).

Decision 768/2008 does not have legal effects for enterprises, individuals or Member States. It is designed to work as toolbox containing those provisions which are common elements of technical harmonisation legislation. These standardised provisions should be integrated into new and revised legislation. For this reason the Commission has envisaged to align ten directives to the new standards set by Decision 768/2008. In addition to the Lifts Directive also the Low Voltage Directive could be of further importance for accessibility.

A significant number of products on the market do not fulfil the requirements set out by the directives. Some actors simply affix the CE marking to their products although these products do not fulfil the conditions for being CE marked. Importers and distributors do not all carry out the necessary verifications to ensure that they are only supplying compliant products. Market surveillance authorities often find it difficult to trace the economic operators supplying non compliant products, in particular when the products originate in third countries. Member States are also imposing different obligations on importers and distributors when it comes to ensuring that products meet the applicable requirements. Furthermore, the actions that national authorities are taking vis-à-vis non-compliant products (e.g. prohibitions of marketing, withdrawals, etc) sometimes differ from one Member State to another.

This problem could be addressed by aligning the legislation to the provisions in Decision 768/2008 designed to tackle this problem. For this purpose an online questionnaire has been started (<http://ec.europa.eu/yourvoice/ipm/forms/dispatch?form=NLF3>) for final users or user organizations.

E.2 Standards related on services for the built environment

CEN/TC 385 project committee "Services for sheltered housing for the elderly"

E.3 ANEC's activities in different standardization areas according accessibility – Current projects under discussion/voting

Main areas of interest and activities with different importance for accessibility of the built environment:

- Child Safety – playground equipment, supermarket trolleys
- Design for All – ANEC policy statement on Design for All
- DOMAP (Domestic Appliances)
- Environment
- Information Society
 - o Services
 - o Traffic

Contact Person for "Design for All": Chiara Giovannini – ANEC Sekretariat (anec@anec.eu)

E.3.1 CEN/TC 10 "Lifts, Escalators and Moving Walks" – EN 81-70 Lifts for persons including persons with disabilities

The author of this report has raised the question within CEN/TC 10 (as ANEC's representative) about the application and requirements/provision on accessibility on lifts for persons. After internal discussions the convenor of WG 1 confirmed clearly that even when a lift for persons is installed this lift has to fulfil the requirements stated in EN 81-70 which is the only lift applied for persons including persons with disabilities. Within CEN/TC 10

ANEC therefore agreed to know more about the situation across Europe, especially as far as the application of the requirements/provision on accessibility are concerned. (Action point 18/13: *ANEC members to inform ANEC Sekretariat whether and how EN 81-70 is applied in their countries (eg.: only wheelchairs/loophole, provisions for vision and hearing impaired people)*).

A little questionnaire has been prepared to help providing this information for the oncoming stage of revision of EN 81-70 within ANEC members. Also other interested persons/organizations are invited to deliver their answers and send them to chiara.giovannini@anec.eu to provide a better overview about the real situation in Europe:

1. *Name of ANEC member:*
2. *Country:*
3. *Is EN 81-70 "Accessibility to lifts for persons including persons with disability" applied in your country? YES or NOT*
 - 3.1 *If yes, could you please tell us whether the provisions on accessibility (eg.: only wheelchairs/loophole/etc., provisions for persons with impaired vision and hearing as required in the standard) are also applied?*
 - 3.2 *If not, could you please tell us whether (and which) a National Building Regulation may supersede the requirements of EN 81-70 (Clause 0.2)?*
4. *Please add any additional comment you might have (e.g. according lift type 1 with car size 1000 mm x 1250 mm if this small car size should be deleted in the next revision etc.)*

E.3.2 CEN/TC 136 "Sports, playground and other recreational facilities and equipment"

A rather new Work item proposal "**Play for All**" – 2010-07-13 based on Draft Resolution C79/2010 in document N 1558 – has been prepared by Sub Committee CEN/TC 136/SC1 "Playground equipment and surfacing" and is under discussion. ANEC had raised the issue before and will now contribute with comments on available drafts; see some general information out of doc. CEN/TC 136 N 1556:

This document (CEN Report No xxxx2010) has been CEN/TC 136/SC1 “Playground equipment and surfacing” decided in September 2007 to develop a document to support the following statement taken from the introduction of EN 1176-1 “*Playground equipment and surfacing*”:

“It is also recognised that there is an increasing need for play provision to be accessible to users with disabilities.”

This CEN Guide will be not a standard it is intended to provide guidance only. Each European country may have national legislation or standards that override this document. Users of this CEN Guide should take into account any national legislation regarding the accessibility rights of disabled people.

Scope

This Guide covers open access, professionally unsupervised play spaces. It does not cover adventure playgrounds or other play spaces which are used under supervision. The intention of this document is to enable users, to a large extent, to access play spaces use the equipment independent of the help of others.

This document is intended to be used in conjunction with EN 1176 and provides guidance to those involved in the specification, provision, and management of play environments. It is intended to help create spaces that will enable children of all abilities to have the opportunity to participate in unsupervised play, and with appropriate levels of challenge and risk.

Although the scope of EN 1176 parts 1 to 11 covers only the safety requirements for play equipment and its safety surfaces. When developing this guide it was realised that the scope for “Play for All” needed to consider a wider context, covering not just the immediate play space but also provide information about the broader environment and other access and facility issues.

Frequently, the issue of accessibility is dealt with by making the environment fit the child. For example, outside the scope of EN 1176 is the need to provide good parking and toilet facilities – an essential pre-requisite for access by many children and their carers.

This report does not focus on impairment specific issues but hopes to help identify obstacles to play for any child who might wish to access the play space and think about ways to circumvent them. It is also intended to highlight any conflicts between the accessibility issue and the actual requirements of EN 1176.

E.3.3 ANEC’s Study about accessibility of signs and signage for people with low vision“

A new ANEC study shows that the size of pictograms, symbols, icons and text used in public places such as airports, metro stations and shopping centres should be at least 5% of the Critical Reading Distance (CRD) in order to be readable by the majority of consumers, including people with visual impairments. Optimal – but not maximal- contrast intensity should be around a value of 75% on the white-black axis. From the new study – carried out by the University of Ghent (Belgium), it is clear that the interaction between size and contrast has to be considered, when discussing guidelines for visual accessibility in public spaces.

At present, in fact, no harmonised approach exist in Europe with regards to size, character height of text and symbols, foreground/background contrast, colour, reading distance, localisation, lighting and legibility of signs used in public places.

Finally, the study draws attention to the particular challenges posed by ensuring both localization and recognition of signs as they are both essential for independent travelling and mobility. However, while recognition is acceptable from 5% CRD on and hardly increases beyond that threshold, localization still improves until 9% CRD.

Background

In the countries of the European Union, life expectancy continues to increase¹⁸. In the EU, Eurostat projections highlight that the share of the population over 80 will increase from 4.1% in 2005 to 6.3% in 2025 and then 11.4% in 2050. Therefore the “baby boomers” born between 1945 and 1965 will start retiring, creating a major shift in the balance between the active and the retired European population.

As a consequence, the number of people with age-related low vision also increases. Problems such as macula related conditions etc are more and more frequent¹⁹. At the same time, people are more mobile and continue to be mobile until a higher age. This older population will often have considerable purchasing power and is therefore likely to travel more for holidays making.

However, the layout of our built environment has become more and more complex with the use of more and more signs and signage in and around public areas and buildings for information, guidance, identification or warning purposes; and also to indicate directions to facilities such as toilets or information kiosks. This situation results in a growing number of mainly elderly people with low vision having difficulties in finding for example their way in public spaces. Despite the obvious need to care for the needs of people with low vision, no European standard nor regulation exist on the visual accessibility of signs and signage in public places.

Therefore, ANEC commissioned a study that primarily aimed to provide a critical overview of the national standards -if available- for signs and signage in the EU countries. This data was checked against the results of two experiments conducted for the study on identification and localization of signs. Recommendations were formulated on the size of signs (words, abbreviations, and icons) in public spaces and the advised contrast intensity between the elements of an icon/word/abbreviation (local contrast between sign elements and immediate surroundings).

Main results from the study

A literature overview showed that within the EU, a large variability in standards for visual accessibility exists. The overview focused on factors such as character height of text and symbols, foreground/background contrast, colour, reading distance, localisation, lighting and legibility. Existing guidelines for the size of signs in public spaces differ significantly over EU countries, ranging from 1.5 to 6% of the Critical Reading Distance (CRD), from which the information contained in letters or symbols must be readable for people with low vision. As far as contrast guidelines are concerned, inconsistencies in definitions and calculations of contrast have to be noted, although there is a general agreement on aiming at a maximal contrast for signage in public spaces.

Forty-two volunteers -40 persons with low vision and 2 control participants participated in the practical part of this study. In a first experiment, they had to identify signs, with different sizes and contrast intensities, presented on the same location in their central visual field. In a second experiment, they had to search for a specific sign in a busy visual environment such as a railway station hall and identify it. Response accuracy and response time were measured.

The results with respect to size of the signs in general show that size of text and symbols on signs should be at least 5% of the Critical Reading Distance. Optimal – but not maximal- performance was observed when contrast intensity approached a value of 75% on the white-black axis. From this study, and in particular from the interaction between size and contrast, it is clear that these two factors cannot be seen independently from each other when proposing guidelines for visual accessibility in public spaces.

ANEC's conclusions

¹⁸Regions 2020 Demographic Challenges For European Regions' – Background document of the European Commission Directorate general for Regional Policy (2008)

¹⁹For example, it is estimated that there are over 500,000 people with macular conditions in the UK. Macular degeneration is the most common form of visual impairment in the UK and throughout the developed world (<http://www.maculardisease.org>)

- With currently about 13 million people estimated with low vision in Europe and 125 million worldwide, enabling safe and independent mobility for people with low vision in public places seems a basic need
- Size of text of signs should be at least 5% of Critical Reading Distance (CRD) for the 'general' low vision population but familiarity with signs plays also a role
- It is important to agree on the aim of any future guideline as localization and recognition are both essential for independent travelling and mobility. However, while recognition is acceptable from 5% CRD on and hardly increases beyond that threshold, localization still improves until 9% CRD
- Further research should be carried out to assess the specific needs of people with low vision, given the considerable heterogeneity in this group with respect to visual acuity and visual field restrictions
- the place where the signs are situated is also playing a role in increasing readability and should be the subject of further guidance as it happens sometimes that signs are large but appear to point into the sky or to a brick wall. The logic of following the signs along a route is also very important for visually impaired people., with enough continuous signage to help people navigate around routes
- It should be noted however that the needs of people with other visual impairments such as blindness should be taken into account with the use of Tactile Walking Surfaces Indicators (TWSI) as well as the provision of relevant information about public places in alternative format²⁰
- ANEC believes that the main results of the study should be considered as the starting point for the formulation of guidelines, which could in time result in a European standard on the legibility of signs and signage in public buildings/for public procurement, where examples of good practice are given as an illustration.

The study is available at: <http://www.anec.eu/anec.asp?rd=77474&ref=07-01.01-01&lang=en>

Contact persons for ANEC: Project Advisor- Prof. Dr. Berry den Brinker (b.denbrinker@fbw.vu.nl)

Findings:

A new Standard for visual accessibility of signs and signage for people with low vision should be developed.

E.3.4 Domestic Appliances & Design for All- ANEC's Lobbying for product's Safety

After years of ANEC lobbying, the first set of revised standards on the safety of domestic appliances (EN 60335 series) were adopted by CENELEC at its Technical Board meeting on 14 April 2010. The ANEC proposals for revision covered the following standards: EN 60335-2-2 (vacuum cleaners), 2-3 (electric irons), 2-6 (cooking ranges, hobs, and ovens), 2-7 (washing machines), 2-23 (appliances for skin or hair care), 2-52 (oral hygiene appliances).

These are the first standards to include requirements for the use of household appliances by vulnerable consumers. The six parts will set the pattern for further revised parts 2. Their adoption represents a considerable achievement for the consumer movement and for ANEC and its members in particular.

However, we deplore the surface temperature limit values defined in the revised standards. Although the values are an improvement over the former versions of the standards, the values are not in line with CENELEC Guide 29 "Temperatures of hot surfaces". According to this Guide, adopted

²⁰ANEC actively participates in ISO TC 173 WG 8 ISO/TC 173 WG 8 "Assistive products for persons with vision impairment – Tactile walking surface indicators" (TWSI) and ISO/TC 59/SC 16 "Building construction — Accessibility and usability of the built environment".

to support Mandate M/346, the temperature limits in the standards are above the burn threshold curves and so pose a serious safety risk to children and elderly people.

Hence ANEC again expressed concern at the temperatures cited, for knobs and handles in particular, during the Unique Acceptance Procedure (UAP) on further standards for the safety of domestic appliances (EN 60335-2-25 on microwave ovens and EN 60335-2-9 on particular requirements for grills, toasters and similar portable cooking appliances) in May 2010.

Findings

The work of these relevant TCs has to be further analysed which of the products are relevant for buildings and should be safe for all users including children, elderly and disabled persons.

Consider also the ongoing revision of the General Product Safety Directive .

E.4 Inventory tables of all relevant CEN/TCs

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
M/101	Doors, Windows and related products	CEN/TC 33 "Doors, windows, shutters and building hardware"	Table 3 & Table 7	<p>1. Already cited:</p> <ul style="list-style-type: none"> • Doors - Operating forces - Requirements and classification (EN 12217) • Building hardware (EN 179) • Panic exit devices (EN 1125) • Controlled door closing devices (EN 1154) • Electrical powered hold-open devices (EN 1155) • Industrial, commercial and garage doors and gates (EN 13241-1) • External blinds (EN 13561) • Shutters (EN 13659) • Locks and latches (EN 12209) • Windows and doors – Product standard, performance characteristics – Part 1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics (EN 14351-1) <p>2. Not yet cited</p> <ul style="list-style-type: none"> • Building hardware – Looks and latches – Electromechanically operated locks and striking plates – 	<ul style="list-style-type: none"> • Building hardware - Uncontrolled door closing devices for single action doors – Requirements and test methods (prEN 15887) • Single swing spring hinge closing devices /WI 00033327) • Electrically controlled panic exit systems for use on escape routes (prEN 13633) • Electrically controlled emergency exit systems for use on escape (prEN 13637) • Level handles and knob furniture (prEN 1906) • Internal pedestrian doors – Part 2: Internal pedestrian doorsets without resistance to fire characteristics (prEN 14351-2) • Windows and doors – Part 3: Windows and pedestrian doorsets without resistance to fire and/or smoke leakage characteristics (prEN 14351-3) • Industrial, commercial and garage doors and gates – Product Standard – Part 2: Products with fire resistance

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
				Requirements and test methods (EN 14846)	or smoke control characteristics (prEN 13241-2)
M/108	Curtain walling	CEN/TC 33 - Doors, windows, shutters building hardware and curtain walling	Table 3 & Table 7	<ul style="list-style-type: none"> • EN 1192:1999 Doors - Classification of strength requirements • CEN/TR 15894:2009 Building hardware - Door fittings for use by children, elderly and disabled people in domestic and public buildings - A guide for specifiers • EN 1125:2008 Building hardware - Panic exit devices operated by a horizontal bar, for use on escape routes - Requirements and test methods • EN 1154:1996/2002 Building hardware - Controlled door closing devices - Requirements and test methods • EN 1155:1997/2002 Building hardware - Electrically powered hold-open devices for swing doors - Requirements and test methods • EN 12045:2000 Shutters and blinds power operated - Safety in use - Measurement of the transmitted force • etc. 	<ul style="list-style-type: none"> • prEN 16005 Powered pedestrian doors - Safety in use of power pedestrian doors - Requirements and test methods

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
M/109	Fire alarm/detection, fixed firefighting, fire and smoke control and explosion suppression products	CEN/TC 70 Manual means of fire fighting equipment CEN/TC 72 - Fire detection and fire alarm systems CEN/TC 191 - Fixed firefighting systems CEN/TC 192 - Fire service equipment	Table 5 & Table 7 Fire Resistance	<ul style="list-style-type: none"> • Portable fire extinguishers - Part 7: Characteristics, performance requirements and test methods (EN 3-7) • Mobile fire extinguishers (EN 1866:2005) 97/23/EC,96/98/EC • Fire alarm devices (EN 54-3) • Fire detection and fire alarm systems – Part 2: Control and indicating equipment (EN 54-2) • Voice alarm control and indicating equipment (EN 54-16) • Loud speakers (EN 54-24) • Component using radio links and system requirements (EN 54-25) 	<ul style="list-style-type: none"> • Control panels (prEN 12101-9) • Pressure switches (prEN 12259-8) • Visual alarms (prEN 54-23)
M/110, M/368	Sanitary appliances	CEN/TC 163 “Sanitary appliances”	Surface Finish; ease of handling; colour and contrast	<p>1. Already cited:</p> <ul style="list-style-type: none"> • Kitchen sinks (EN 13310) • WC pans and WC suites with integral trap (EN 997) • Shower enclosures (EN 14428) • Whirlpool baths (EN 12764) • Bidets (EN 14528) • Communal washing troughs (EN 14296) • Wall hang urinals – Functional requirements and test methods (EN 13407) • Wash basins – Functional requirements and test methods (EN 	<ul style="list-style-type: none"> • Shower tray for domestic purposes (prEN 14527) ... under appeal from CEN Member • Baths for domestic purposes (prEN 14516) ... under appeal from CEN member

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
				14688)	
M/111	Circulation Fixtures	CEN/TC 50 - Lighting columns CEN/TC 226 - Road equipment			
M/118	Waste Water Engineering Products	CEN/TC 155 - Plastic piping systems and ducting systems CEN/TC 165 - Waste water engineering			
M/119	Floorings	CEN/TC 129 "Glass in buildings" CEN/TC 67 Ceramic tiles CEN/TC 129 - Glass in buildings CEN/TC 134 - Resilient/textiles and laminated floor coverings CEN/TC 175 - Round and sawn timber CEN/TC 178 - Pavement units CEN/TC 217 - Surfaces for sports areas CEN/TC 229 - Precast concrete products CEN/TC 246 - Natural stones CEN/TC 323 - Raised access	Colour and contrast; lighting/glare; surface finish; Non allergenic/toxic; Alternative format? slippery characteristic	<ul style="list-style-type: none"> • CEN/TR 13548:2004 General rules for the design and installation of ceramic tiling • EN 14411:2006 Ceramic tiles - Definitions, classification, characteristics and marking • EN ISO 10545-2:1997 Ceramic tiles - Part 2: Determination of dimensions and surface quality (ISO 10545-2:1995, including Technical Corrigendum 1:1997) • Etc. 	<ul style="list-style-type: none"> • 00067096 Ceramic mosaics, trims and other special ceramics components for floor and wall tiling

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
		floors			
M/121	Internal and external wall and ceiling finishes??	CEN/TC 67 - Ceramic tiles CEN/TC 99 – Wallcoverings CEN/TC 128 - Roof covering, Wall cladding CEN/TC 175 - Round and sawn timber CEN/TC 246 - Natural stones CEN/TC 249 - Plastics CEN/TC 277 - Suspended ceilings CEN/BT/TF 119 - Stretched ceilings	Colour and contrast; lighting/glare; surface finish; Non allergenic/toxic; Alternative format?		
M/124	Road Construction Products	CEN/TC 227 - Road construction products CEN/TC 254 - Flexible sheets for waterproofing CEN/TC 336 - Bituminous binders	Surface finish; colour and contrast; alternative format		
M/129	Space heating appliances	CEN/TC 46 “Oil stoves”	Handling, usable controls		
		CEN/TC 130 “Space heating appliances without integral heat sources”			
		CEN/TC 295 “Residential solid fuel burning appliances”			
M/135	Glass in	CEN/TC 129 - Glass in		no relevant accessibility requirements	

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
	Buildings	buildings			
		CEN/TC 339: Slip resistance of pedestrian surfaces – Methods of evaluation			FprCEN/TS 16165 Determination of slip resistance of pedestrian surfaces - Methods of evaluation
97/67/EC	Handling and operability of letter boxes and plates	CEN/TC 331 Postal Services		<ul style="list-style-type: none"> • EN 13724:2002 Postal services - Apertures of private letter boxes and letter plates - Requirements and test methods 	EN 13724rev: Postal services - Apertures of private letter boxes and letter plates - Requirements and test methods
2006/42/EC , 98/37/EC 95/16/EC		CEN/C 10 Lifts, escalators and moving walks		<ul style="list-style-type: none"> • EN 81-70 Accessibility to lifts for persons including persons with disability • EN 81-40 Stair-lifts and inclined lifting platforms intended for persons with impaired mobility • EN 81-82 Improvement of the accessibility of existing lifts for persons including persons with disability • EN 115-1 Safety of escalators and moving walks - Part 1: Construction and installation • EN 115-2 Safety of escalators and moving walks - Part 2: Rules for the improvement of safety of existing escalators and moving walks • EN 81-21:2009 Lifts for the 	prEN 81-41

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
				transport of persons and goods - Part 21: New passenger and goods passenger lifts in existing building	
98/37/EC	Handling and operability for persons in wheelchair and with walking aids, crutches	CEN/TC 183 Waste Management		<ul style="list-style-type: none"> • EN 12574-2:2006 Stationary waste containers - Part 2: Performance requirements and test methods • EN 12574-3:2006 Stationary waste containers - Part 3: Safety and health requirements • EN 840-5:2004 Mobile waste containers - Part 5: Performance requirements and test methods • etc. 	

E.5 Inventory tables of all relevant CEN/TCs outside mandated works

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
		CEN/TC 136 Sports, playground and other recreational facilities and equipment	table 1, 3 and 7		• New WI - Play for All
	All kind of furniture for offices, laboratory, workbenches, kitchen, domestic furniture, storage, assessment of the surface gloss and reflectance	CEN/TC 207 Furniture		<ul style="list-style-type: none"> • EN 15372:2008 Furniture - Strength, durability and safety - Requirements for non-domestic tables • EN 15373:2007 Furniture - Strength, durability and safety - Requirements for non-domestic seating • EN 1725:1998 Domestic furniture - Beds and mattresses - Safety requirements and test methods • EN 1729-1:2006 Furniture - Chairs and tables for educational institutions - Part 1: Functional dimensions • EN 1729-2:2006 Furniture - Chairs and tables for educational institutions - Part 2: Safety requirements and test methods • EN 1957:2000 Domestic furniture - Beds and mattresses - Test methods for the determination of functional 	To be further checked

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
				characteristics <ul style="list-style-type: none"> • EN 527-1:2000 Office furniture - Work tables and desks - Part 1: Dimensions (+AC: 2002) • EN 581-1:2006 Outdoor furniture - Seating and tables for camping, domestic and contract use - Part 1: General safety requirements 	
		CEN/TC 152: Fairground and amusement park machinery and structures – Safety		<ul style="list-style-type: none"> • EN 13814:2004 Fairground and amusement park machinery and structures - Safety 	
		CEN/TC 122 Ergonomics		<ul style="list-style-type: none"> • EN ISO 6385 Ergonomic principles in the design of work systems <i>Etc.</i>	
		CEN/TC 169 Lighting		<ul style="list-style-type: none"> • EN 1838:1999 Lighting applications - Emergency lighting • EN 13201-2:2003 Road lighting - Part 2: Performance requirements • EN 12665:2002 Light and lighting - Basic terms and criteria for specifying lighting requirements • EN 12464-2:2007 Light and lighting - Lighting of work places - Part 2: Outdoor work places 	

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
				<ul style="list-style-type: none"> • EN 12464-1:2002 Light and lighting - Lighting of work places - Part 1: Indoor work places • EN 12193:2007 Light and lighting - Sports lighting 	
		CEN/TC 315: Spectator facilities	table 1, 3 and 7	<ul style="list-style-type: none"> • CEN/TR 15913:2009 Spectator facilities - Layout criteria for viewing area for spectators with special needs • EN 13200-1:2003 Spectator facilities - Part 1: Layout criteria for spectator viewing area – Specification • CEN/TR 13200-2:2005 Spectator facilities - Layout criteria of service area - Part 2: Characteristics and national situations • EN 13200-4:2006 Spectator facilities - Part 4: Seats - Product characteristics 	
		CEN/TC 53 Temporary work equipment (unforeseen obstacles and potential hazard for people with		<ul style="list-style-type: none"> • CEN/TR 15563:2007 Temporary works equipment - Recommendations for achieving health and safety • EN 1004:2004 Mobile access and 	

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
		visual impairment)		<p>working towers made of prefabricated elements - Materials, dimensions, design loads, safety and performance requirements</p> <ul style="list-style-type: none"> • EN 12811-1:2003 Temporary works equipment - Part 1: Scaffolds - Performance requirements and general design • EN 12812:2008 Falsework - Performance requirements and general design 	
		CEN/TC 247 Building automation, controls and building management	Easy to handle and operate for all	<ul style="list-style-type: none"> • CEN/TS 15379:2006 Building management - Terminology and scope of services • CEN/TS 15810:2008 Graphical symbols for use on integrated building automation equipment • EN 15232:2007 Energy performance of buildings - Impact of Building Automation, Controls and Building Management • EN 15500:2008 Control for heating, ventilating and air-conditioning applications - Electronic individual zone control equipment 	

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
				<ul style="list-style-type: none"> • EN ISO 16484-2:2004 Building automation and control systems (BACS) - Part 2: Hardware (ISO 16484-2:2004) • to be checked further ... 	
		CEN/TC 325 Prevention of crime by urban planning and building design		<ul style="list-style-type: none"> • CEN/TR 14383-2:2007 Prevention of crime - Urban planning and building design - Part 2: Urban planning • CEN/TR 14383-5:2010 Prevention of crime - Urban planning and building design - Part 5: Petrol stations • CEN/TR 14383-7:2009 Prevention of crime - Urban planning and building design - Part 7: Design and management of public transport facilities • CEN/TR 14383-8:2009 Prevention of crime - Urban planning and building design - Part 8: Protection of buildings and sites against criminal attacks with vehicles • CEN/TS 14383-3:2005 Prevention of crime - Urban planning and building design - Part 3: Dwellings • CEN/TS 14383-4:2006 Prevention of crime - Urban planning and design - 	

MANDATE/ DIRECTIVE	PRODUCTS COVERED	TCs INVOLVED	Relevance to Accessibility CEN Guide 6 - Factors to consider	FINALIZED/HARMONISED PRODUCT STANDARD	OUTSTANDING STANDARDS
				Part 4: Shops and offices <ul style="list-style-type: none"> • EN 14383-1:2006 Prevention of crime - Urban planning and building design - Part 1: Definition of specific terms 	
		CEN/TC 329 Tourism services		<ul style="list-style-type: none"> • EN ISO 18513:2003 Tourism services - Hotels and other types of tourism accommodation - Terminology (ISO 18513:2003) 	

ANNEX F
All documents in inventory

Overview of measures concerning built environment and its elements in the EU countries
[Quantitative and qualitative analysis of the main areas of building elements and building types]

F.1 Coverage of building elements by all types of documents

Table F.1.1 - Coverage of external environments and approaches to buildings, all documents

All documents coverage				
External Environments and Approaches to Buildings	comprehensive	partial	none	comprehensive coverage, %*
Access Routes and Approaches	86	11	7	83 %
Gradients and Ramps	94	4	5	91 %
Steps and Stairs	91	6	6	88 %
Handrails	87	9	6	85 %
External Lifts	44	15	32	48 %
Surface Finishes	55	31	13	56%
Crossing Points, Tactile Paving, and Dropped Kerbs	58	19	18	61 %
Drop Off/Pick Up Zones	33	26	38	34 %
Car parking	74	19	6	75 %
Obstacles on a path and Street Furniture	63	15	18	66 %
Seating and rest areas	49	18	30	51 %
Facilities for Guide Dogs	36	6	52	38 %
Signage and Wayfinding (external - audible)	32	24	29	38 %
Signage and Wayfinding (external - tactile)	59	25	13	61 %
Signage and Wayfinding (external - visual)	64	21	13	65 %
Lighting (external)	35	35	29	35 %

* as reported pr building element; actual percentage may differ

Table F.1.2 - Coverage of internal environments, all documents

All documents coverage				
Internal Environments	comprehensive	partial	none	comprehensive coverage, %*
Entrances	68	24	8	68 %
Reception Areas, counters, desks and ticket offices	52	16	26	55 %
Security Provisions	19	25	42	22 %
Storage Facilities	17	27	49	18 %
Circulation Routes	69	15	14	70 %
Manoeuvring space requirements	69	16	10	73 %
Lobbies	45	17	29	49 %
Internal Doors	72	15	11	73 %
Windows	35	11	45	38 %
Passenger Lifts	73	10	13	76 %

All documents coverage				
Internal Environments	comprehensive	partial	none	comprehensive coverage, %*
Passenger Lifts for existing buildings	49	18	26	53 %
Platform Lifts / Lifting Platforms	51	13	29	55 %
Stairs	78	10	11	79 %
Ramps	81	8	10	82 %
Escalators	21	10	49	26 %
Travelators	20	7	51	26 %
Handrails	78	10	12	78 %
Sanitary facilities for ambulant disabled people (Toilets/Showers/Changing)	43	20	20	52 %
Sanitary facilities for wheelchair users (Toilets/Showers/Changing)	79	10	12	78 %
Sanitary facilities for other users - e.g. Children, enlarged WCs, etc. (Toilets/Showers/Changing)	41	19	32	45 %
First Aid Facilities	18	6	67	20 %
Surface Finishes	47	30	14	52 %
Glazing and Manifestations/markings	53	21	20	56 %
Colour Contrasts	49	24	21	62 %
Signage and wayfinding (interior - audible)	25	23	36	30 %
Signage and wayfinding (interior - visual)	56	26	17	57 %
Signage and wayfinding (interior - tactile)	55	26	15	57 %
Lighting (interior)	33	39	24	34 %
Acoustics	21	14	51	24 %
Audible Communication Systems	38	24	28	42 %
Switches, Outlets and controls	51	30	20	50 %
Emergency Egress Requirements	29	30	39	30 %
Refuse systems	14	10	60	17 %
Furnishing (seating, desks, etc)	40	28	24	43 %
Indoor climate	1	5	7	8 %

* as reported pr building element; actual percentage may differ

Table F.1.3 - Coverage of transport facilities, all documents

All documents coverage				
Transport Facilities	comprehensive	partial	none	comprehensive coverage, %*
Bus Facilities	42	22	32	44 %
Rail Facilities	51	19	27	53 %
Taxi Facilities	33	11	42	38 %
Airport Facilities	30	31	31	33 %
Car Parking (including number, dimensions and access)	58	27	11	60 %
Parking Control	27	16	51	29 %
Cycle Parking	4	13	64	5 %

* as reported pr building element; actual percentage may differ

Table F.1.4 - Coverage of specific building uses, all documents

All documents coverage				
Specific Building Uses	comprehensive	partial	none	comprehensive coverage, %*
Office, Conference and Meeting Areas	41	23	30	44 %
Kitchen/Refreshment (including bars, pubs and restaurants, tea points and vending machines)	31	35	28	33 %
Hotels, student accommodation, etc	35	37	24	36 %
Residential	41	33	26	41 %
Sport	34	35	26	36 %
Auditoriums, concert halls and similar	31	37	26	33 %
Education	31	28	33	34 %
Healthcare	31	25	33	35 %
Library	32	20	39	35 %
Leisure Attractions/Entertainment	36	24	33	39 %
Retail	31	31	30	34 %
Industrial	21	20	52	23 %
Shared space	26	21	45	28 %
Public Plaza	44	15	37	46 %
Waterfront Environments (beaches, paths, cabins)	17	21	53	19 %
Child Play Areas (interior and Exterior)	26	29	40	27 %
Judicial Facilities, Detention Facilities or Correctional Facilities	27	26	43	28 %
Bank, Post Offices, ATM's	28	30	33	31 %
Laboratories	20	14	52	23 %

All documents coverage				
Specific Building Uses	comprehensive	partial	none	comprehensive coverage, %*
Gas/Petrol Stations	4	22	56	5 %
Religious	23	24	42	26 %
Listed/Historic Buildings	20	20	47	23 %
Rural Environments	15	16	51	18 %
Ports	0	5	5	0 %

* as reported pr building element; actual percentage may differ

Table F.1.5 - Combined coverage of building elements by country/state/region, all documents

Combined coverage by country, state, region			
Country	comprehensive	partial	none
Belgium*	71		
British Columbia, (Canada)	70	0	10
Ontario (Canada)	68	1	
UK (England and Wales)	68		
Alberta (Canada)	65	11	3
Nova Scotia (Canada)	66	3	
Canada (Provinces and Territories)	64		
Castilla Y León, Spain*	58		
Quebec (Canada)	57	7	16
Austria**	56	17	7
Hungary	55	17	7
Sweden	54		
Ireland	54	10	16
Denmark	51	12	17
Luxembourg	44	29	5
Greece	42	22	16
Belgium (Flanders)	40	31	8
USA	38		
Finland	38	26	15
Romania	35	4	42

*=single document coverage

**=standards coverage

Table F.1.6 - Estimate on potential suitability in public procurement

Number of documents	As technical specification and criteria for awarding public contracts	As guidance for different levels of adapting existing buildings
High	114	82
Medium	63	58
Low	70	72

Table F.1.7 - Technical and functional requirements

Type	GENERAL LEGISLATION		BUILDING CODE		TECHNICAL REGULATION		STANDARD		GUIDELINE	
	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical	Functional	Technical
Total	64	29	40	36	58	58	50	72	120	119

F.2 Combined coverage of building elements by country/state/region by all types of documents

c	comprehensive coverage	p	partial or incomplete coverage	n	no coverage
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Table F.2.1 - Built Environment Elements – External Environments and Approaches to Buildings

Built Environment Elements <i>External Environments and Approaches to Buildings</i>	Draft ISO 21542	Austria	Belgium/Flanders	Canada	Denmark	Finland	Greece	Ireland	Luxembourg	Sweden	USA	UK (England +Wales)	Netherlands	IBC
Access Routes and Approaches	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Gradients and Ramps	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Steps and Stairs	c	c	c	c	c	c	c	c	c	c	p	c	n	p
Handrails	c	c	c	c	c	c	c	c	c	c	p	c	n	p
External Lifts	p	c	c	n	c	p	p	p	c	c	p	c	n	P
Surface Finishes	p	c	c	c	c	p	c	p	c	p	p	c	n	P
Crossing Points, Tactile Paving, and Drop Off/Pick Up Zones	p	c	c	c	c	c	c	p	p	p	p	c	n	P
Car parking	p	c	p	c	p	n	p	c	n	c	p	c	n	p
Obstacles on a path and Street Furniture	c	c	c	c	c	p	c	c	c	p	c	c	n	c
Seating and rest areas	c	c	p	c	p	c	p	c	c	c	p	c	n	p
Facilities for Guide Dogs	c	n	p	c	n	n	n	n	n	n	n	c	n	n
Signage and Wayfinding (external - tactile)	n	p	p	n	n	n	p	n	c	p	P	c	n	p
Signage and Wayfinding (external - visual)	p	c	c	c	n	p	c	p	c	p	P	c	n	p
Lighting (external)	p	c	c	c	c	p	c	p	c	c	P	c	n	p
Lighting (external)	p	p	p	c	c	p	p	p	c	p	n	c	n	n

Table F.2.2 - Built Environment Elements – Internal Environments

Built Environment Elements <i>Internal Environments</i>	Draft ISO 21542	Austria	Belgium Flanders	Canada	Denmark	Finland	Greece	Ireland	Luxem- bourg	Sweden	USA	UK (England +Wales)	Nether- lands	IBC
Entrances	c	c	c	c	c	p	c	c	c	c	p	c	c	p
Reception Areas, counters, desks and	c	c	p	c	p	n	c	c	c	c	c	c	n	c
Security Provisions	p	p	n	c	p	n	p	p	n		p		n	p
Storage Facilities	n	c	n	c	p	n	c	p	n	p	p	p	n	p
Circulation Routes	c	c	c	c	c	p	c	c	c	c	c	c	c	c
Manoeuvring space requirements	c	c	c	c		c	c	c	c	c	c	c	c	c
Lobbies	c	c	p	c	c	n	c	c	c	c	c	c	p	c
Internal Doors	c	c	c	c	c	p	c	c	p	c	c	c	c	c
Windows	c	c	n	c	n	n	p	c	n	c	c	c	n	c
Passenger Lifts	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Passenger Lifts for existing buildings	p	c	p	c	c	p	c	c	n	c	c	c	c	c
Platform Lifts / Lifting Platforms	p	c	p	c	c	p	c	c	c	c	c	c	n	c
Stairs	c	c	c	c	c	c	c	c	c	c	p	c	n	p
Ramps	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Escalators	c	n	p	n	n	n		p	n	n	c	p	n	c
Travelators	c	n	n	n	n	n		p	n	n	c	p	n	c
Handrails	c	c	c	c	c	p	c	c	c	c	c	c	n	c
Sanitary facilities for ambulant disabled	p	p	p	n	p	n	c	c	n	n	c	c	c	c
Sanitary facilities for wheelchair users	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Sanitary facilities for other users - e.g.	p	p	c	n	n	n	p	c	n	p	c	c	n	c
First Aid Facilities	n	c	n	c	n	n		p	n	n	n	p	n	n
Surface Finishes	p	c	p	c	n	p	p	c	c	p	p	p	n	p
Glazing and Manifestations/markings	c	c	c	c	p	p	p	c	c	c	n	c	n	n
Colour Contrasts	c	c	p	c	p	p	p	c	c	c	p	c	n	p
Signage and wayfinding (interior - audible)	p	c	p	n	n	p	p	c	n	p	p	c	n	p
Signage and wayfinding (interior - visual)	c	c	c	c	p	p	c	c	c	c	p	c	n	p
Signage and wayfinding (interior - tactile)	c	c	c	c	p	p	c	c	c	p	p	c	n	p
Lighting (interior)	p	c	p	c	p	p	p		p	p	p	c	n	p
Acoustics	p	c	n	n	c	n		p	n	c	n	p	n	n
Audible Communication Systems	p	c	p	c	c	p		c	c	p	p	c	n	p
Switches, Outlets and controls	c	c	p	c	p	n	c	c	c	c	c	c	n	c
Emergency Egress Requirements	c	c	p	c	p	n	p	p	n	c	c	c	n	c
Refuse systems	n	p	n	n	c	n	n	n	n	c	n	p	p	n
Furnishing (seating, desks, etc)	c	c	p	c	p	p	p	c	c	c	P	c	n	p

Table F.2.3 - Built Environment Elements – Transport Facilities

Built Environment Elements <i>Transport Facilities</i>	Draft ISO 21542	Austria	Belgium/ Flanders	Canada	Denmark	Finland	Greece	Ireland	Luxem- bourg	Sweden	USA	UK (England + Wales)	Nether-lands	IBC
Bus Facilities	p	c	p	c	p	c	p	c	p	p	p	c	p	p
Rail Facilities	p	c	p	c	c	c	p	c	p	c	c	c	p	c
Taxi Facilities	p	p	p	p	p	p		c	p	c	p	c	p	p
Airport Facilities	p	c	p	c	p	p	p	p	p	p	p	c	p	
Car Parking (including number,	p	c	c	c	c	p	c	c	c	p	p	c	p	
Parking Control	p	c	p	c	p	p		p	c	p	p	c	p	
Cycle Parking	p	p	p	p	p	p		p	p	p	p	p	c	p

F.3 Statutory documents coverage

Table F.3.1 - Statutory documents coverage, countries part 1

State/Fed State/Organisation	Austria	Belgium (Brussels)	Belgium	Belgium (Brussels)	Belgium (Flanders)	Belgium (Wallonie)	Manitoba, Nova Scotia	Saskatchewan, Province of	Canada, British Columbia	Canada, Nova Scotia	Canada, Ontario	Canada, Quebec	CYPRUS	Denmark	Finland	Greece	Hungary
Type of document	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory
External Environments and Approaches to Buildings																	
Access Routes and Approaches	c	c	c	c	c	c	c	c	c	c	c	c	c	c	p	c	p
Gradients and Ramps	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Steps and Stairs	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Handrails	c	c	c	c	p	c	c	c	c	c	c	c	c	c	p	c	c
External Lifts	n	c	c	c	p	c		n	n	n	n		n	p	n	p	n
Surface Finishes	c	c	c	c	p	c						c	p	n	n	c	n
Crossing Points, Tactile Paving, and Dropped	c	c	c	c	n	c				p	p	c	c		n	c	p
Drop Off/Pick Up Zones	p	n	n	n	n	n				p	p	c	c	n	n	p	n
Car parking	c	c	c	c	p	c		c		p		c	c	p	p	C	c
Obstacles on a path and Street Furniture	c	c	c	c	p	c						c	c	n	n	p	n
Seating and rest areas	c	c	c	c	n	c						c	n	n	n	p	n
Facilities for Guide Dogs	n	c	c	c	p	c						c	n	n	n	n	n
Signage and Wayfinding (external - audible)	c	c	c	c	n	c				n	n		p	n	n	p	n
Signage and Wayfinding (external - tactile)	c	c	c	c	p	c						c	c	n	n	c	n
Signage and Wayfinding (external - visual)	c	c	c	c	n	c						c	c	n	n	p	n
Lighting (external)	n	n	n	n	n	n		p	p		p	c	p	p	n	n	n
Internal Environments																	
Entrances	c	c	c	c	p	c	p	p	c	p	p	c	c	c	p	c	c
Reception Areas, counters, desks and ticket	c	c	c	c	p	c							c	n	n	c	n
Security Provisions	n	p	p	p	n	p							p	p	n	p	n
Storage Facilities	c	n	n	n	n	n							n	n	n	p	n
Circulation Routes	c	c	c	c	p	c	p	c	c	p	p	c	c	c	p	c	n
Manoeuvring space requirements	c	c	c	c	c	c		p	p	p	p	p	c	p	c	c	p
Lobbies	c	n	n	n	p	n							p	p	n	c	n
Internal Doors	c	c	c	c	p	c	c	c	c	p	c	p	c	p	p	c	c
Windows	n	n	n	n	n	n							n	n	n	p	p
Passenger Lifts	c	c	c	c	p	c	p						c	c	p	c	p
Passenger Lifts for existing buildings	c	c	c	c	p	c							c	c	p	c	n
Platform Lifts / Lifting Platforms	c	c	c	c	p	c	p						c	c	p	p	n
Stairs	c	c	c	c	c	c	c	p	c	p	c	c	c	p	c	c	c
Ramps	c	c	c	c	p	c	c	c	c	p	c	c	c	p	c	c	c
Escalators	n	c	c	c	n	c							n	n	n	n	n
Moving walks	n	c	c	c	n	c							n	n	n	n	n
Handrails	c	c	c	c	p	c	c	c	c	p	c	c	c	c	p	c	c
Sanitary facilities for ambulant disabled	p	c	c	c	n	c	n	n	p				c	n	n		p
Sanitary facilities for wheelchair users	c	c	c	c	p	c	c	c	c	c	c	c	c	p	c	c	p
Sanitary facilities for other users - e.g. Children, enlarged WCs, etc.	p	c	c	c	n	c	n	c	c	c		c	c	n	n	p	n
First Aid Facilities	c	n	n	n	n	n							n	n	n	n	n
Surface Finishes	p	c	c	c	p	c							p	n	p	p	p
Glazing and Manifestations/markings	c	c	c	c	n	c		c	p				p	p	p	p	n
Colour Contrasts	c	c	c	c	p	c							c	p	p	p	n
Signage and wayfinding (interior - audible)	c	c	c	c	n	c	n				n		n	n	p	n	n
Signage and wayfinding (interior - visual)	c	c	c	c	n	c		p	c				c	p	p	p	n
Signage and wayfinding (interior - tactile)	c	c	c	c	p	c			c				c	p	p	c	n
Lighting (interior)	n	n	n	n	p	n		p	c		p	p	p	p	p	p	n
Acoustics	p	n	n	n	n	n	p						n	c	n	n	n

State/Fed State/Organisation	Austria	Belgium (Brussels)	Belgium	Belgium (Brussels)	Belgium (Flanders)	Belgium (Wallonia)	Belgium (Manitoba, Nova)	Saskatchewan,	(Province of	Canada, British Columbia	Canada, Nova Scotia	Canada, Ontario	Canada, Quebec	CYPRUS	Denmark	Finland	Greece	Hungary
Type of document	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory
Audible Communication Systems	p	c	c	c	n	c				c				n	c	p	n	n
Switches, Outlets and controls	c	n	n	n	n	n	p	p	p	p	p	p	p	p	p	n	p	p
Emergency Egress Requirements	c	n	n	n	p	n	p	p	c	c	c			n	p	n	p	p
Refuse systems	c	n	n	n	n	n	n							n	n	n	n	n
Furnishing (seating, desks, etc)	c	c	c	c	p	c			c					n	n	p	p	n
Indoor climate				n		n								n	c		p	
Transport Facilities																		
Bus Facilities	c	p	p	p	n	p		c	c	c		c	p	n	n	p	p	
Rail Facilities	c	p	p	p	n	p		c	c	c		c	p	c	c	p	n	
Taxi Facilities	n	n	n	n	n	n								p	n	n	n	
Airport Facilities	c	p	p	p	n	p								p	p	p	p	
Car Parking (including number, dimensions)	c	c	c	c	p	c		c	c	c	p			c	p	p	c	
Parking Control	c	c	c	c	n	c		c	c	c				n	n	n	n	
Cycle Parking	n	n	n	n	n	n		n						n	n	n	n	
Specific Building Uses							n											
Office, Conference and Meeting Areas	c	c	c	c	p	c								p	p	p	p	
Kitchen/Refreshment (including bars, pubs)	p	p	p	p	p	p				c				p	n	p	p	
Hotels, student accommodation, etc	c	p	p	p	p	p			p	p	c			c	c	p	c	
Residential	c	p	p	p	p	p	p	p	p	p	p	p	p	p	c	c	p	
Sport	c	c	c	c	p	c		p					p	p	n	p	n	
Auditoriums, concert halls and similar	c	c	c	c	p	c		c	c				p	p	p	p	p	
Education	c	c	c	c	p	c	n						c	c	p	p	p	
Healthcare	c	c	c	c	p	c	n		p					p		p	?	
Library	c	c	c	c	p	c								p	n	p	n	
Leisure Attractions/Entertainment	c	c	c	c	p	c		c						p	n	p	p	
Retail	c	p	p	p	p	p	p	c	p				c	p	p	p	?	
Industrial	c	n	n	n	n	n	p	c	p		c	c	p	p	p	p	p	
Shared space	n	c	c	c	n	c	p	c	p		c	c	n	n	n	n	n	
Public Plaza	c	c	c	c	p	c	p	c	c		c	c	c	n	n	c	n	
Waterfront Environments (beaches, paths,	n	n	n	n	p	n	n		p					p	n	n	p	
Child Play Areas (interior and Exterior)	c	c	c	c	p	c								n	n	p	n	
Judicial Facilities, Detention Facilities or	c	c	c	c	p	c		c	p				c	n	p	p	p	
Bank, Post Offices, ATM's	c	c	c	c	p	c								p	p	p	p	
Laboratories	c	c	c	c	n	c	p	n						p	n	p	p	
Gas/Petrol Stations	n	n	n	n	n	n	n	n						n	p	p	n	
Religious	c	c	c	c	p	c	n	n						p	n	p	p	
Listed/Historic Buildings	c	c	n	c	p	n	n	n						p	p	n	n	
Rural Environments	p	c	c	c	n	c	n	n						n	n	n	?	
Ports				p		p								p			p	
c=comprehensive	59	56	55	56	5	55	9	23	24	12	14	29	3	1	8	2	9	
p=partial	8	8	8	9	43	9	13	10	13	13	10	7	2	2	3	3	13	
n=none	13	16	17	17	32	18	12	8	1	2	3	0	2	3	3	1	58	
None. %	17%	20%	21%	21%	40%	22%	35%	20%	3%	7%	11%	0%	27%	44%	44%	19%	73%	
None or n/a	19	21	22	20	37	21	63	52	48	60	61	49	2	4	4	2	63	

Table F.3.2 - Statutory documents coverage, countries part 2

State/Fed State/Organisation	Ireland	Luxembourg	NETHERLAND	Portugal	Romania	Singapore	SPAIN	SPAIN (España)	SPAIN, ANDALUCIA	SPAIN, CANARIAS	SPAIN, CASTILLA Y LEÓN	SPAIN, CATALUÑA	SPAIN, GALICIA	SPAIN, MADRID	SPAIN, VALENCIA	Sweden	UK (England and Wales)	UK (Northern Ireland)	UK (Scotland)	Australia	
c=comprehensive coverage																					
p=partial coverage																					
n=no coverage																					
Type of document	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	
External Environments and Approaches to Buildings																					
Access Routes and	p	p	c	c	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	p
Gradients and Ramps	c	c	c	c	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	p
Steps and Stairs	c	c	n	c	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	p
Handrails	c	c		c	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	n
External Lifts	n	p		n	p	n	c	c	c	c	c	c	c	n	c	p	n	n	n	n	p
Surface Finishes	p	p		p	p	c	p	c	c	c	c	c	c	c	c	p	n	p	p	p	p
Crossing Points, Tactile	n	p		p	p	c	c	c	c	c	c	c	c	c	c	p	p	p	p	p	n
Drop Off/Pick Up Zones	n	n		n	p	n	p	p	p	n	p	n	p	n	n	p	n	n	n	c	
Car parking	n	p		c	p	n	c	c	c	c	c	c	c	c	c	p	n	n	n	c	p
Obstacles on a path and	p	c		p	p	c	c	c	c	c	c	c	c	c	c	p	p	n	n	p	n
Seating and rest areas	n	n		n	p	p	c	c	c	c	c	c	n	n	c	p	n	n	n	p	n
Facilities for Guide Dogs	n	n		n	n	n	c	c	n	c	c	c	c	n	n	n	n	n	n	n	n
Signage and Wayfinding	n	n		p	p	p	n	c	p	n	n	p	n	n	p	p	n	n	n	p	p
Signage and Wayfinding	n	p		p	p	p	c	c	p	n	c	p	p	n	p	p	n	p	p	p	p
Signage and Wayfinding	n	p		p	p	p	p	c	c	n	c	c	c	c	p	p	n	n	n	p	p
Lighting (external)	n	p		n	n	p	c	c	n	p	p	n	p	n	c	p	p	n	n	c	c
Internal Environments		p																			n
Entrances	c	p	c	p	p	c	c	n	c	c	c	p	c	p	c	c	c	c	c	c	n
Reception Areas, counters,	n	p	n	p	p	p	c	n	c	c	c	c	n	c	c	p	p	p	p	p	n
Security Provisions	n	n	n	n	p	p	c	c	c	c	p	c	n	n	c	n	n	n	n	n	n
Storage Facilities	n	n	n	n	p	p	p	n	p	p	n	n	n	n	n	p	n	n	n	n	P
Circulation Routes	p	p	c	c	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	C
Manoeuvring space	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	p			p	N
Lobbies	c	p	p	c	p	c	c	n	c	c	c	p	n	p	p	c	p	c	p	p	n
Internal Doors	c	p	c	c	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	p
Windows	p	n	n	n	c	n	p	c	n	n	n	n	n	c	n		p	n	n	p	p
Passenger Lifts	p	p	c	c	p	c	c	c	c	c	c	c	c	c	c		c	c	c	p	p
Passenger Lifts for existing	p	n	c	p	p	n	c	c	p	n	p	c	n	n	c		n	n	n	n	n
Platform Lifts / Lifting	p	p	n	c	p	c	p	n	c	n	n	n	n	n	c	p	c	c	c	c	p
Stairs	c	c	n	c	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	p
Ramps	c	c	c	c	p	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	n
Escalators	n	n	n	n	p	n	p	n	c	c	c	n	c	c	n		n	n	n	p	p
Travelators	n	n	n	n	p	n	c	n	c	c	c	n	c	c	n		n	n	n	n	n
Handrails	c	c	n	c	p	c	c	c	c	c	c	c	c	c	c	p	c	n	n	c	p
Sanitary facilities for ambulant	c	p	c	p	p	c	p	c	c	p	c	c	n	c	c		c	c	c	c	n
Sanitary facilities for	p	p	c	c	c	c	c	c	c	c	c	c	c	c	c	p	c	c	c	c	p
Sanitary facilities for other	p	n	n	n	p	c	p	n	p	p	c	n	n	c	n	p	p	c	n	p	
First Aid Facilities	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	p
Surface Finishes	n	p	n	p	p	c	c	c	c	c	c	c	c	p	c	p	p	p	p	p	n
Glazing and	p	p	n	n	p	n	p	c	c	c	c	c	c	c	c	c	p	n	n	p	n
Colour Contrasts	p	p	n	c	n	c	p	n	c	c	c	n	n	c	n	c	p	c	p	n	
Signage and wayfinding	n	n	n	n	p	n	p	n	c	c	c	p	p	c	p	p	n	n	n	n	
Signage and wayfinding	n	p	n	c	n	c	p	c	c	c	c	p	p	c	p	p	p	p	p	p	n
Signage and wayfinding	n	p	n	c	n	c	p	c	c	c	p	p	p	c	p	p	p	p	p	n	n
Lighting (interior)	n	p	n	n	p	p	c	c	c	c	p	n	p	c	n	p	p	n	n	n	n
Acoustics	n	n	n	n	n	n	n	n	c	c	c	n	n	c	n	p	n	n	n	n	n
Audible Communication	p	p	n	n	n	p	n	c	c	c	c	p	p	c	p	p	n	p	p	n	p
Switches, Outlets and controls	p	p	n	n	p	p	p	n	c	c	c	c	c	c	c	p	p	c	p	n	
Emergency Egress	p	n	n	n	n	n	c	c	c	c	n	p	n	p	p	c	p	n	n	p	n

State/Fed State/Organisation	Ireland	Luxembourg	NETHERLAND	Portugal	Romania	Singapore	SPAIN	SPAIN (España)	SPAIN, ANDALUCIA	SPAIN, CANARIAS	SPAIN, CASTILLA Y LEÓN	SPAIN, CATALUÑA	SPAIN, GALICIA	SPAIN, MADRID	SPAIN, VALENCIA	Sweden	UK (England and Wales)	UK (Northern Ireland)	UK (Scotland)	Australia
Type of document	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory	Statutory
Refuse systems	n	n	p	n	n	n	n	n	n	n	n	n	n	n	n	p	n	n	n	n
Furnishing (seating, desks, Indoor climate)	n	p	n	n	p	n	p	p	c	c	c	c	c	c	c	p	n	n	n	p
Transport Facilities																				n
Bus Facilities	p	n	-	n	n	n	c	c	c	c	c	c	c	c	c	p	n	n	n	n
Rail Facilities	p	n	-	n	n	n	c	c	p	c	n	c	p	c	c	c	p	p	p	n
Taxi Facilities	p	n	-	n	n	c	p	c	c	c	c	c	c	c	c	p	n	n	n	n
Airport Facilities	p	p	-	n	n	n	c	c	p	c	c	n	p	c	c	p	p	p	n	n
Car Parking (including Parking Control)	p	p	-	c	p	n	c	c	c	c	c	c	c	c	c	p	p	p	c	n
Cycle Parking	n	n	c	n	n	n	n	n	n	n	n	n	n	n	n		n	n	n	n
Specific Building Uses																				n
Office, Conference and Kitchen/Refreshment	n	n	c	p	p	p	c	p	c	c	n	p	c	p	n	p	n	n	p	n
Hotels, student	p	n	c	p	p	p	c	p	p	p	c	p	p	p	p	p	c	c	p	n
Residential	p	n	c	p	p	p	c	c	c	c	c	c	c	c	n	p	p	p	n	n
Sport	n	n	c	p	p	p	c	p	p	c	c	p	p	p	p	p	n	n	n	n
Auditoriums, concert halls and Education	p	n	c	p	p	p	c	p	p	c	c	p	p	p	n	c	p	p	p	n
Healthcare	n	n	c	p	n	p	c	p	p	p	c	p	p	p	n	p	p	p	p	n
Library	n	n	c	p	n	p	c	n	p	p	c	p	p	n	n	c	n	n	n	n
Leisure	n	n	c	p	p	p	c	n	p	p	c	p	p	n	n	c	n	n	n	n
Retail	n	n	c	p	p	p	c	n	p	p	c	p	p	n	n	p	p		p	n
Industrial	n	n	c	p	n	p	p	n	n	n	c	n	n	n	n	c	p		p	n
Shared space	n	n	c	p	p	n	c	n	c	p	c	n	n	c	n	p	n	n	n	
Public Plaza	n	n	-	p	n	n	c	c	c	p	c	n	n	c	p	c	n	n	n	
Waterfront Environments	n	n	-	p	n	n	c	c	c	n	n	n	n	n	n	p	n	n	n	
Child Play Areas (interior and Judicial Facilities, Detention)	n	n	-	p	n	p	p	c	p	p	n	n	n	p	p	p	n	n	n	
Bank, Post Offices, ATM's	n	n	c	p	n	p	p	n	p	p	p	n	n	p	n	p	p	p	p	
Laboratories	n	n	c	p	n	n	p	n	n	n	n	n	n	n	n	p	n		n	
Gas/Petrol Stations	n	n	c	p	n	n	p	n	n	p	n	n	p	n	n	p	p	p	n	
Religious	n	n	c	p	n	n	c	n	n	p	c	p	p	p	n	c	n	n	n	
Listed/Historic Buildings	n	n	c	p	n	n	p		n	c	n	n	n	n	n	p	p	n	n	
Rural Environments	n	n	-	n	n	p	p	n	p	n	c	n	n	p	n	p	n	n	n	
Ports																				
Comprehensive	10	8	30	19	33	25	44	42	47	48		57	33	31	41	35	22	15	18	17
Partial	24	29	33	33	47	26	26	96	21	17	7	20	22	14	14	47	29	17	29	25
None	46	44	24	28	30	29	55	28	12	15	16	27	27	25	31	4	36	41	34	54
None. %	58%	54%	42%	35%	38%	36%	6%	35%	15%	19%	20%	34%	34%	31%	39%	5%	45%	54%	43%	67%
None or n/a	51	48	42	33	35	34	11	34	17	20	21	32	32	30	36	16	41	50	39	69

Table F.3.3 - Statutory documents coverage, all countries

All states/Fed States/Organisations	Comprehensive	Partial	None	None. %
External Environments and Approaches to Buildings				
Access Routes and Approaches	94	12	7	6%
Gradients and Ramps	101	6	5	4%
Steps and Stairs	99	7	6	5%
Handrails	93	9	7	6%
External Lifts	46	17	34	35%
Surface Finishes	58	37	13	12%
Crossing Points, Tactile Paving,	63	21	19	18%
Drop Off/Pick Up Zones	39	26	39	38%
Car parking	80	20	7	7%
Obstacles on a path and Street	68	16	20	19%
Seating and rest areas	51	19	32	31%
Facilities for Guide Dogs	38	6	55	56%
Signage and Wayfinding	34	28	30	33%
Signage and Wayfinding	64	28	13	12%
Signage and Wayfinding	68	23	14	13%
Lighting (external)	39	37	30	28%
Internal Environments	3	4	3	30%
Entrances	75	24	9	8%
Reception Areas, counters, desks	56	18	28	27%
Security Provisions	19	28	46	49%
Storage Facilities	19	29	51	52%
Circulation Routes	77	15	14	13%
Manoeuvring space	75	17	11	11%
Lobbies	50	20	30	30%
Internal Doors	79	16	11	10%
Windows	37	13	46	48%
Passenger Lifts	79	12	13	13%
Passenger Lifts for existing	54	18	29	29%
Platform Lifts / Lifting Platforms	59	14	29	28%
Stairs	85	11	11	10%
Ramps	87	10	11	10%
Escalators	21	15	50	58%
Travelators	21	9	54	64%
Handrails	84	11	13	12%
Sanitary facilities for ambulant	50	20	21	23%
Sanitary facilities for wheelchair	86	12	12	11%
Sanitary facilities for other users	46	21	33	33%
First Aid Facilities	18	10	69	71%
Surface Finishes	49	35	15	15%
Glazing and	55	24	22	22%
Colour Contrasts	55	25	22	22%
Signage and wayfinding (interior	27	23	38	43%
Signage and wayfinding (interior	61	29	18	17%
Signage and wayfinding (interior	60	28	17	16%
Lighting (interior)	34	43	27	26%
Acoustics	22	16	54	59%
Audible Communication Systems	40	26	29	31%
Switches, Outlets and controls	53	34	21	19%
Emergency Egress Requirements	29	33	41	40%
Refuse systems	15	11	62	70%
Furnishing (seating, desks, etc)	41	29	26	27%
Indoor climate	1	6	8	53%
Transport Facilities	0	1	1	50%
Bus Facilities	42	26	35	34%
Rail Facilities	51	25	28	27%

All states/Fed States/Organisations	Comprehensive	Partial	None	None. %
Taxi Facilities	34	15	45	48%
Airport Facilities	31	35	33	33%
Car Parking (including number, Parking Control	64	28	12	12%
Cycle Parking	28	16	55	56%
Specific Building Uses	4	13	68	80%
Office, Conference and Meeting	2	0	2	50%
Kitchen/Refreshment (including	43	26	32	32%
Hotels, student accommodation,	34	37	31	30%
Residential	39	39	25	24%
Sport	43	37	28	26%
Auditoriums, concert halls and	37	37	29	28%
Education	33	41	27	27%
Healthcare	35	30	34	34%
Library	33	29	34	35%
Leisure	34	22	42	43%
Retail	39	26	36	36%
Industrial	34	34	31	31%
Shared space	22	23	54	55%
Public Plaza	26	21	49	51%
Waterfront Environments	46	15	41	40%
Child Play Areas (interior and	17	23	57	59%
Judicial Facilities, Detention	27	30	43	43%
Bank, Post Offices, ATM's	28	28	44	44%
Laboratories	30	34	33	34%
Gas/Petrol Stations	21	17	53	58%
Religious	4	25	57	66%
Listed/Historic Buildings	23	28	44	46%
Rural Environments	20	23	50	54%
Ports	16	16	54	63%
	0	7	5	42%

ANNEX G

National Status reports of existing legislation, standards, guides on accessibility requirements of the built environment

Table G.1 - Overview on European and International countries, CEN, ISO etc. with responsible rapporteurs from PT A and PT B

EU member states	Inventory/Spreadsheet	Country Report – PT A	Checklist - PT B
Austria:	Monika A. Klenovec	Monika A. Klenovec	Monika A. Klenovec
Belgium:	Flanders.public build (Kpol)	Kathleen Polders	Kathleen Polders
	Wallonia (ANLH) S. Herman	S. Herman	S. Herman
Bulgaria:			
Cyprus:	Katerina Papamichail	Clelia Petridou	Clelia Petridou
Czech Republic		Libor Dupal <i>Ondřej Folk / Dagmar Lanzova</i>	
Denmark:	Soren Ginnerup	Soren Ginnerup	
Estonia:			Clas Thoren
Finland:	Maija Könkkölä Elisabet Svensson	Maija Könkkölä	Maija Könkkölä
France:	Eric Gaussorgues	Eric Gaussorgues	
Germany:	Dr. Volker Sieger	Dr. Volker Sieger	Dr. Volker Sieger
Greece:	Katerina Papamichail	Katerina Papamichail	Katerina Papamichail
Hungary:	Mónika Parti	Mónika Parti	Mónika Parti
Ireland:	Eoin O'Herlihy Fionnuala Rogerson	Eoin O'Herlihy Fionnuala Rogerson	Eoin O'Herlihy Fionnuala Rogerson
Italy:		Paola Bucciarelli Mitzi Bollani	
Latvia:			Clas Thoren
Lithuania:		Kristina Smailyte	Clas Thoren
Luxembourg:	Silvio Sagramola Yannick Breuer	Silvio Sagramola Yannick Breuer	
Malta:		Dr. Joseph Spiteri	
Netherlands:	Delfin Jimenez	Delfin Jimenez	Delfin Jimenez
Poland:		Ewa Kuryłowicz Chiara Giovannini	
Portugal:	Pedro Homem de Gouveia	Pedro Homem de Gouveia Natalia Giorgi	
Romania:	Isabela Nita	Isabela Nita	Isabela Nita
Slovakia:		Branislav Mamojka	
Slovenia:		---	
Spain:	Francesc Aragall	Francesc Aragall	Delfin Jimenez
Sweden:	Elisabet Svensson	Elisabet Svensson	Clas Thoren
UK:	Keith Bright Peter Connell	Keith Bright Peter Connell	Keith Bright Peter Connell
EFTA Countries			
Liechtenstein:			
Norway:	Rudolph Brynn Elisabet Svensson	Rudolph Brynn	Rudolph Brynn

Switzerland:	Joe Manser	Joe Manser	
International countries			
USA:	Peter Connell	Peter Connell	
Australia:	Murray Mountain	Murray Mountain	
Canada:	Betty Dion Bob Topping	Betty Dion Bob Topping	
Singapore:	Keith Bright		
South Africa		Keith Bright	
General EU Docs, legislation			
TSI PRM legislation:	Soren Ginnerup		
CEN/TCs + ENs	Monika A. Klenovec Eoin O'Herlihy		
International Docs			
ISO/FDIS 21542	Soren Ginnerup		
International Build. Code	Peter Connell		

G.1 Country Expert Report Form

Project Team A

Country Report: _____

Rapporteur/Informant: _____ (Name)

_____ (Email)

The following questions are intended as a guide for national rapporteurs/experts to make a 1-2 page report (WORD document) "...highlighting the country's existing regulations, standards, technical reports, procurement, training + education of architects and construction engineers, etc." The bullet points are giving you examples and questions.

State Legislation with accessibility requirements (technical or functional)

- History (- development concerning legislation on accessibility for people with disabilities and others).
- Authorities responsible for legislation on accessibility in the built environment

Building Regulations

- Describe also the relationship between legislation and implementation of accessibility in practice – is there a clear follow-up, where are the gaps, if any?
- Any activities to improve accessibility of existing buildings available if under refurbishment or adaptation? – with equal or lower requirements as for new buildings?

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization?

- Has the National Standards Organisation published accessibility standards for construction, built environment or building products?
- Are these standards in line with the functional requirements of CEN/CENELEC Guide 6

Other Bodies involved in accessibility of the built environment

- Production of accessibility design guidelines?
- Co-operation structures between relevant public & private bodies and NGOs
- Bodies that are checking conformity with legislation (public and others).

Public Procurement implementation

- Is there a legislated procedure for procurement concerning accessibility of the built environment?
- Are new building projects with work places, offices, shops etc. in general now accessible in your country – and to what extent?

Conformance Assessment Schemes

- In which stages of the building process are conformity assessment schemes available and introduced?
- Which bodies are involved? (see d)

Education/Training of architects, construction engineers, public procurers etc.

- Describe the level /type of education in this field for architects and engineers, and general availability of expertise in accessibility
- Facultative or obligatorily introduced in the curricula for different professionals?

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans?

- Have there been already in the past “accessibility action plans”
- Are there any new actions / policies to implement accessibility in the near future at national or regional level?

Awareness/Awards/Funds to improve implementation of accessibility in the built environment, see here some examples

- Any public funds available for new (and existing) multi-level housing, single apartment and/or family single homes to improve accessibility etc.
- Are there any activities for existing buildings to improve accessibility?
- Awards available which are considering accessibility in the built environment as a single subject or as a strategy for sustainability?

Conclusion regarding accessibility in the built environment

- Highlight good practices in the country
- Highlight weak points and gaps in the general situation
- Where are the most important starting points for improvement in the expert’s opinion?
- Any activities to improve the existing building stock according accessibility – perhaps also in a sustainable built environment?

Date: _____

G.2 European Member States**G.2.1 Austria**

Rapporteur/Informant: Arch. DI Monika A. Klenovec [klenovec@designforall.at]

State Legislation with accessibility requirements (technical or functional)

Since 1997 a strong commitment in the [state constitution](#) exists (similar than in all other countries):

“No one shall be discriminated due to his disability. The Republic (Federation, countries, municipalities and villages) commits themselves to ensure the equal treatment of disabled and non-disabled persons in all spheres of every day life.”

What was missing over the years until 2006 was a legal ordinance or regulation how this has to be fulfilled in detail and how it can be claimed for at the court if not fulfilled. This lack was closed in January 2006 with the [Federal equal treatment legislation for disabled persons](#) and with the implementation of the **Public Procurement Directive**.

As a first step a mediation procedure (reconciliation process) is fixed in the [Federal equal treatment legislation](#). If this procedure gives no satisfying result the way to the court is open.

Design of streets, railway stations, airports etc. on the one side and [employee protections legislation](#) and anti-discrimination legislation on the other side is regulated on an equal basis for all federal countries with states legislation. All other building uses are under the responsibility of the local [building regulation](#).

[Public procurement regulation](#) is widely used for every building project but not always linked to detailed technical accessibility requirements which are mostly based on the local [building regulation](#).

Building Regulations

Until December 2007 each federal country in Austria has its own way to handle accessibility in their building regulation – Austria had nine different building regulations.

OIB – the Austrian Institute of Construction – was founded by the nine federal countries of Austria to take over responsibility in the European building harmonization process based on the Construction Product Directive, on the ‘New Approach’ concept and to represent the interests of the nine Austrian countries in all relevant committees of the European Commission. OIB is the notified body for European Technical Approvals, member within EOTA, member in the Standing Committee on Construction and in the Preparatory Group where Mandates for harmonised European technical specification will be negotiated.

As a milestone [harmonised building regulations](#) have been developed following a similar concept than in the Construction Products Directive with the 6 essential requirements. These 6 Guidelines have detailed technical requirements with strong references to different Austrian standards included.

One umbrella document describes the 6 minimum functional requirements; e.g. in the clause of accessibility the different use of buildings which have to be accessible are listed – very similar as within the *UN Convention on the Rights of Persons with Disabilities*:

1. Mechanical Resistance and Stability
2. Safety in case of Fire
3. Hygiene, Health and the Environment
4. Safety in Use
5. Protection against Noise
6. Energy Economy and Heat Retention

While in the Construction Products Directive accessibility is not mentioned this important theme has been added as one clause to the usability requirements within [Guideline 4](#).

Until now 5 (6) federal countries have introduced these [OIB-Guidelines](#) within their building regulations: Vienna, Burgenland, Upper Austria, Tirol, Vorarlberg (Styria will follow soon). Within [Guideline 4 “Usability and accessibility in the built environment”](#) we find strong references to different clauses of [ÖNORM B 1600](#) which is the main accessibility standard in Austria. Accessible parking areas, ramps, entrances and doors, horizontal paths, manoeuvring areas, vertical paths as lifts, stairs, sanitary facilities and equipment, rooms for different use, outdoor areas and signage, 2sense principle, adaptable housing, tourism facilities and housing is herein described. On an indirect way the content of the voluntary standard becomes obligatorily. Anyway each standard is for architects, planners etc. ‘state of the art’ and fulfilment is often required in procurement proceedings. In Vienna the architect has to confirm that he has fulfilled accessibility requirements within their design during the application of the building permit. At the completion of the work a civil engineer has to confirm again that the principles of accessibility have been considered. After some years of experience this seems to be a weak tool to improve accessibility and not very effective. Until now no one go to the court and claime for their rights.

3 countries have now different ways to handle accessibility in the built environment in their building regulation.

The increasing reduction of survey and control mechanism by building regulation officers according the change to government “light” (lack of manpower and resources) transfers the awareness and responsibility to architects, planners and building construction firms. In Vienna architects have to give a confirmation about the fulfilment of accessibility requirements in their design before they deliver their design plans to claim for the building permit. At the end of the building process they or civil engineers confirm in a final notice of performance that everything has been executed according the accessibility requirements along the building permit procedure – which is not always the case and depending on education and expertise of the involved companies and designers. If nobody claims first in a reconciliation process and finally at the court afterwards about less accessibility nothing will happen.

Another point is existing buildings. More or less the same accessibility requirements should be incorporated as in new buildings. But if only minor adoptions will be done only a building announcement has to be delivered and no further control mechanism starts. In big refurbishment and adaptation projects the same procedure is required to get a building permit than in new buildings.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Many standards are available for accessible buildings. Since 1977 [ÖNORM B 1600](#) for barrier free buildings is on the market with different revisions. This standard is added by [ÖNORM B 1601](#) for special buildings and institutions for disabled persons, [ÖNORM B 1602](#) Barrier free education facilities, [ÖNORM B 1603](#) Barrier free tourism facilities,

[ÖNORM V 2100](#) Series for persons with vision impairment or blind persons concerning walking guiding lines system, protection for the construction sites etc.

Other Bodies involved in accessibility of the built environment

The department of accessible buildings in Graz has elaborated excellent [brochures](#) for the accessibility of the built environment based on [ÖNORM B 1600](#) which is widely used in Austria. Additional leaflets have been published to different subjects as [emergency routes for disabled persons](#), [adaptable housing](#), [accessible swimming pools](#), saunas, supported by leaflet about [accessible toilets](#), [accessible platform lifts](#), [accessible lifts](#), [playgrounds for all children](#) elaborated by the Austrian network of accessibility consultants.

For accessible housing the association “design for all” has published a [brochure](#) which gives positive images and photo on the implementation of accessibility in family homes – also based on [ÖNORM B 1600](#).

Public Procurement implementation

According [employment protection legislation](#) it has to be considered that every company, office with more than 25 employees has to employ one disabled person. If they do not fulfil this requirement they have to pay for each not-employed disabled person 230 €/day! According [employment's protection legislation](#) and [equal treatment legislation](#) owners of companies, offices, shops etc. have to look ahead for accessibility of the built environment. When at the moment no disabled person is in the company employed the toilet can be made adaptable for later times. But if this is a public used building than in any case an accessible toilet has to be provided according the amount of users of the building. Accessibility of the main entrance, way to the lifts, lift size etc. have to fulfil accessibility requirements.

In federal school buildings accessibility requirements are introduced sufficiently.

Conformance Assessment Schemes

Education/Training of architects, construction engineers, public procurers etc.

It clearly shows that education really is an important issue concerning architects, building engineers etc. and for professionals in the whole building execution process as plumbers, carpenters, paviours etc.

An institute for social services has been established to consult architects and consumers (elderly frail persons, disabled persons etc.) about accessibility requirements and good practices. They organize also the works for private users in their adaptation projects with established professional teams supervised by the institute.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Public funds for multi-level housing and single family homes is an important strategic tool of the country's government for implementation higher technical requirements for accessibility, adaptable housing etc. (based on [ÖNORM B 1600](#), the Austrian accessibility standard).

In the most western federal country Vorarlberg since many years different activities have been developed to improve accessibility of the existing built environment:

Since 18 years every second year a special building award for good practices of accessible building sites is organized, well known by the architects. This award improves awareness on accessibility among architects amazingly.

Another project is the "accessible village/city for all users". Numerous of villages and cities are participating in this project about more than 15 years. Awareness has also reached consumers, shop owners etc. due to the communication in the local magazines. Step by step all public buildings are adapted accessible and gives guidance and good practices to the inhabitants – even when they built their single family houses.

Conclusion regarding accessibility in the built environment

In Graz, Styria there is a project table for housing projects established in the government where architect can discuss their project before they claim for a building permit to get all necessary information and guidance in one place. Accessibility is of course also an issue in this process. Government experts receive due to this discussions and negotiations also training on good accessibility solutions and requirements and on information about emergency exits etc..

"Design for all" presents during this year in 3 exhibitions six different smart bathing facilities, well designed and accessible: one adaptable bathroom, one compact small bath room and one wellness bathing area, one accessible public toilet with baby changing facility and two hotel bathing rooms one in light version and one fully equipped for a user in a wheelchair.

In the largest park of prefabricated housed in south of Vienna "Blue Lagoon" a new project is started: one accessible house to show the advantages of accessibility and the smart design for all users to improve awareness of users and consumers.

Missing link and gaps:

- Education of architect, etc. – only 15 % have learnt about accessibility solutions and requirements during their studies
- Legislation should be better harmonised.
- Consulting for consumers and architects, building engineers etc. is an essential issue.
- Action plan is under preparation (next year)
- Funds are effective tools to increase accessibility
- Control is necessary by consultants or governmental representatives also at the end of the execution. Project sometimes starts with accessibility well incorporated and at the end the building is not accessible due to wrong product choices and wrong fixings etc.

G.2.2 Belgium (Flanders)

Rapporteur/Informant: Enter vzw – Kathleen Polders [Kathleen.polders@entervzw.be]

State Legislation with accessibility requirements (technical or functional)

History:

- Since 17/07/1975 Belgium has a [federal law on accessibility](#). However, this law wasn't applied a lot in practice because of several reasons. First of all, the law wasn't mentioned in our planning regulations so there was no control on the appliance of the law. Second, the law contained

standards which were obsolete and there was no opening in the law to use new developments or materials.

Besides certain legal specifications there is in the [Flemish regulation](#) of 28/05/2004 a special attention in the composition of the request of certain building permits for integral accessibility.

One of the 5 provinces of Flanders had since 2007 an own provincial regulation on accessibility (*excel-sheet: Provinciale stedenbouwkundige verordening inzake toegankelijkheid*). The provincial urban ordinance is in practice since 1/04/2007.

Since 01/03/2010 a new Flemish regulation is in practice (*excel-sheet: Gewestelijke stedenbouwkundige verordening inzake toegankelijkheid*). The provincial regulation isn't in force anymore since the introduction of the Flemish urban ordinance for accessibility.

- Since 29/04/1997 Flanders has [a regulation on roads for roads for pedestrian traffic](#)
- Since 10/05/2007 there is a [Belgian anti-discrimination law](#) which include an article on adapting the workplace for employees. The employer can request an adaptation of the workplace or tools for one of its employees. The employer receives a compensation for the adaptation.
- Since 20/03/2009 there is a [Flemish regulation which allows guide dogs to enter public places](#)
- Since 3/04/2001 there is a [ministerial circular letter on reserved parking for people with disabilities](#)

Authorities Flanders

- Flemish minister on Equal Opportunities responsible for the legislation on accessibility.
- The ministry of Equal Opportunities uses the Open Co-ordination Method to determine agreements concerning accessibility with the other Flemish policymakers (ministers).
- Flemish minister who is responsible for the Flemish Codex Spatial Planning (*excel-sheet: Vlaamse Codex Ruimtelijke Ordening*), the legislation of spatial planning and building regulations.

Building Regulations

The regulation on accessibility for public buildings for the region of Flanders 01/03/2010 is mentioned in the [building regulations](#). When building or rebuilding or refurbishing a building accessible for the public, they have to apply the regulation on accessibility to get a building permit.

Regulation:

The [regulation on accessibility for public buildings for the region of Flanders 01/03/2010](#) must also be applied for the refurbishment of buildings accessible to the public. If the building is within the scope of this regulation and there are refurbishments, then the elements rebuild or replaced have to be adapted to the standards of this regulation.

When it concerns heritage, a heritage-officer makes the weighing between the value of the heritage and accessibility.

Other:

- If it concerns a touristic building, they can get financial support for making their touristic accommodation more accessible.
- In Flanders we have 4 accessibility consultancies (1 in each province, 1 consultancy is working in 2 provinces). A specialist on accessibility gives a specific accessibility advice of new buildings, the refurbishment of buildings and the adapting of housing. The 4 accessibility consultancies also check existing buildings on accessibility. The results (How accessible is this building?) are collected in a databank and can be consulted a on a website www.toevla.be
- Enter has initiatives to inform and give tips on accessible buildings, houses ...

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

“[NBN ISO/TR9527:1994 – Ontwerprichtlijnen](#)”. This is an International standard registered as Belgium standard. We find this standard dated.

“[EN 81-70 European safetyrules for elevators including accessibility of elevators for people with disabilities](#)”. The [regulation on accessibility for public buildings for the region of Flanders](#) 01/03/2010 refers to elements (type 2) of this European norm.

Other Bodies involved in accessibility of the built environment

Enter vzw: Enter is the Flemish expert centre for accessibility, and its mission is to inspire, to inform, to promote, do research, work together with users, professionals and policymakers to become more design for all and get an integrated approach on accessibility of housing, public buildings, public spaces, urban planning, mobility, tourism and care.

Enter vzw is recognized as the official partner of the Flemish government.

Some instruments that Enter has developed:

- “[Handboek toegankelijk publieke gebouwen](#)”: Guidelines for accessible public buildings. This digital handbook is developed as an initiative next to the Flemish regulation on accessibility. It gives, next to the regulations, more tips on making a building more accessible. The guidelines can be consulted on the website www.toegankelijkgebouw.be.

The website also contains digital questionnaires (quicksan + checklist) With the quickscan designers can find out, in the design phase, what the specific regulations on accessibility are going to be for their project. The checklist gives, when the design is finished, an overview of the regulations on accessibility for their specific project. Architects can use this document to send it with the plans to get a building license.

- “[wenkenbladen](#)”: Guidelines for accessibility for several building types, public domain (accessibility of schools, banks, restaurants and shops, apartments, signalization, sport centres , ,...) These publications can be ordered or can be consulted on the website of Enter www.entervzw.be
- “[meegroeiwonen](#)”: Enter has made a national design guide on lifespan housing. Enter has published a guide book on “lifelong living: flexible – adaptable – growing with your needs” and also a website www.meegroeiwonen.info. A sustainable, long term vision on living and building which responds to the diversity of humans, the demographic evolutions and changing needs and situations of individuals. Currently Enter also has a pilot project with the theme “life long living” at district level (Genk).
- “[de zilveren sleutel](#)”: The silver key www.dezilverensleutel.be is an interactive website for living for the elderly. It stimulates active elderly to think and act in time on their own living situation, tips for more comfort, safety in their home; home adaptation, information point, way finder to financial support, services,...
- “[vademecum publiek domein](#)”: Guidelines on accessibility of public domain. These guidelines can be consulted on the website of Enter www.entervzw.be

Enter vzw has also a common project “Flemish Network on accessible building” with **WTCB** (The Belgian Building Research Institute) and **In-Ham**. WTCB is a private research institute founded in 1960 under impulse of the National Federation of Belgian Building Contractors. (www.toegankelijk.be).

Enter has a coordinating function, ongoing consultations en corporation with the 4 **accessibility consultancies** (1 in each province, 1 consultancy is working in 2 provinces) in Flanders (see 2. Building regulations)

Intro: Intro strives to improve the accessibility of festivals, performances in cultural centres and sporting events for disabled people. To this end, Intro provides organisations with individual advice and assists with the practical organisation of an event.

TOV(Toegankelijkheidsoverleg Vlaanderen) is the organization that represents the “users” of accessibility. TOV is an overall organization that covers different member organizations

Ouderenraad: Council of the Elderly People

Bodies that are checking conformity with legislation (public and others):

- Officials who control the application of a building license also control or the regulations on accessibility are applied
- These officials can ask advice on accessibility from one of the 4 accessibility consultancies.
- If the building is built and the regulations are not applied correctly there is a building violation.

Public Procurement implementation

In the social housing sector the Flemish company of social housing (Vlaamse Maatschappij Sociaal Wonen) applies in its procurement guidelines (C2008) elements of accessibility. C2008 is a work instrument for designing social housing. The social housing companies and their contractors need to follow these guidelines.

(<http://www.vmsw.be/Algemeen/Publicaties/C2008/tabid/5604/language/nl-BE/Default.aspx>)

Other public buildings have to apply the [regulation on accessibility](#) to get a building license (*Stedenbouwkundige verordening inzake toegankelijkheid publiek toegankelijke gebouwen*).

New building projects with work places, offices, shops etc. in general are now accessible in the country. According to the scope of the [regulation on accessibility for public buildings](#) for the region of Flanders 01/03/2010.

There is a difference in meaning of “public” in this Flemish legislation.

In Flanders, the building type determines the “publicness” of a building. Every building that is accessible for people who are not employees, whoever the owner or tenants is a public building. We make this distinction because in case of employees we have the regulation on adapting the workplace.

So libraries, shops, offices (not the spaces only for employees but only the rooms public like entrance, lobby, meeting rooms,...), schools, sport accommodation, the communal space of apartment buildings (not the private apartments), touristic accommodation, hospitals (except the private rooms of the patients),... are all public buildings in Flanders and [the regulation on accessibility for public buildings](#) for the region of Flanders 01/03/2010 has to be verified.

This regulation has to be applied when you build, rebuild or refurbish a building in Flanders. The regulation determines 3 groups of buildings: touristic accommodations, “residential buildings” (= buildings with rooms for sleeping = apartment buildings, hospitals, elderly homes, student dorms and prisons), other public buildings (schools, shops, offices,...).

For the group of touristic accommodations the number of rooms determines the scope of this regulation. For example if the building only has 2 rooms used as a touristic accommodation, the regulation is not to be applied. If you have 3-10 accommodation, the ground floor (the common parts) has to be accessible and has to be adapted to the standards described in this regulation (circulation routes, stairs, ramps, lifts, sanitary facilities, dressing rooms, changing rooms, parking, seating (theatre seating) and reception desk). If there are types of rooms on other floors that are not accessible on the ground floor, they also have to be adapted to the standards.

For more than 10 rooms the standards are to be applied for the whole building (common parts) + the regulation asks to provide a percentage of the rooms as accessible.

For the group of “residential buildings” the number of rooms + the number of levels they are situated determines the scope. For example, in apartment buildings there have to be a minimum of 6 apartments situated on 3 levels. If this is the case the standards are to be applied for the whole building (common parts; not the “private parts” like the apartment itself).

For the other group the scope gets determined by the m² which are public. For example an office. Only the parts accessible for public have to be taking in account for the m². The parts only for employees not.

Conformance Assessment Schemes

When building or rebuilding (refurbishment) a building accessible for the public, they have to apply this regulation to get a building license.

Officials who control the application of a building license also control whether the regulations on accessibility are applied. These officials also can ask advice on accessibility from one of the 4 accessibility consultancies.

Education/Training of architects, construction engineers, public procurers etc.

The [regulation on accessibility for public buildings](#) for the region of Flanders is active since 01/03/2010. Already since January 2010 Enter vzw organized together with Equal Opportunities in Flanders 7 information sessions for architects.

The 4 accessibility consultancies held, each around 5 in there province, information sessions for officials who control the application of a building license.

Enter vzw has also a Efro-Project “Flemish Network on accessible building” together with WTCB (The Belgian Building Research Institute – www.bbri.be) and In-HAM (www.in-ham.be)

This network organizes in September and October 2010 information sessions for contractors.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans?

- Policy Note 2009-2014 of the minister of Equal Opportunities.
- Open Co-ordination Method for implementing accessibilities in the policy of the other ministers with specific action plans and goals
- There are different new projects of Enter and of Equal Opportunities

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

The Flemish adjustment support is a financial support when you want to adjust your house to the physical needs of a person older than 65. The financial support is for technical tools or refurbishments to improve accessibility.

You also have subsidies for buildings (for example hospitals, elderly homes,... www.vipa.be) where accessibility is a criteria for getting the funds.

Some cities or communities give financial support for accessibility screenings and for adjustments for improving accessibility (users of wheelchairs, baby carriage, elderly, ... of a shop, a doctor’s office, a meeting place, sport facilities...)

If it concerns a touristic building, they can get financial support for making their touristic accommodation more accessible. There are also labels in the touristic sector for accessible accommodations.

Conclusion regarding accessibility in the built environment

Flanders now has a [regulation](#) that has to be taken in consideration when building a building accessible for public. This is a step forward to accessible buildings.

Enter vzw has by the years obtained a lot of expertise on accessibility. With the websites, information sessions,... Enter tries to convince and inform people of the importance of accessibility. This Flemish

regulation on accessibility doesn't cover everything, so guidelines are very important. Sensibilisation and guidelines often work better to understand regulation.

Activities to improve the existing building stock according accessibility:

Regulation, sensibilisation and guidelines

G.2.3 Bulgaria

No rapporteur available.

G.2.4 Cyprus

Rapporteur/Informant: Clelia Petridou [clelia@cytanet.com.cy]

State Legislation with accessibility requirements (technical or functional)

The Legislation concerning the accessibility of the Disabled was firstly voted on 1991 but the basic specification/requirements were only put in action at 1999 as 61H requirements and are part of the Legislation for Roads and Buildings. Thus no building license was issued since unless all floors were accessible to wheelchair users. The requirements concerned either residential or/and non residential buildings with parking spaces over 5 (included). This Regulation is still in force but a new Legislation under the [89/106/EU for the "Safety in use and accessibility"](#) is under preparation and hopefully will be in force by the end of 2010.

The Authority responsible for issuing the building license is

- the Department of Urbanism of Housing and Planning for stage 1 concerning the development plan and
- The local Authorities for stage 2 concerning the issue of Building permit. The Local Authority we could say that is the competent authority for plan checking and auditing.

Building Regulations

The Local Authority is supposed to check the plans regarding accessibility, but the follow up was actually very difficult at least the first 5-6 years for there was no exact Knowledge in accessibility matters. Now, 10 years passed since the first implementation of the Legislation and we can say that there is enough sensitization and knowledge both among designers and the Authorities. The Local Authority is trying to have a follow up on the construction stage but, the fact that the Department of Housing and Planning issues the stage I Permit the construction starts (illegally) without the actual building Permit and sometimes there are problems emerging concerning for example the slope gradient or the width of corridors etc.

Concerning the existing buildings under refurbishment or adaptation, there must be a feasible implementation of accessibility requirements. In case accessibility is difficult to achieve, a Special Committee is actually responsible for deciding the degree of implementation.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Officially there are no standards for construction following the CEN/CLC Guide 6. The existing 61H standards are general with the minimum of the main specifications. A new legislation is being prepared though by the Cyprus Scientific and Technical Chamber (E TEK) that includes all the standards referred in the Guide 6. These requirements will be hopefully implemented by the end of 2010.

Other Bodies involved in accessibility of the built environment

As for Checking the conformity to the accessibility legislation is a task of the Local Authority. The Accessibility Bureau of the Ministry of Transport and Works is the only Service that is giving advices on accessibility matters. A guide was prepared and sent to all architects so as they can follow the requirements easily. The bureau is in contact with all Government Departments responsible for the design of Official buildings, pavements or pedestrian areas.

The Bureau is in contact with the Technical Committee for People with Reduced Mobility (TEDEA) – an NGO Committee constituted by private architects who are trying to promote accessible design.

Concerning the new guidelines mentioned above, the Cyprus Committee of Organisations of PwD were involved as well as the Bureau for the Accessibility of the Ministry of Transport and Works, and the Technical Committee for People with Reduced Mobility (TEDEA) – NGO.

The Paraplegic Association is also actively involved and is becoming more and more assuming and asserting which is very helpful. For example together with the accessibility bureau they claimed from Cyprus Tourist Organisation, to promote accessibility for hotels and restaurants and there were special seminars for the relevant officers. This co-operation started 6 months ago and its goal is to spread the notion of accessibility in to this Organisation and consequently the tourism Industry.

Public Procurement implementation

Law 12(I)/2006 (the Law) is the relevant legislation governing public procurement contracts in the Republic of Cyprus. The Law, which transposes EU Procurement Directives 17/2004 and 18/2004 into Cyprus's legal system, provides for the co-ordination of procedures for the award of public works contracts, public supply contracts, public service contracts and related matters. All projects are obliged to comply with the accessibility requirements of the 61.H specifications.

The department responsible for public procurements edited measures to develop the implementing capacity of the Cypriot authorities in applying the European Public Procurement legislative Package.

On the other hand, all European co financed projects for roads, pedestrian areas or the Cyprus Cultural Centre are obliged to get an Accessibility Certificate from the Committee for Accessibility of the Ministry of Transport and Works, a Committee coordinated by the Accessibility Bureau. The plan-checking is done accordingly to the functional requirements of CEN/CENELEC Guide 6.

All new building projects since 2000 are accessible in a basic level but not yet the shops because the requirements wasn't clear about that (it was enough for them to have the main entrance of the building accessible and did not specify exactly about the shops) So we can't really say that Cyprus is not exactly an accessible country but we are hopefully about to become one. The notion of universal design, the level of sensitization and the rights of the PwDs are becoming more and more pressing for the centres of decision makers.

All pavements though in the city centres are being adapted so as to be safe and accessible for wheelchair users and the blind with tactile guides.

Conformance Assessment Schemes

In the stage of the application for building permit and all the plans have to comply with the requirements of 61H. For big projects there is a rather close audit but not necessarily/specifically for accessibility matters because there is still a serious lack of knowledge and sensitization.

Bodies involved are the Technical Services of each Local Authority.

Education/Training of architects, construction engineers, public procurers etc.

Non for the moment apart from initializing seminars in 1999 and an accessibility seminary organized by TEDEA (NGO association). The only Government Service in this field is the Bureau for the accessibility in the Ministry of Transport and Works that gives information and knowledge about accessibility specifications. The Accessibility Bureau is among other things, giving short seminars to the public officers. Things will really move on when the [new legislation](#) takes place end of 2010.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

There have not been any "accessibility action plans" in the past, apart from the fact that government is obliged to employ 10% of PwD in public posts but the buildings are not actually ready to accept the new employees.

There are new actions / policies to implement accessibility in the near future at national or regional level. A whole new legislation is being carried out and will be soon voted by the House of the Representatives. This new Legislation concerns all matters of "Design for all" and there will be special "educational" seminars to Architects and engineers.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

There are no public funds available for new (and existing) multi-level housing, single apartment and/or family single homes to improve accessibility etc., only in the case of a disabled's house for adapting the living space.

The Department of Public Works has a program of adapting the existing Public Service Buildings in the context of renovation.

There are no awards available which are considering accessibility in the built environment as a single subject or as a strategy for sustainability?

Conclusion regarding accessibility in the built environment

Good practices in the country

The new design concerning pedestrian pavements has adopted a holistic approach for Cypriot pavements so as to have the right specifications for wheelchair users and for the blind.

G.2.5 Czech Republic

Rapporteur/Informant:

Libor Dupal, Czech Consumer Association [Dupal@regio.cz]

With the help of:

Přemysl Berounský, Cabinet for Standardization

Petr Novák, Ministry of Local Development

Ondřej Folk [o.folk@nrzp.cz] (access expert: Dagmar Lanzova, CNDC expert consultant for accessibility)

State Legislation with accessibility requirements (technical or functional)

Act on building No. 183/2006 Coll. including amendments contains also provisions regarding accessibility in buildings.

Building Regulations

Code No. 398/2009 Coll. on ensuring accessibility in buildings. The obligation for accessibility is embedded in the building code.

The building code provides for the basic requirements for building as far as the accessibility is concerned. Details are specified in implementing ordinances (Ordinance No. 398/2009 Coll. on civil-technical requirements for foundation engineering and use of barrier-free buildings).

The building code is valid for new buildings as well as for changes of finalized buildings and for changes in use of buildings.

For the finalizing of buildings there exist ordinance No. 499/2006 on finalizing of buildings where some details are also specified.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Guide 6 - Guidelines for standards developers to address the needs of older persons and persons with disabilities was translated (in fact as ISO/IEC Guide 71) was 5 years ago translated by our association and published in a brochure together with the ISO/IEC Guides 50 and 51. We together with the national standardization body (CNI at that time) broadly distributed the booklet among the

members of standardization committees, standardization centres and other standard developers. In this way the implementation of the guide has been supported.

Probably there is no national standard on accessibility in the built environment available. All relevant EN are implemented. Some of ENs implemented as CSN are referred directly from the Code or from the implementing ordinances, respectively.

Other Bodies involved in accessibility of the built environment

Ministry of Local Development,

Ministry of Transport (accessibility in means of transport),

Ministry of Industry and Trade (particular products for disabled people),

Governmental Committee for Disabled People.

Some NGOs and professional associations are also involved to some degree.

The architect or designer is fully responsible for ensuring barrier-free access in buildings during design process as well as during execution of the building.

All persons participating at the design and execution of the building are responsible for safe and barrier-free execution of the building in accordance with the documentation of the building. This is checked during building permit process at the local building authority.

The accessibility of the building is checked during final building approval and then by inspections carried out during use of the building.

Public Procurement implementation

Yes; the Law No 137/2006 on public procurement

The National Association often complains on some particular problems related to accessibility of new buildings.

Conformance Assessment Schemes

Act No 22/1997 on technical requirements for products;

Order of the Government No.163/2002 on the scheme of assessment of construction products

The legislation concerning the SAC is fully compatible with the European harmonizing legislation.

Education/Training of architects, construction engineers, public procurers etc.

Ministry of Local Development intensively ensures courses for municipal building offices;

Česká komora akreditovaných inženýrů a techniků činných ve stavebnictví / the Czech Board of Accredited Engineers and Technicians in Construction Building – this professional association prepares training and professional education for their members.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Governmental Decree No. 253/2010 – national plan for creation of equal opportunities for years 2010-2014

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Targeted grants in the frame of the national programme of Accessibility For All.

Conclusion regarding accessibility in the built environment

A lot of done, a lot of missing.

Problem is that some EU harmonised rules (including standards) are of lower quality than previous schemes and rules.

In the Czech Republic the issue of accessibility (barrier-free use of buildings) is established in specific way, which seems to be different from these in other EU member states.

Accessibility is mostly covered by the Construction Code, not by the Antidiscrimination Act. Provisions of the Construction Code establish barrier-free use of buildings/constructions as public interest. Accessibility shall be included even in the stage of planning of all new buildings/constructions (planning management). In existing buildings (change of building = renovation; change of usage - e.g. from nursery to retirement home) the Decree provisions are applied unless there are serious area-technical or construction-technical reasons against (e.g. the elevator 1 x 1,4m cannot be built in the casing of 0,9 x 1m). Alike buildings/constructions being cultural heritage, the Decree is applied along the interests of cultural preservation.

Established parameters are related to the group of persons called in legislation as persons with reduced mobility (PRM). These include persons with physical disability (wheelchair users, persons with clutches, sticks, walkers, or walking slowly), persons with sensory disabilities (visual, hearing, learning), seniors, pregnant women, mother with prams or children under 3 years and persons with heavy or huge luggage). The Decree is divided in technical details in each chapter according to the needs of persons with physical, visual and hearing disabilities).

The Decree is followed by technical standards providing technical details.

There are no special standards of accessibility, these are included in each new or revised regulation, covering the needs of persons with physical, visual and hearing disability."

G.2.6 Denmark

Rapporteur/Informant: Soren Ginnerup [sog@sbi.dk]

State Legislation with accessibility requirements (technical or functional)

Accessibility requirements were first introduced through functional requirements in the Building Act and technically in [Building Regulations](#) of 1977. Regulations have been expanded gradually by each revision in 1984, 1995, 2008 and the present 2010 version. The Ministry of Economics and Business are responsible for core legislation and building regulations through its Danish Enterprise and Construction Authority. Guidelines on road and urban accessibility are controlled mainly by the Ministry of Transport, also responsible for implementing EU directives and access issues related to bus, rail and air passenger transport.

Building Regulations

Accessibility requirements in the [Building Regulations](#) are partially checked by Municipal Authority Building Controllers, according to schemes set up locally. Major variations in level and detail are seen from Municipality to Municipality for this reason, including follow-up procedures. It's important to notice that building controllers are not liable for accessibility requirements not being met in a building, as this by law resides solely with the owner or builder. Consequently, the completion stage is not associated with a full sign-off by the authorities, and flaws in buildings theoretically remain reportable even years after completion. Upon reception of complaints the authorities are then obliged to demand that the building owner takes steps to correct the issue.

When refurbishing and adapting existing buildings with public access, newbuilding control procedures of close to regulatory status have been in force since 2005, leading to a gradual improvement of accessibility in existing buildings.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Danish Standards have published [DS 3028 \(2001\), Accessibility for All](#), covering buildings for private and public use, largely implementing the functional requirements of Guide 6.

Other Bodies involved in accessibility of the built environment

As of 2006 the Danish Building Research Institute has taken over production of accessibility design guidelines, closely linked to the Building Regulations. The guidelines have more or less replaced the

DS 3028 standard, and standardization development focus has very much turned towards upcoming ISO and CEN standards that may become part of future EU regulations.

Co-operation structures between relevant public & private bodies and NGOs are of formal as well as informal nature, and only few major initiatives are not coordinated to some point.

Besides from a few organizations that may be employing their own assessment schemes, all checking of conformity is assigned to local municipal authorities, and, in particular, the builder and/or owner.

Public Procurement implementation

There is no formal regulatory procedure for procurement concerning accessibility of the built environment, mainly as all buildings are subject to the requirements in the Building regulations. Publicly procured projects with work places, offices, shops etc. inherently should be accessible. Actual level of accessibility of course is subject to standards of procurers, knowledge of consultants and influence of building control procedures.

Conformance Assessment Schemes

[Conformity schemes](#) are designed by the municipal authority building control departments themselves, and harmonised National schemes do not exist. The stage of the building process at which formal and informal assessment starts for this reason varies greatly, but often happens at the stage of application for a building permit or possible introductory talks. Municipal Authority Building Control departments are the principal bodies involved in conformity assessment.

Education/Training of architects, construction engineers, public procurers etc.

Short introductory courses on accessibility are being offered by the Danish Building Research Institute, Aalborg University, directed towards built environment related educations. Some courses are part of the curricula in a few schools of architecture, but do not carry a compulsory status.

Consultancy organizations report that formal expertise and capacity in general is lacking throughout the industry, and ask that access consultant training modules be set up as soon as possible. A basic level module for architects, engineers and consultants is being introduced in 2011 at the Danish Building Research Institute, University of Aalborg, and a master in Universal design is planned to follow in 2013.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Regarding the UN convention accessibility obligations to be largely met by the current building regulations, possible further action plans are more likely to be generated by EU directives than by National initiatives. Large scale action plans are not planned at the moment.

Allowing accessibility requirements in the latest versions of the building regulations to maintain their technical specification nature demonstrates that accessibility is being treated differently from other matters, the majority of which have undergone a gradual transformation into functional requirements instead.

Ensuring capacity building and tools for better compliance with existing regulations are selected areas of action in the next couple of years, mainly as part of funds allocated to University of Aalborg projects.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Activities for existing buildings to improve accessibility: Government funds for improvements in access to buildings with public service functions have been active since 2006, and approximately 100 projects per year are compensated up to 25 % of accessibility related costs.

[Building regulations](#) ensure that the majority of new public and private housing, including single family homes, be accessible or at least visitable to a certain point, ensuring a growing mass of relatively easily adaptable homes of all categories.

Special funds are in place to finance an annual refurbishment of considerable numbers of existing multilevel housing areas, focusing to a very high degree on improved accessibility.

Formerly a prize existed for buildings with cultural purposes, but currently no awards are available.

Conclusion regarding accessibility in the built environment

Weak points and gaps in the general situation

Compared to other countries it seems characteristic that the absence of a Discrimination Act influences the awareness and preparedness of procurers to comply with more than the basic measures for accessible buildings, prescribed through regulations. On the other hand, basic universal design in an informal sense is already part of the building regulations, particularly on step-free access which applies to each and every entrance in all types of buildings, including private homes, a case not being seen anywhere else in the world. The weak side may be, though, that fulfilment of requirements is more difficult to accomplish in practice, and that control gradually has been reduced over the past 25 years, possibly offering too little assistance in the critical stages of the building process. With responsibility being stressed as an issue concerning the owner of a building, and to a lesser degree the municipal authorities, a clear gap is present here.

Consequently, the most important points for improvement in my view would be improved quality assessment procedures supporting self-declaration of existing rules; a discrimination act influencing the accessibility of existing environments, and, finally, mainstreaming of universal design strategies in planning and design, through better education and training.

G.2.7 Estonia

No rapporteur available.

G.2.8 Finland

Rapporteur/Informant: Maija Könkkölä [maija.konkkola@invalidiliitto.fi]

State Legislation with accessibility requirements (technical or functional)

In 1973, a clause was added to the Finnish Building Decree that stipulated, for the first time, that planning should also give adequate consideration to the needs of people with impaired mobility or orientation skills. In 1978, a group of associations of disabled people lodged an official complaint with the Chancellor of Justice, concerning the absence of any lift in the town hall of Kauniainen (a small town near Helsinki); this complaint resulted in an acknowledgement of the need for a lift in public buildings even if they only have two storeys, and provisions and guidelines to this effect were incorporated in the relevant legislation.

Gradually, the effect of the decree began to be seen in new buildings. Disabled people still had to lodge complaints many times, especially when attempts were made to avoid the lift requirement when buildings were built on a slope and access was possible from ground-level to both storeys.

To stop this, in 1985 the Ministry of the Environment, which is responsible for matters concerning building, issued new and stricter provisions and guidelines, although the decree itself remained unchanged.

In 1990 the time was at last ripe for a reform of the Buildings Decree, so that instead of referring to "adequate consideration" it now spoke of premises to which everyone had an equal right of access.

At the same time, a new clause was introduced into the decree. This stipulated that all buildings, i.e. including residential buildings too, should be appropriate to the needs of children, old people and people with a disability. However, this clause was interpreted to mean that only apartment blocks of four storeys or higher must have a lift; on the other hand, in buildings that do have lifts, it was taken to mean that bathrooms and lavatories must be large enough for users with wheelchairs.

In 1995 there was a change in the Finnish Constitution which forbids all discrimination on grounds of disability or illness. This for its part influenced positively the development of Finnish building

legislation.

The highest authority in planning and building is Ministry of the Environment. In municipalities, the building permissions are given by municipal Building Control Committees.

Building Regulations

A new "[Land Use and Building Law](#)" came into force in the beginning of the year 2000. There are many places in this law where the demand of accessibility is mentioned. Public and private spaces for administration, services, business, working spaces, blocks of flats and pedestrian spaces must be and be kept accessible.

New [Building Regulations and Guidelines F2](#) concerning safety came into force in 2001 and Building Regulations and Guidelines [F1](#) and [G1](#) in 2005. In them the accessibility regulations have become better than before. It is no more possible to build blocks of flats with three storeys or more without a lift. Also the entrances of small houses must now be made accessible.

In Ministry of the Environment is now starting an operation to make the building regulations and guidelines more clear so that they are easier to follow.

A big problem is, that in different municipalities the law and regulations are followed differently. The Building Control Committees are generally stricter in large cities than in rural municipalities. A problem has also been the habit of neglecting the accessible entrance to small houses. Perhaps the reason is, that there are no sanctions for neglecting accessibility. Town-planners are not enough aware of what are the access principles in planning and building.

When an existing building is renovated so that it needs a building permission, it must be made accessible principally according to the regulations and guidelines for new buildings.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

To my knowledge, Guide 6. is not used in standardization. ISO/TR 22411:2008 concerning vulnerable groups has been translated into Finnish.

Other Bodies involved in accessibility of the built environment

In Finland "Rakennustietosäätiö" (The Building Information Foundation) publishes "RT-cards" (Building Information Cards) concerning building guidelines and building products. There are cards with information about accessibility and in some cards the information about accessibility is integrator with other information. There is also an illustrated publication called "Esteetön rakennus ja ympäristö 2007" (Accessible Building and environment).

Some publications have been produced in Finnish Association of People with Physical Disabilities ordered by Ministry of the Environment. The Ministry of Education and Culture has produced publications concerning sports facilities. Many associations of people with a disability have produced several publications about accessibility.

In some municipalities there is an accessibility ombudsman. Most municipalities have a municipal disability council with expertise in accessibility. Some associations of people with disabilities also have people who can give guidance in accessibility matters.

Public Procurement implementation

There is no legislation yet concerning accessibility in public procurement.

Conformance Assessment Schemes

Education/Training of architects, construction engineers, public procurers etc.

The students learn at technical universities and colleges what is necessary concerning accessibility according to the law and regulations. Architects who have studied earlier have little or no education about accessibility. A big problem are negative attitudes towards accessibility among older

generations of architects and engineers. Unfortunately these attitudes often are inherited by younger colleagues too. Accessibility is not regarded as a human right and an essential part of sustainable building.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Finland has not ratified the Convention. The action plan VAMPO (Finland's Disability Policy Programme) has been approved 2010. There has not been accessibility action plans for Finland in the past. Helsinki has a ten-year accessibility project "Helsinki for All" ending 2011.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

ARA (The Housing Finance and Development Centre of Finland) supports new lifts in old multi-storey dwelling houses. Municipalities support modifications in the homes of severely disabled people.

There is a yearly award Accessibility Prize by Architects' and designers' Armi Association and the Finnish Association of People with Physical Disabilities.

Conclusion regarding accessibility in the built environment

Architects, builders in general and politicians are now active in ecological and economical issues but seem to neglect social issues such as accessibility in the built environment. We need more awareness, change of attitudes and education in accessibility matters.

When guidelines concerning sustainable built environment are presented, they must be integrated with guidelines for accessibility.

Accessibility must be regarded as a human right of people with disabilities. In new buildings, accessibility is a wise investment to the future. It benefits all people. This must be understood. Economical resources must be used to promote accessibility in existing buildings, too.

G.2.9 France

Rapporteur/Informant: Eric Gaussorgues [eric.gaussorgues@afnor.org]

State Legislation with accessibility requirements (technical or functional)

A [new law in 2005](#) makes an obligation to build any new building (habitation, for public or for workers) with accessibility requirements and all existing buildings receiving public and systems of transportation must before 2015 make works to allow the accessibility.

Building Regulations

[Law of 2005, February the 11: art 41 to 47](#)

Decree 1657, May the 17th

Order, August the 1st

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

No accessibility standards available.

Other Bodies involved in accessibility of the built environment

All kind of associations of disable people,

Public Procurement implementation

If there is no respect of accessibility regulations, no subsidies are allowed in public works sites.

Conformance Assessment Schemes

Departmental commissions of accessibility in any new project, including states agents, associations

Education/Training of architects, construction engineers, public procurers etc.

Regulated by the law, there is an obligation to organize the learning of accessibility in schools of architecture.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Not in my point of view but the convention has been recently signed by the state of France.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Specially private or NGO's initiatives.

Conclusion regarding accessibility in the built environment

The [new law](#) is recent but very complete and ambitious.

G.2.10 Germany

Rapporteur/Informant: Dr. Volker Sieger [sieger@institut-bgm.de]

State Legislation with accessibility requirements (technical or functional)

In 2002, the [German Federal Disabled Persons Equality Act \(BGG\)](#) came into force, followed by the corresponding [regional laws](#) in the respective federal states (*Laender*) in subsequent years. The laws, whether at national or regional level, define neither functional nor technical requirements for accessibility. However, they do specify that accessibility must be ensured when structures are built. These laws refer to all new buildings and extensive conversions of existing ones. The principles of the inviolability of property and proportionality apply to improving accessibility in existing buildings.

The Disabled Persons Equality Acts, whether on a [federal](#) or [regional](#) level, have also had a direct impact on more specific legislation (e.g. laws concerning the conveyance of passengers). Other specific legislation (e.g. construction legislation) has also been amended to take accessibility requirements into account. Specific legislation stipulates in general terms that accessibility must be ensured but only specify functional requirements in exceptional cases. However, all such legislation stipulates that accessibility must be ensured either by applying the generally recognized rules of technology or specific technical rules (e.g. [DIN 18024](#)).

A list of all mandatory or recommended technical rules for the various legal fields, whether at federal or *Laender* level, does not yet exist but is due to be published in late 2012 (by the Institute for Accessibility and Mobility, Mainz, and the German Association for the Blind and Partially Sighted, Berlin).

Building Regulations

[Building regulations](#) – *different Responsibilities*

The construction ministries in each of the 16 *Laender* and the construction authorities that operate under the control of the construction ministries are responsible for building, i.e. buildings to which the public has access and other structures, as well as housing.

The ministries of transport in each of the 16 *Laender* are responsible for civil engineering works, i.e. public roads and highways, and for public transport. This field is not dealt with here as the legal situation in this field is far more complex than in the building sector and specific rules apply to the construction of tunnels or structures built by the national railway company, for example.

Building Regulations and Implementation in practice

Apart from certain exceptions, the *Laender* are responsible for building legislation. The regional building codes generally stipulate that accessibility has to be ensured in new buildings. Lists of technical building regulations drawn up by the respective construction ministry exist to aid the implementation of construction legislation in practice and compliance with the regulations included in the list is mandatory for clients and architects. The relevant declarations in writing have to be submitted.

Fourteen of the 16 *Laender* have included the currently valid [DIN standards on accessibility](#) ([DIN 18024](#) and [DIN 18025](#)) in their lists of technical building regulations, either fully or partially. In one federal state they are regarded as generally recognized rules of technology and are applied as such. Only in a single federal state are they regarded as one of a number of possibilities of ensuring accessibility.

It can be more or less assumed that all 16 *Laender* will include the new DIN standards on accessibility ([DIN 18040-1](#) for buildings to which the public has access to be published in October 2010 and [DIN 18040-2](#) for housing, to be published in 2011) in their lists of technical construction regulations. The same mandatory technical rules on accessibility would then apply throughout Germany.

It is not usually checked whether the list of technical construction regulations has been fully taken into account. However, the respective building authorities have the right to carry out checks at any time. This also applies to accessibility. In practice, compliance with the regulations is only checked when third parties (e.g. the official local representative for disabled persons or a representative of an association for the disabled) identifies infringements of the regulations in plans or in completed buildings. As clients and architects alike are obliged to comply with the list of technical building regulations, the necessary legal action can be taken at any time, in the same way as for all other infringements of valid building regulations.

Accessibility within existing buildings with lower or equal requirements?

The [building codes](#) of the *Laender* do not draw any distinction between new buildings and modernisation. The building codes and technical building regulations apply to all construction work. However, in view of the protection of property, consideration is always given to limiting the financial cost of ensuring accessibility in existing buildings to a reasonable level. Improving accessibility in existing buildings is therefore the exception rather than the rule.

The technical rules do not include lower requirements for improving accessibility in existing buildings. The relevant technical rules for new buildings, e.g. the [DIN standards](#) referred to above, always apply to modernisation work in existing buildings and for limited building conversions. Recommendations are given in numerous handbooks and guidelines.

According to a decision of the relevant DIN committee, it is not currently planned to publish a separate technical body of rules for improving accessibility in existing buildings. German associations for the disabled in particular oppose separate technical rules only for existing buildings. They support the view that the relevant standards for new buildings should also apply by analogy to existing ones, in line with current practice.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization?

There are a number of [DIN standards on accessibility issues](#) (see data collection Germany).

CEN/CENELEC Guide 6 is probably seldom applied, due to lack of familiarity with it.

Other Bodies involved in accessibility of the built environment

Disabled persons and representatives of associations for the disabled are members of the committees in charge of preparing standards for accessibility.

Public Procurement implementation

As all public tenders in Germany have to comply with the recognized rules of technology and respect the lists of technical building regulations new buildings with public access have to be accessible. Similar rules apply to housing for which public tendering procedures are carried out. This is usually only the case for rented housing run by housing associations.

Conformance Assessment Schemes

Generally the municipal building authorities are responsible for ensuring compliance with legal and technical regulations (see above). However, they only check compliance in individual cases or if any infringements are reported (see above).

Generally accessible buildings – compared with UN Convention list

Work places are not subject to the [building legislation](#) described above. They are generally made accessible if disabled persons are employed. Public grants for employers are available in this case, the grants being financed by a fund into which employers that do not employ any, or too few, disabled persons pay a compensation charge.

For office buildings that are subsequently used partially as workshops and partially as units to which the public has access (e.g. doctors' surgeries), the number of units that are not accessible is estimated to be very high.

All other buildings and structures such as hotels, restaurants, shops, post offices, doctors' surgeries, chemists etc. are listed in the building regulations as buildings to which the public has access and therefore fall under the provisions of building legislation, so that application of [DIN 18024-2](#) (soon to be replaced by [DIN 18040-1](#)) is mandatory.

In spite of the presumably considerable number of buildings that are accessible to the public but that, in contravention of the building regulations, do not (adequately) comply with requirements for accessibility, it can generally be said that all new buildings are accessible. However, as the construction of new buildings and extensive conversions are only part of the construction activities taking place in Germany there is no reliable data on the percentage of accessible buildings available.

There is no reliable data for housing either. However, it must be assumed in this case that only a very small percentage of housing units are accessible. This is mainly due to the fact that around 80 per cent of construction work is on existing buildings (modernisation of housing built in the 1950s and 1960s). As already mentioned above, it is very difficult to ensure accessibility in existing buildings, especially in housing, owing to the principle of proportionality.

Education/Training of architects, construction engineers, public procurers etc.

There are no compulsory modules dealing with accessibility in degree courses for architects and engineers in Germany.

Expertise with regard to accessibility is available in numerous publications on the subject but the number of experts with specialist knowledge of this field who would be able to assess accessibility for public or private clients is very small. The architectural associations for Berlin-Brandenburg and Saxony are just beginning to offer training courses in this subject for architects.

Accessibility seldom appears on curricula and then only as an optional element.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

The federal government is currently drawing up a plan of action to implement the UN Convention.

As accessibility has to be implemented first and foremost by the *Laender*, in particular due to the fact that the federal states are responsible for building legislation and passenger transport, action plans at this level will be particularly important. The government of the federal state of Rhineland-Palatinate has already passed an action plan to implement the UN Convention. Other regional governments, in North Rhine-Westphalia for example, are in the process of drawing up action plans.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

The government-owned bank *Kreditanstalt für Wiederaufbau* (KfW) awards cheap loans to private individuals and housing associations for modernisation work in existing housing.

The work carried out must improve accessibility. Compliance with individual modules defined by the KfW has to be achieved (e.g. improving accessibility by installing a lift or stair lift, accessibility in bathrooms).

Any activities for existing buildings to improve accessibility?

There are unfortunately only very few such activities. Only the federal state of Rhineland-Palatinate has introduced a provision in its Disabled Persons Equality Act according to which the *Land*, local

authorities and other public institutions are meant to gradually improve accessibility in existing buildings. We are not aware of the existence of similar provisions in any other federal states.

Conclusion regarding accessibility in the built environment

Good practices in the country

Existing building legislation, in particular the lists of technical building regulations and, generally, the reference to [DIN 18024-2](#), guarantee that accessibility is ensured in new public buildings and in existing public buildings after extensive conversion work. Accessibility can therefore be legally enforced even though the relevant building authorities rarely carry out checks.

When [DIN 18040-1](#) is published, all federal states will probably gradually include the new standard in their respective building codes so that Germany will soon have a basis for ensuring accessibility in buildings that is accepted by all of the most important interest groups.

The situation for new housing will be similar when [DIN 18040-2](#) is published in 2011. Irrespective of this, however, each of the sixteen federal states stipulates in its own building code the minimum number of accessible housing units that must be provided in each residential building. The situation is still very unsatisfactory in many federal states (see below).

Weak points and gaps in the general situation

One weak point is the lack of checks carried out by the building authorities. During deregulation and the reduction of bureaucracy the number of staff employed by the building authorities was gradually reduced. Thus the authorities can practically only react if they are notified of infringements of the building regulations. Due to the lack of staff, compliance with regulations on accessibility is almost only ever checked in the case of large construction projects.

Another weak point is that there is no legal obligation or other incentive to improve accessibility in existing buildings that are accessible to the public. For example, hardly any old restaurants have toilets for disabled guests.

It is also unsatisfactory that in most federal states there are almost no regulations stipulating the number of accessible rooms that must be provided in new hotels even though hotels are accessible to the public and therefore have to ensure accessibility.

As far as housing is concerned, it is unsatisfactory that, in spite of the standards on accessibility (currently [DIN 18025](#), in future [DIN 18040-2](#)), the building regulations of the 16 federal states have separate, and different, rules concerning how many accessible housing units must be provided in each residential building. In many federal states, the number of accessible housing units stipulated in the respective building regulations is insufficient and an amendment to the regulations would be desirable.

Regarding the subject of accessibility as a whole, the amount of old housing stock is probably the greatest problem in Germany. As most construction activities take place in existing buildings, the building regulations only apply to a limited extent, as mentioned above. As a result, there will be a lack of accessible housing in Germany for many decades to come. This not only conflicts with the UN Convention, it will also make demographic change difficult to manage.

G.2.11 Greece

Rapporteur/Informant: Katerina Papamichal [papamikat@yahoo.gr]

State Legislation with accessibility requirements (technical or functional)

The [Greek Constitution](#) guarantees equal rights for all citizens. This includes the rights of people with disabilities to participate fully in society (article 21).

Functional requirements are stated in various laws to ensure accessibility to **public buildings, spaces and facilities** for “people with special needs”, “people with reduced mobility”, “people who encounter obstacles” and “people with disabilities”. **Private dwellings** have only limited

requirements concerning access to buildings and provision of lifts in apartment blocks over 3 storeys high.

Since June 1985 an **Office for Studies for People with Special Needs** was established in the Ministry of Environment, Planning and Public Works, with the purpose to eliminate barriers and to improve the awareness of technicians and all the actors responsible for this issue. This office provided important input to the [General Building Regulations](#) and also published the first Greek "[Guidelines on Designing for All](#)" (1998). The Guidelines, including functional requirements and technical specifications, are referred to in almost all the legislation concerning the built environment, and can therefore be regarded as *de facto* standards.

Most of the legislation on accessibility in the last 10 to 15 years has been issued by the Ministry of Environment but other Ministries such as Tourism, Health, Social Welfare and Transport have produced legislation which includes accessibility requirements and specifications. All of these refer to the above [Guidelines](#).

The Athens 2004 Olympic and Paralympic Games gave a considerable impetus to the awareness and knowledge of accessibility issues and led to a wide range of solutions in the Olympic cities, especially in Athens.

Since 2005 the Ministry of the Interior has been given responsibility to direct and coordinate the implementation of accessibility to the built environment in prefectures and municipalities.

There is a ministerial accessibility committee coordinated by the Ministry of the Interior and an accessibility committee for improving the [general building regulations](#).

Building Regulations

The Greek planning system is characterized by a multiplicity of laws and a command-and-control type regulation. Planning control is realized through the building permit. This permit is required for any work of construction. There is a lack of efficient monitoring and control mechanisms in the implementation of accessibility.

The Ministry of Interior has begun in past 5 years to enforce the follow-up of the accessibility regulations more effectively by means of circulars, action programmes and conformity assessment schemes in ministries and municipalities. This system is not yet fully used in practice.

The Greek National Tourist Organisation (EOT) has a follow-up procedure since it checks the accessibility of new and renovated hotel buildings and facilities as part of the star classification assessment system.

Conformity checking was carried out thoroughly for the Athens 2004 Olympic and Paralympic Games installations, buildings and outdoor environments.

There is special legislation and [action programmes](#) to improve the accessibility of all existing public buildings. The implementation and follow up is not yet effective. There is no public financial support or incentives to improve the accessibility of privately-owned buildings (homes or businesses).

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization?

There are accessibility standards for construction, built environment or building products published by the National Standards Organisation, only general standards, e.g. [for lifts](#), following EU directives.

[Standards are not in line with the functional requirements of CEN/CENELEC Guide 6. Standards e.g. for lifts refer only to construction, operation and maintenance]

Other Bodies involved in accessibility of the built environment

Production of accessibility design guidelines

[Accessibility Design Guidelines](#), Ministry of the Environment (1998). Guidelines for Access of People with Special Needs in Public Spaces (2001), the Ministry of Health and Social Welfare.

[Design Guide for Accessible Beaches](#), The Ministry of Development (2003).

[Methodology for Checking Accessibility in Public Services and Infrastructure](#), The Ministry of Interior has published a (2008)

Co-operation structures between relevant public & private bodies and NGOs

Public bodies (ministries and departments) have cooperated with disability NGOs on access issues and actions over many years. The national organization of disability associations (ESAEA) must be consulted (by law) on matters concerning people with disabilities. The private sector is not especially involved in actions or programmes to improve accessibility.

Information about disabled people's rights and accessibility is disseminated by Disability Now (www.disabled.gr) to disabled people and everybody who is interested and also by ESAEA (www.esaea.gr) and other disability organisations. Disability NGOs also participate in local, regional, national and EU projects on accessibility.

Bodies that are checking conformity with legislation (public and others)

Building permit authorities (should) check the basic access requirements of submitted plans but there is no follow up after construction.

Greek National Tourist Organisation makes checks of plans for hotels, rented rooms etc. in connection with assessment for the star rating. Constructions are then checked to ensure conformance with the awarded star category. Some accessibility requirements can vary according to the star category, 1 to 5.

In recent years all municipalities have been directed to conduct accessibility conformance checking and improvements for the outdoor environment and public buildings but implementation is very weak.

Public Procurement implementation

There is no especially legislated procedure for procurement concerning accessibility of the built environment. The access requirements that are foreseen in the applicable laws for every case must be included in the general requirements of the procurement.

Accessibility measures are not systematically implemented generally. In the private sector, the access requirements for lifts and level access / ramps to buildings are mainly considered but not everywhere. Catering establishments should have a disabled toilet by law. Parking spaces for disabled people are more common nowadays. There is no general awareness among architects to use a Design for All approach in the whole project.

Conformance Assessment Schemes

Building permit offices must study application plans to ensure conformity with the law. During construction, the engineers of the public bodies follow the general implementation of the project but specific conformity in relation to accessibility is not usually by a written procedure.

Education/Training of architects, construction engineers, public procurers etc.

There are no obligatory courses in accessibility / Design for All at schools of architecture. Accessibility might be taught within other lessons, depending on the lecturer's knowledge and priorities.

Generally there are few experts on accessibility to the built environment in Greece. They are mainly the architects and engineers involved in producing laws, guidelines and actions.

After the publication of the [Ministry of Environment Design Guidelines](#), 1998, several courses were given for municipalities with the co-operation of the Technical Chamber of Greece but today there is no public body responsible for such training or for continued professional training in accessibility.

Most technicians/ planners do not have expert knowledge or awareness of accessibility requirements and solutions.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Greece signed the CRPD on 30/3/2007. Greece has not signed the Optional Protocol, nor has Greece ratified the convention, (as of 21/8/2010).

Action plans to remove barriers and improve accessibility are in progress at municipal level, directed and coordinated by the Ministry of the Interior (circulars, conformity schemes with guidelines and questionnaires).

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

No public funds are available for new (and existing) multi-level housing, single apartment and/or family single homes to improve accessibility etc.

There is special legislation and action programmes to improve the accessibility of all existing public buildings. The implementation and follow up is not yet effective. There is no public financial support or incentives to improve the accessibility of privately-owned buildings (homes or businesses).

No awards are available which are considering accessibility in the built environment as a single subject or as a strategy for sustainability.

Conclusion regarding accessibility in the built environment

Good practices in the country

[Guidelines Designing for All](#) (1998) issued by the Ministry of the Environment, Planning and Public Works have become the *de facto* standard for access criteria / solutions.

The pedestrian route which unifies the archaeological sites in the centre of Athens is an example of good practice in accessible urban design in an ancient city.

The Acropolis of Athens was provided with a platform lift and a vertical lift in 2004, making this World Heritage Site at last accessible to wheelchair users.

Transport systems: the Athens Metro, Tram and Electric Railway systems are fully accessible since 2004, with lifts and tactile routes at every station.

The [Design Guidelines for Beaches and access to the sea](#) (Min. of Development) are very detailed and well elaborated, but implementation is as yet very limited.

Weak points and gaps in the general situation

Complexity of legislation and many responsible authorities. Weak enforcement and weak follow-up.

Legislation focuses mainly on the requirements for mobility impaired people, especially wheelchair users and blind people, which also apply to other “people facing obstacles”.

But there is less consideration for requirements of deaf people and those standardization, but use of these standards is voluntary. On several areas of built environment, like safety of disabled people in fire or special building types have no regulation regarding to the accessibility at all.

All of the regulations, standards and technical specifications must be used in case of public buildings and facilities. Because they are structurally dispersed, thus sometimes contradicts are shown, it is difficult to apply them in practice.

with hearing impairments and learning difficulties. Legislation does not refer to needs of people with allergies

Blind routes – tactile pavements - are widespread (in Athens) but are not implemented properly in many cases.

General awareness about accessibility and respect for disabled people’s rights is low, e.g. car parking on pavements and dropped kerbs is common.

No education of students of architecture and engineering in accessibility / Design-for-All.

Activities to improve the existing building stock according accessibility

Action plans/ conformity scheme and circulars by the Ministry of Interior.

[“Jason” Action plan](#) by the ESAEA

G.2.12 Hungary

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State Legislation with accessibility requirements (technical or functional)

In Hungary the [Government Decree on National Building Requirements](#) (Government Decree No. 253/1997. (XII.20.)) contains the basic technical dates regarding to the accessibility of the built environment which must be observed in the building permission process of new buildings and also adaptation or refurbishment of existing buildings. The Ministry for National Economy is responsible for legislation on this National Building Requirements.

Building Regulations

The experience is that using only general technical dates described in [National Building Requirements](#) do not result in expected level of accessibility. After the building permission process there is no real follow-up on implementation of accessibility. The final construction drawing should contain all of the necessary details, which determine the accessibility of the built environment basically. On this level of the building process there is no conformity assessment, except those projects financed by governmental bodies where rehabilitation engineers must be involved both in the planning and the implementation process. In case of these projects the fruition of accessibility in the completion phase is also must be proved.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Beside of the [National Building Regulation](#) there are some other departmental technical specifications, which also must be kept. The Hungarian Standards Institution (HSI) has published standards in reference to some special building constructions which are mostly based on CEN/ISO

Other Bodies involved in accessibility of the built environment

Beside of the deficiency in legislation, the other difficulty is the incomplete and insufficient knowledge of those persons involved in the planning and construction process. To fill this gap, several design guidelines have been produced in order to give overall information about the different types of disabilities and the effects of the built environment on disability. Although these design guidelines are not mandatory, in practice, they give the most sufficient and useful functional information and technical dates regarding to the accessible built environment.

The above mentioned design guidelines were developed by foundations or non-governmental organizations, in corporation with professionals expert on universal design and accessibility of the built environment.

Public Procurement implementation

Conformance Assessment Schemes

Education/Training of architects, construction engineers, public procurers etc.

In the education of architects the accessibility question is emphasised mostly through the student design projects. The main goal should be that all of the subjects contain accessibility-related parts in their own context. At the Budapest University of Technology Economics, Faculty of Architecture post graduated, two year Rehabilitation Engineering Program was accredited eight years ago. Until nowadays, more than hundred Rehabilitation Engineers graduated and work as architects or

consultant on different fields to promote the accessibility of the built environment for all. Most of them are members of REKORE Rehabilitation Engineering Society of Hungary, www.rekore.hu.

The Budapest University of Technology and Economics coordinated the AWARD project (Accessible World for All Respecting Differences) within the framework of the LEONARDO resulting in a richly illustrated DVD available in five languages (download: www.mfk.unideb.hu/profzold or on disc at request). The aim of the project was to produce electronic teaching material demonstrating the concepts of universal design in the built environment. The objective is to include the necessary knowledge in the curricula of vocational and higher technical institutes.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

To improve implementation of accessibility in the built environment the Hungarian government through the New Hungary Development Plan found adaptation or refurbishment of existing public buildings and building new ones. Besides, VÁTI Public Non-profit Company invites entries for a competition of “Accessible Building of the Year” regularly. The award goes to buildings mostly meet the accessibility requirements.

Conclusion regarding accessibility in the built environment#

G.2.13 Ireland

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State Legislation with accessibility requirements (technical or functional)

The principal legislation that covers accessibility to the built environment in Ireland includes:

[Building Control Acts \(1990 – 2007\)](#) Enabling legislation for the control of standards in design and construction under which building regulations and building control regulations are made. Includes provisions for access for people with disabilities (Part M).

[Employment Equality Act \(1998 – 2004\)](#) Requires employers to make reasonable accommodation for employees including adapting premises and equipment

[Equal Status Acts \(2000 & 2004\)](#) Requires reasonable accommodation of people with disabilities in the provision of goods, services and accommodation, including access to premises and information, and access to education

[Disability Act 2005](#) Contains specific accessibility requirements for public sector organisations to make their buildings more accessible, to improve access to their services, to consider access in the procurement process, to make information to which the public have access more accessible and to improve access to heritage sites.

Authorities responsible for legislation on accessibility in the built environment include the Departments of Environment, Heritage & Local Government and the Department of Community, Equality and Gaeltacht Affairs. Other departments with responsibilities include Health & Children, Transport, Enterprise, Trade & Innovation and Social Protection. The Department of Environment is responsible for Planning and Building Control legislation through the Local Authorities. The National Disability Authority (NDA) is a state agency that provides independent expert advice to Government on policy and practice.

Building Regulations

[Part M of the Building Regulations](#) (Access for People with Disabilities) was introduced in 1991. The [current Part M regulation](#) (Access and Use) was updated in 2010 and its aim is now less focused on disability and more on inclusion for all. The regulation is performance based and is supported by a technical guidance document. The regulation covers access and use of buildings. It applies to all new buildings, to extensions, to material alterations of existing buildings, and to material changes of use. It also applies to dwellings but only to the extent of achieving visitability. The 2010 technical guidance includes a separate section for existing buildings for use where the higher standards for new buildings cannot be achieved if it is impracticable. Guidance on many building types is limited.

Primary responsibility for compliance with building regulations in Ireland rests with designers, builders and building owners with minimal resources available within the local authorities to enforce and control the regulations. This has resulted in relatively poor compliance levels. Up to 2009 no prior approvals or permits were required apart from the requirement to obtain a Fire Safety Certificate. In 2009 a Disability Access Certification Scheme was introduced which now requires all works, other than dwellings, to obtain a Disability Access Certificate (DAC) prior to the building being opened, occupied, or used.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

There are currently no Irish national standards developed for accessibility of the built environment and British Standards are commonly used. The National Disability Authority has published a comprehensive guidance document on best practice for accessibility of the built environment [Building for Everyone](#) which is currently being revised by the Centre for Excellence in Universal Design (CEUD). The [revised version](#) is due for publication in 2011. The NDA/CEUD has also published national codes of practice and guidelines on [Accessible Maritime Transport](#), for [Public Transport Operators](#) and for ICT and Public Access Terminals.

The National Standards Authority of Ireland (NSAI) has established an Accessibility for All Standards Consultative Committee (AASCC) in 2005. A working group of this committee focuses on access to the built environment and is actively involved in the development of ISO DIS 21542.

The NSAI recently provided training to people with disabilities, disability organisations and people involved in developing national and international standards as part of the EC "Stand4All" project. Since the training has taken place the NSAI Access for All Standards Consultative Committee has established Working Group 7 to initiate training on the implementation of CEN/CLC Guide 6.

Other Bodies involved in accessibility of the built environment

Other statutory and non statutory/voluntary bodies have published accessibility design guidelines including the Local government Management & Services Board (LGMSB), the [Irish Wheelchair Association](#) (www.iwa.ie), the [National Council for the Blind of Ireland](#) (www.ncbi.ie), DeafHear and the [Association of Occupational Therapists](#).

There are no formal arrangements with such bodies to check conformity with legislation.

A Centre for Excellence in Universal Design (CEUD) was established by the NDA in 2007 under the Disability Act 2005. The main role of the centre is to contribute to the development and promotion of standards, education & professional development, and awareness of Universal Design in three areas – Built Environment, Products & Services and Information Technology.

Public Procurement implementation

The EU Directive 2004/18/EC was transposed into Irish legislation in Statutory Instrument No 329 of 2006. It includes provisions for accessibility and specific rules governing specifications and contract documents. It requires a contracting authority, when awarding a public contract, to ensure, as far as practicable, that the technical specifications for the contract take account of the need to prescribe accessibility criteria for all persons who are likely to use the relevant works, products or service, particularly those who have disabilities.

Section 27 of the [Disability Act 2005](#) requires that services supplied to Public Bodies are accessible to persons with disabilities, unless it would not be practicable or justifiable on cost grounds or would result in an unreasonable delay. The NDA is responsible for monitoring the implementation of the Disability Act including the section on public procurement. In 2008 an NDA survey on Accessibility of Public Services and Information provided by Public Bodies identified that 39.5% of public bodies reported having policies and 26.0%, procedures in place to ensure that goods and services supplied to them are accessible to people with disabilities. Just 36.5% of survey respondents reported having made changes to tender documentation under their control, to include accessibility criteria in the tender or tender scoring process.

Conformance Assessment Schemes

Conformance Assessment Schemes exist principally in the area of Planning and Building Control as operated by the Local Authorities. These schemes commence reasonably early in the design process but are mainly reliant on a process of voluntary “self-certification”. The Disability Access Certificate scheme, mentioned in paragraph 2 above is a recent development and it will be interesting to assess its impact in 2 / 3 years time. Its operation is proving controversial in some areas as there is wide variation between Building Control Authorities with regards to the interpretation of the functional requirements, in particular where the technical guidance is inadequate. A positive feature is that most designers are now acutely aware of the need to comply with the regulation.

Education/Training of architects, construction engineers, public procurers etc.

There are no legally binding instruments requiring the formal training of built environment professionals in accessibility. A number of under graduate and post graduate courses do include modules on accessibility and inclusive / universal design and some courses integrate it across all subjects. For the past 10 years the post graduate training leading to registration of professional architects has included accessibility as a core component of the course and examination. Training of those involved in public procurement would appear to be very limited.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans?

Ireland has signed the UN Convention but has not yet ratified it. The Irish National Disability Strategy was launched in 2005 and addresses some key areas of the Convention including accessibility of the built environment. However, as yet the Strategy does not extend to civil / political rights.

The National Disability Strategy is targeted towards the full integration of people with disabilities into the social, cultural, economic and political life of the country. It includes a national action plan and 6 sectoral plans, the implementation of which is monitored on an annual basis.

A new housing policy for people with disabilities is currently in development and due to be published by the Department of Environment in 2011.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Excellence Through Accessibility Awards (EtA Award)—This award scheme aims to objectively examine and encourage the accessibility of buildings, services and information technology provided by Government Departments and Agencies under their remit. (www.nda.ie)

O2 Ability Awards – Irish business awards which recognise best practice for the inclusion of people with disabilities as customers, employees and members of the community. One of the Ability Awards categories focuses on environmental accessibility and measure how accessible the organisations built environment is.

ABLE Business Excellence Award is a Quality mark for accessibility in business and was launched by REHAB and Excellence Ireland in 2009.

RIAI / OPW Accessibility Award forms part of the Architects’ Institute (RIAI) annual awards, and is sponsored by the office of Public Works. It is presented to the architects and building owner for the most accessible building.

Kanchi Network(www.kanchi.org) is a recently established business network designed to effect change in attitudes to disability through business

Grants are available for housing adaptations and mobility aids for people with physical, sensory, intellectual or mental health needs. The adaptations grant is means tested.

Conclusion regarding accessibility in the built environment

Good practices:

New building regulation now focused on Access for All. Improved technical guidance.

Standards Authority looking at gaps in national standards in conjunction with CEUD

Most projects procured as PPP (public private partnerships) include accessibility in briefs

EtA Award scheme a good model for improving accessibility within public bodies

Weak points and gaps:

Absence of effective & consistent Building Control / Conformance Assessment System

Limited Training/Awareness/Education/CPD and no professional accreditation of courses

No Irish / CEN Standards for external environments, and for auditing / certification

No systems for monitoring the management of accessibility within the built environment

Starting points for improvement:

Increase resources for building control and levels of inspection. Introduce mandatory self-certification by registered certifiers.

Strengthen accessibility in planning policies for wider environment and ensure greater co-ordination between local authority planning and building control

Develop good practice management protocols for accessibility of specific building types

Consider establishment of local "Access Boards" (as in Australia) or "Access Ombudsman" with authority to rule on difficult access problems within specified timeframe.

In public procurement all public bodies to include a statement of the accessibility objective of their policy / procedure. Suppliers to be asked to highlight accessibility features of their products / services and technical expertise in accessibility to be sought from tenderers

Existing building stock:

Improve guidance on acceptable standards

Link funding mechanisms to access improvements and develop incentives

G.2.14 Italy

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State Legislation with accessibility requirements (technical or functional)

The principal legislation that covers accessibility to the built environment in Italy includes:

Legge 9 gennaio 1989, n.13: "Disposizioni per favorire il superamento e l'eliminazione delle barriere architettoniche negli edifici privati." (Measures to encourage the overcoming and removal of architectural barriers in private buildings)

National law 13 in 1989 introduced conceptual innovations at legislative level, which have now become part of the common language of planners: accessibility, visitability, adaptability, which defines three levels of usability.

The purpose is that of activating a planning process which gradually leads to full usability of buildings, in order to increase everyone's quality of life.

Decreto Ministeriale - Ministero dei Lavori Pubblici 14 giugno 1989, n. 236: "Prescrizioni tecniche necessarie a garantire l'accessibilità, l'adattabilità e la visitabilità degli edifici privati e di edilizia residenziale pubblica sovvenzionata e agevolata, ai fini del superamento e dell'eliminazione delle barriere architettoniche." (Technical requirements necessary to ensure accessibility, adaptability & visitability of private buildings and public housing, in order to remove architectural barriers)

Decreto del Presidente della Repubblica 24 luglio 1996, n. 503: "Regolamento recante norme per l'eliminazione delle barriere architettoniche negli edifici, spazi e servizi pubblici." [Rules for the removal of architectural barriers in public buildings, spaces and public services)

Authorities responsible for legislation on accessibility in the built environment include the Ministero dei Lavori Pubblici (Ministry of Public Works), Ministero per le Pari Opportunità (Minister for Equal Opportunity), Ministero delle infrastrutture e dei trasporti (Ministry of Infrastructure and Transport), Regional and Local Government. Other departments with responsibilities include Welfare, Enterprise, Social Affairs. The Departments of Public Works, Environment, Welfare and Social Affairs, are responsible for Planning and Building Control legislation through the Local Authorities.

Italy was one of the first Countries in Europe provided with a National Act on accessibility (D.P.R. n. 384 dated 27th April 1978) repealed by the National Act (D.P.R. n. 503 dated 24th July 1996).

Actually In Italy there are 4 National Acts:

- L. n. 13/1989 related to accessibility in private building, both new and existing;
- D.M. n. 236/1989 standards and guides on accessibility for internal and external environment;
- L. n. 104/1992 related to accessibility in public building and spaces, that act is very important because at paragraph 7 it fixes penal sanctions for architect, builder and mayor;
- and the above mentioned Act D.P.R. n. 503/1996 that lays down functional requirements duties for the built environment in general, both private and public, both internal and external.

Some Regions have their specific legislation such as Liguria, Lombardia, Veneto as well as different Municipalities include accessibility requirements in their local Building Regulations.

Three Authorities are responsible of the work: the architect who makes the project, the builder who makes the construction, the mayor who gives the building permission. All they three are responsible in front of the Court and they have to pay penal sanctions in case of mistakes.

Building Regulations

The current state building regulation on private buildings and public housing and open-to-public buildings (D.M. 236/89) dates from 1989. The current state building regulation on public building, places and facilities (D.P.R. 503/96) dates from 1996. Quite all technical prescriptions of D.P.R. 503/96 make reference to technical prescriptions of D.M. 236/89.

Both these regulations are performance based and supported by examples and technical suggestions. The regulation applies to all new buildings, to extensions and to material alterations of existing buildings, also historical ones. The technical guidance is primarily focused on people with mobility limitation with less guidance for people with other kind of impairments (e.g., sensory, cognitive).

Primary responsibility for compliance with building regulations in Italy rests with designers, builders and building owners with minimal resources available within the local authorities to enforce and control the regulations. This has resulted in relatively poor compliance levels.

There is not an external professional that checks and signs the accessibility level of the building/space.

The architect, who made the project, signs a self declaration on the accessibility of the building/space he designed.

Gaps: *Education at University does not include accessibility. Few people have a deep knowledge on it. If a person checks that a building is not built according with the regulation, the only proceeding is to denounce to the Court, but it is too long and expensive and people renounce if they are not directly involved.*

Accessibility of existing buildings has the same requirements as of new buildings

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

There are currently no Italian national standards developed for accessibility of the built environment. No one has published a reliable comprehensive guidance document on “best practice for accessibility of the built environment”, although hundreds of leaflets, publications and manuals about the removal of architectural barriers are printed every year.

UNI – Italian National Standard did not publish any accessibility standards for construction, built environment. They said because they find D.M. n. 236 – 1989 “standards and guides on accessibility for internal and external environment” enough. None as well is done about building products.

Other Bodies involved in accessibility of the built environment

Many statutory and non statutory/voluntary bodies have published accessibility design guidelines but there are no formal arrangements with such bodies to check conformity with legislation.

Accessibility guidelines are produced by architects under the mandate of the Government Authorities, Regions and Municipalities.

There is good participatory process with related NGOs on the development of legislation.

Architects make their certification on their done work and the Municipalities check their documentations and make the inspection.

Developer is responsible of checking conformity with the legislation. The local building committee (Municipality) has a supervisory responsibility. In few Regions like Liguria and Lombardia, where Regional Laws on accessibility exist, a certified Architect is the only one that can give the approval

Public Procurement implementation

The Italian Public Procurement is regulated by a Public Procurement Act : Decreto Legislativo n. 163 of 12th April 2006, “Codice dei contratti pubblici relativi a lavori, servizi e forniture in attuazione delle direttive 2004/17/CE e 2004/18/CE”. There is not a special legislated procedure in it because somehow all the National Laws must be respected.

Are new building projects with work places, offices, shops etc. in general now accessible in your country – and to what extent? They must be. If they do not, it is for mistake.

Conformance Assessment Schemes

Conformance Assessment Schemes exist principally in the area of Building Control as operated by the Local Authorities. These schemes commence reasonably early in the design process but are mainly reliant on a process of “self-certification”.

Conformity assessment schemes are available and introduced, first of all at design level, then before the building is handed over. All the new public buildings or private buildings for public use are inspected before the permit to open by a Social Health Department.

Which bodies are involved? *Architects, Builders, Municipality Authorities, Local Health System .*

Education/Training of architects, construction engineers, public procurers etc.

There are no legally binding instruments requiring the formal training of built environment professionals in accessibility. At the moment, a few number of under graduate and post graduate courses do include modules on accessibility and inclusive/universal design/design for all.

Training of those involved in public procurement would appear to be very limited.

Many Universities are developing educational voluntary schemes in the field of accessibility and Design for All, as well as other bodies or NGO.

Facultative or obligatorily introduced in the curricula for different professionals? Facultative

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans?

Italy has signed the UN Convention and ratified it.

DPI Italia Onlus

(<http://www.dpi.org/>, <http://www.make-development-inclusive.org/partner.php?spk=en&nb=10>) together with other national associations of people with disabilities are deeply involved in addressing all the areas of the Convention including universal design approach, accessibility of the built environment and reasonable accommodation issues.

Actions plans are still under study.

Italy works on accessibility action plans since 1988 using Government Fund.

Are there any new actions / policies to implement accessibility in the near future at national or regional level? *Implementation of accessibility in Historical Building.*

Awareness/Awards/Funds to improve implementation of accessibility in the built environment, see here some examples

Concorso Internazionale di Idee **“Progettare e realizzare per tutti”**:

(<http://www.lospiritedistella.it/attivita.html>).

Concorso nazionale **“Muoversi nell’immobile”**

(http://www.progettarepertutti.org/news/MUOVERSInellIMMOBILE_bando.pdf)

Grants are available for housing adaptations and mobility aids for people with physical, sensory, intellectual or mental health needs.

We have much initiative , but none of them are continued. That is a weak point.

*Italy has **Government fund** for private people who need their existing house accessible.*

*We have **initiative to improve accessibility** in existing & public housing.*

*Many Municipality, Region and NGOs every year promote **Awards on accessibility** on different subject : accessible university, tourism for all, accessible bar and pubs, new accessible design for Autogrill, etc.*

Conclusion regarding accessibility in the built environment

Good practices:

Effective, clear and quite complete accessibility laws focused on “Universal Design”

Well-written and well-illustrated technical manuals for Designers.

Award schemes are improving accessibility within designers

Accessibility in many ancient buildings such as Coliseum in Rome, Vatican Museum in Rome, Egyptian Museum in Turin, etc.

Weak points and gaps:

Designers tend to read and implement only prescriptive/dimensional solutions by the norm that refer almost exclusively to wheelchair users needs. This happens for two main reasons:

Designers haven't received suitable curricular training on Accessibility issue and Universal Design

The people (who are not always designers!) responsible for controlling a project and the solutions carried out:

- haven't received appropriate training on this subject
- tend to check accessibility only partially and ignore the context and final users of the space
- tend to check almost always the same things (i.e., dimensions of a bathroom but not the height of the sanitary fittings), often based on precepts of a repealed norm (D.P.R. 384/78)

Weak educational program at school level, weak spread of good practices, weak level of accessibility in hotels.

As a result, many designers comply with the controllers' requests - to the detriment of final users - just to avoid problems.

No Standards Authority looking at gaps in and between national and local standards

Absence of effective & consistent Building Control / Conformance Assessment System

Very limited Training/Awareness/Education and no professional accreditation of courses

No systems for monitoring the management of accessibility within the built environment

Most important starting points for improvement

Education and training for architect and public employers.

Activities to improve the existing building stock according accessibility

It would be great if documents on sustainable environment could include protection and support of Human diversities and social sustainability.

G.2.15 Latvia

No rapporteur available.

G.2.16 Lithuania

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State Legislation with accessibility requirements (technical or functional)

Law on the Social Integration of the Disabled of the Republic of Lithuania

(Lietuvos Respublikos Neįgaliųjų socialinės integracijos įstatymas)

http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc_l?p_id=373285

Art. 3, par. 6: the principle of accessibility for disabled people

Art. 11: Accessibility in built environment for disabled. **According to the article**, it is required to consider the accessibility in built environment for disabled in all areas of life when planning new territories and designing new buildings - public and private, when constructing public transportation objects and when adjusting informational environment to appropriate the needs of the disabled.

The main procedures for making the built environment accessible for disabled are established in the **Technical Regulation for Construction** (Order of the Minister for Environment on Approval of Technical Regulation STR 2.03.01:2001: "Construction and Territories. Requirements for Needs of Disabled People", No. 317)

http://www3.lrs.lt/pls/inter2/dokpaieska.showdoc_l?p_id=139277&p_query=&p_tr2=

Building Regulations

[Law on Construction of the Republic of Lithuania](#)

(Lietuvos Respublikos statybos įstatymas)

http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=378329

Art. 6, par. 3: Design, construction, reconstruction and major repairs of buildings and engineering works must be carried out in such a way that they will satisfy the specific needs of the disabled persons in compliance with the Law on Social Integration of Disabled People. This provision does not apply for reconstructions of dwelling houses.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Technical Regulation for Construction:

Par. 4: This regulation complies with the European Union standard ISO/TR 9527:1994(E) which established the minimum requirements for accessibility in the built environment for disabled people (Technical Report ISO/TR 9527:1994(E) Building construction - Needs of the Disabled People in Buildings - Design Guidelines).

Other standards from the website of Lithuanian Standards Board:

http://www.lsd.lt/typo_new/index.php?id=en

Safety rules for the construction and installation of lifts - Existing lifts - Part 82: Improvement of the accessibility of existing lifts for persons including persons with disability (CEN/TS 81-82:2008)

Guidelines for standards developers to address the needs of older persons and persons with disabilities (CEN/CENELEC Guide 6:2002, modified)

Other Bodies involved in accessibility of the built environment

The Department for the Affairs of Disabled at the Ministry of Social Security and Labour

Local authorities

Public Procurement implementation

Law on Public Procurement of the Republic of Lithuania

(Lietuvos Respublikos viešųjų pirkimų įstatymas)

Lithuanian version with latest

amendments: http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=387337

English version without latest amendments:

http://www.vpt.lt/admin/uploaded/VPI_vertimas_2007_red.pdf

Art. 25 Technical Specifications:

Par. 1: Supplies, services or works in procurement shall be described in technical specifications contained in contract documents. Certain definitions of technical specifications shall be given in Annex 3 to this Law. Whenever possible these technical specifications should be defined so as to take into account accessibility criteria for people with disabilities or design for all users.

Conformance Assessment Schemes

Education/Training of architects, construction engineers, public procurers etc.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

On 8 December 2010 the Government of the Republic of Lithuania adopted the decision on the implementation of UN Convention of the Rights of Persons with Disabilities and its optional protocol. As a result, several national institutions responsible for the implementation of the Convention were appointed.

http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=388475&p_query=&p_tr2=

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Conclusion regarding accessibility in the built environment

The legal basis for the accessibility in built environment is rather well established, however, several problems still exist that need to be solved. For instance, due to the lack of the effective surveillance mechanism the new buildings are often recognized as suitable for use although in practice they fail to comply with several requirements of the Technical Regulation for Constructions (the National Strategy for Social Integration of the Disabled for 2010-2012)

G.2.17 Luxembourg

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& Yannick Breuer

State Legislation with accessibility requirements (technical or functional)

In Luxembourg regulations around accessibility were limited to some safety criteria in public schools until 2001.

In 1999, the Ministry of Family (responsible for disability questions in Luxembourg) trusted the national disability information and meeting centre Info-Handicap to setup an interdisciplinary workgroup and to develop accessibility criteria to be anchored in a national legislation.

The members of the group analyzed the existing approaches at European level and adapted them to the national situation in order to come up with a set of recommendations to be published in a document called "[Guide des Normes](#)".

(http://www.welcome.lu/index.php?option=com_docman&task=doc_download&gid=7&Itemid=87)

In parallel an "interministerial committee" worked on the elements to be included in the legislation. The new legislation was composed of 2 parts:

- the main law

(http://www.welcome.lu/index.php?option=com_docman&task=doc_download&gid=68&Itemid) that anchored the obligation for accessibility of all new "public" buildings and all "public" buildings to be substantially renovated;

- the technical execution text of the law

(http://www.welcome.lu/index.php?option=com_docman&task=doc_download&gid=67&Itemid)) precisising the type of buildings, the elements, and the accessibility criteria to consider

Building Regulations

The law was (and still is) limited to "public" buildings, meaning buildings built or rented with public money by national or municipal authorities. The criteria address mainly spaces meant for the "visitors".

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Other Bodies involved in accessibility of the built environment

The control activities if the legislation is implemented are placed under the authority of a Governmental body, the “national office for safety in the public administration”. This body works with agreed companies, in general specialized in safety and energy saving activities, and trusts them with the accessibility controls. The law foresees that all checked buildings should be identifiable through a particular label, but this has never been done.

Public Procurement implementation

Public procurement activities in Luxembourg follow strict rules and the mandatory technical sheets for responding to calls have to be downloaded from a Governmental server. Although the recent Directives on public procurement have been transposed in Luxembourg, including the options for accessibility and for social criteria, the technical sheets do not yet take on board accessibility in a consequent way and the process for adapting them is quite heavy as it must be done in co-operation with the professional Chambers of each single profession.

Any accessibility related activity in the private sector (shops, restaurants, hotels, etc...) is purely volunteer and Info-Handicap, together with several partners has set up a National Accessibility Concept.

(http://www.welcome.lu/index.php?option=com_docman&task=doc_download&gid=69&Itemid=87) carried out by the MEGA (Multidisciplinary Experts Group for Accessibility) in order to raise awareness, provide technical guidance and organize training activities for the private sector. The concept includes also a label called “EureWelcome” to identify the private buildings that have been assessed.

Conformance Assessment Schemes

Education/Training of architects, construction engineers, public procurers etc.

As there is no school for architecture in Luxembourg, the raising of awareness at that level has to take place via special actions and information sessions organized on the initiative of Info-Handicap. Although there is a general awareness towards the importance of an accessibility/design for all approach, experience and consequence are lacking.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Conclusion regarding accessibility in the built environment

For the time being, the situation in Luxembourg can be summarized as follows:

There is a general “good-will” attitude towards accessibility, but only as long as there are no costs

Technicians are lacking information and craftsmen rely to architects (“I install what they tell me”)

Lobbying of people with disabilities is quite poor in Luxembourg

G.2.18 Malta

Rapporteur/Informant: Dr. Joseph Spiteri [joseph.spiteri@um.edu.mt]

State Legislation with accessibility requirements (technical or functional)

The Equal Opportunities (Persons with disabilities) Act of 2000 provides the framework legislation making it unlawful to discriminate against persons with disabilities in a number of areas including the built environment.

Following the enactment of this legislation the body charged with its administration, i.e. the National Commission for Persons with Disabilities (KNPD), published recommended standards for the built environment – Access for All Design Guidelines. The 2nd edition was published in 2005 and since then certain aspects are being reviewed and updated section by section.

Thus the accessibility guidelines provide the ‘nuts and bolts’ regarding dimensions but the authority is based on the anti discrimination act.

These guidelines have been adopted by the Malta Environment and Planning Authority (MEPA), the body responsible of issuing development permission in Malta, as an official Planning document by Ministerial decree.

Building Regulations

The Access for All Design Guidelines (KNPD:2005) are the relevant *de facto* Building Regulations concerning accessibility.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

None that I am aware of.

Other Bodies involved in accessibility of the built environment

The KNPD is the main body addressing these issues on a national scale.

Public Procurement implementation

Clauses / conditions regarding accessibility are generally included in public procurement documents.

Conformance Assessment Schemes

This works in two related ways.

At planning stage all planning applications for development permission regarding public – access buildings are vetted by the KNPD to control for compliance to the Access for All Design Guidelines. This procedure is under the guidance of KNPD consultant architect. Proposals that do not get approval from KNPD are not generally approved by MEPA. Hence no planning permit is approved without it being in compliance with accessibility requirements.

The EOCU (Equal Opportunities Compliance Unit) runs a conformance assessment on buildings (which includes a site inspection by KNPD architect), this is sometimes carried out in conjunction with the procedures related to the issue of Compliance Certificate (i.e. certificate that constructed building conforms to approved plans in development permission)

Education/Training of architects, construction engineers, public procurers etc.

Accessibility issues are taught in the general design education at the Faculty of the Built Environment at the University of Malta.

Seminars for practising architects have been held as well as for representatives of local administrative councils.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Legislation is being reviewed with this aim in mind. Naturally this is a time consuming process.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Funding schemes are available to Local (administrative) Councils to improve accessibility within their respective jurisdictions. Some projects have already been realised.

Conclusion regarding accessibility in the built environment

Since the enactment of the relevant legislation in the year 2000, (the disability anti discrimination Act was the first Act of the Maltese Parliament in the new millennium), there has been a noticeable improvement in awareness and actual accessibility within the built environment in Malta. The National Commission for Persons with Disabilities which was set up in the 1980's has been the main motor in championing the cause.

With the introduction of formal procedures within the Planning Permission Process coupled with the publication of accessibility guidelines the improvement in accessibility is a continuing, if somewhat time consuming and long term process.

G.2.19 Netherlands

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State Legislation with accessibility requirements (technical or functional)

History

There are laws and regulations requiring that public places are made accessible and that housing is made accessible. The following measures are promoted to facilitate accessibility in the build environment: marking parking areas, installing lifts and accessible toilets, access to public places, improving accessibility in housing, financial support for adapting private buildings and providing for specially adapted motor vehicles.

Provisions for special transport require municipalities to provide facilities for transporting disabled residents (either by collective transport or by cash payments).

Sign language for deaf people has no officially recognized status so far. A Committee on Sign Language is working on this issue. However, it is used as the first language in education of deaf people.

There are Government measures for encouraging media to make their information services available, e.g. sign language of certain TV-programmes.

The following measures are being taken to make other forms of public information services available:

1. Advisory service for the disabled with the Netherlands Telephone Company,
2. Television services for the mentally disabled. The following services are provided in order to facilitate information and communication between persons with disabilities and other persons: literature in Braille/tape, news magazines on tape/Braille, sign language interpretation available on request, easy readers for persons with mental disabilities, electronic reading of daily news papers and news magazines (via a computer) and text-telephone for the deaf.

Legislation

The [Dutch Building Decree](#) in his chapter 4 defines requirements for accessibility on buildings.

Provisions for special transport are included in the Facilities for the Disabled Act (WVG)

Authorities

Accessibility in the build environment is observed by: national authority, local Governments and by local platforms of the disabled (on a voluntary basis, not regulated by law).

Building Regulations

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Other Bodies involved in accessibility of the built environment

Government campaigns

Since the adoption of the Rules the Government has supported many campaigns conveying the message of full participation. These include: Dissemination of the Standard Rules; Support of NGOs propagating the message of full participation; a research project with regard to non-discrimination; Integration of the basic principles of the Standard Rules in the long-term programme for an intersectoral policy on the disabled, 1995-1998.

Organizations and NGOs

There are two national umbrella organizations:

1. The organization of the physically disabled.
2. The organization for the mentally disabled.

All relevant organizations are represented cooperating closely. According to the decree established by the Interministerial Steering Group on policy for the disabled - an advisory body to the Dutch Government - The Group maintains contacts with the umbrella organizations of the disabled. Disability organizations are often consulted when laws and regulations with a disability aspect are being prepared. This occurs at national, regional and local level. The Government provides financial and consultative support to organizations. Disabled persons participate to a limited extent in judiciary, to some extent in Government, legislature and in political parties and to a great extent in NGOs. The disabled persons' organizations have the role to: advocate rights and improved services, to mobilize disabled persons, to identify needs and priorities, to participate in the planning, implementation and evaluation of services and measures, to contribute to public awareness and to promote services.

Co-ordination of work

The national co-ordinating committee is reporting to the Ministry of Health, Welfare and Sport but also to other relevant Ministries. The committee also submits reports to a sub-council of the Cabinet. The committee includes representatives of several Ministries. No representatives of NGOs, and of the private sector are included. Organizations of disabled people are included, having a consultative status. The Government expects the committee to participate in policy development and to perform other tasks. For instance, to identify gaps in legislature and eliminate obstacles experienced by the disabled. The co-ordinating committee has had the following effects: improved co-ordination of measures/programmes, improved legislation, improved integration of responsibility, more effective use of resources and improved promotion of public awareness.

The adoption of the Standard Rules has led to a rethinking of the approach to disability policy.

Public Procurement implementation

Conformance Assessment Schemes

Education/Training of architects, construction engineers, public procurers etc.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Since the adoption of the Rules the Government has supported many campaigns conveying the message of full participation. These include: Dissemination of the Standard Rules; Support of NGOs propagating the message of full participation; a research project with regard to non-discrimination; Integration of the basic principles of the Standard Rules in the long-term programme for an intersectoral policy on the disabled, 1995-1998.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment, see here some examples

Conclusion regarding accessibility in the built environment

G.2.20 Poland

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State Legislation with accessibility requirements (technical or functional)

Accessibility requirements are explicitly addressed through building legislation in the Building Law, The Law on Spatial Planning and many regulations connected with them.

Act of 7 July 1994 - Building Law (Art.5) with further amendments,

Decree of Minister of Infrastructure on technical requirements for buildings and their location, published on 12 April 2002

Building Regulations

Building regulations are valid since 1995, specific requirements issued as the ordinance are being constantly updated, aimed mainly at the needs of wheelchair users with some general recommendations concerning blind people.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

The Polish Standardization Committee (www.pkn.pl) has a Technical Committee nr. 1 created especially for dealing with the problems of disabled people. The secretary's name is Marta Piwowa. Now the Committee is dealing with the PN-EN 12183, and EN 12183. Generally in the field of accessibility many European norms are being translated into Polish. PKN has a status of observer in watching the works connected with the norm ISO 21542.

All EU standards, Technical Reports and CEN/CLC Guide 6 were implemented to the national standardization system.

Other Bodies involved in accessibility of the built environment

Several organizations dealing with this area e.g. the TUS organization in Warsaw.

Ministry of Infrastructure <http://www.en.mi.gov.pl/>

The General Office of Building Control <http://www.qunb.gov.pl/>

Polish Committee for Standardization http://www.pkn.pl/?lang=en&pid=en_strona_glowna

Public Procurement implementation

The Polish city of Gdynia was one of the partners in Build for All program finished in 2006 should have more experience about the outcome and effect of this program. The extent of implementing the recommendations included there in the practice of public procurement could be required from City Gdynia's government..

Act of 29 January 2004 – Public Procurement Law <http://www.uzp.gov.pl/cmsws/page/?F;356>

Conformance Assessment Schemes

Concerning the procedure of approving the specific design phases in the light of accessibility in Poland there is a similar procedure within the process of obtaining the building permit. The Building Design has to be verified and stamped by the specialist on Safety and Work Hygiene (BHP) who is

supposed an expert on accessibility, i.e. he or she has to know the regulations within this area. Then the public buildings and some dwelling houses are turned when built it after the approval procedures done by all kinds of experts, safety expert among them.

Education/Training of architects, construction engineers, public procurers etc.

On the higher education level many design schools (architectural design, industrial design) are promoting the universal design approach and teach the relevant requirements (Warsaw, Kraków, Gdańsk, Poznań, Wrocław, Łódź. All design courses require implementation of universal design criteria as stated in the building regulation.

The problem of the accessibility requirements for the buildings is a part of the curriculum at the technical universities.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

All disability organizations dealing with this area of problems (TUS organization), see more here www.niepelnosprawni.pl

Charter of the Rights of Person with Disabilities passed by Polish Parliament (Sejm) on 1 August 1997.

Each year government publish Annual Report on undertaken activities for realization of Charter's resolutions.

<http://www.mpips.gov.pl/index.php?gid=385>

Awareness/Awards/Funds to improve implementation of accessibility in the built environment, see here some examples

www.niepelnosprawni.pl is the official website of the different organizations acting on behalf of disabled people in Poland and integrating many of disabled people at the same time.

Conclusion regarding accessibility in the built environment

It is slowly getting improved. ISO 21542 is looked forward to as the source of detailed information how to solve the specific problems when designing and building. The absence of that type of reference is sometimes used as an excuse for people who do not understand the need of opening the environment. There are many good examples of implementation of 'universal design' (The Kraków system of Fast City Streetcar would be one of them) as well as many lost occasions when the level of accessibility has not proved satisfactory. There are many situations when the needs of people with visual impairments are being considered, for example the Polish Standardization Committee PKN 's website is accessible in a version for easier reading with yellow characters on the black background.

G.2.21 Portugal

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State Legislation with accessibility requirements (technical or functional)

Two laws are central in making accessibility mandatory in Portugal: an anti-discrimination law (Law no. 46/2006, enacted on August the 28th) and an accessibility law (decree-law no. 163/2006, enacted on August the 8th).

Under the anti-discrimination law (Law 46/2006), refusal or limitation of access to the built environment is classified as a discriminatory practice, prohibited and punishable by law. Under this law, a victim of discrimination can seek compensation through lawsuit.

The [accessibility law](#) (Decree-Law 163/2006) established the accessibility standards and a set of rules for its implementation, both in new buildings and in existing buildings (there's a deadline, which ends no later than 2017).

Accessibility requirements expressed in these laws, namely in [Decree-Law 163/2006](#), have been referred to in subsequent laws (for example, touristic sites).

There are rules to ensure accessibility of the built environment requiring that public places and housing are made accessible.

- Law by decree 123/97, introduced on 22 May 1997 standards aimed at eliminating environmental obstacles of the built environment

- Law by [decree nº163/2006](#) (*Regime da acessibilidade aos edifícios e estabelecimentos que recebem público, via pública e edifícios habitacionais*) which establishes the legal framework for the access to public buildings and buildings receiving public (e.g. theatres, cinemas, museums, post offices, etc.), including those in construction, to make them accessible to all citizens.

Art 2: Standards on accessibility apply to all public infrastructure, buildings, outdoor environment (parks), the land, sea and air transportation.

Art 4: All public administration - central, regional and local - as well as the public institutions and the entities responsible for public procurement, have to certify and guarantee the execution of the laws, regulations and standard established by this decree.

Art 14: NGOs representing and defending the rights of people with disabilities have the right to propose or intervene in any actions related to the application of accessibility standards as mentioned in the Annex.

- Guidelines to a better interpretation of [DL n°163/2006](#), *Guia acessibilidade e mobilidade para todo*²¹

Building Regulations

In Portugal, building regulations are set on a national basis. So the accessibility requirements were set through [Decree-Law 163/2006](#) referred above.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

No, not yet. It's still being translated by the national TC.

Other Bodies involved in accessibility of the built environment

A few municipalities (local government) have been setting accessibility requirements, which are complementary to the law and also mandatory. These requirements do not cover all the issues touched by national legislation, but often detail requirements, or "raise the bar", for specific elements (e.g., pedestrian crossings, housing, etc.).

Accessibility in the built environment is observed by a national authority, the National Secretariat for rehabilitation (Instituto nacional para a reabilitação) and by local governments.

Public Procurement implementation

The new public procurement law (Decree-Law 18/2008, enacted on January the 21st) states that "whenever possible, technical specifications for goods to acquire or construction works to deliver must be set in a way that includes characteristics that allow for the use by persons with disabilities or any user."

²¹ Sources: Guia acessibilidade e mobilidade, <http://www.inr.pt/content/1/4/decretolei>; Regime da acessibilidade aos edifícios e estabelecimentos que recebem público, via pública e edifícios habitacionais, http://www.inr.pt/bibliopac/diplomas/dl_163_2006.htm; Independent Living Institute Report http://www.independentliving.org/standardrules/Inclnt_answers/Portugal.html

Codigo dos Contratos Publicos: Which transposes the European Directives on Public Procurement
<http://www.base.gov.pt/codigo/DocumentosCCP/Apresentação%20pública%20do%20CCP%20em%2020080130.pdf>

Conformance Assessment Schemes

Education/Training of architects, construction engineers, public procurers etc.

Portugal subscribed the Resap 2001, a European resolution that recommends that all university courses for future building professionals (namely architects and engineers) should integrate Accessibility and Universal Design in their curricula. At present, implementation of this resolution seems to be, at best, rather inconsistent. No public data exists for this specific issue, though.

The most difficult obstacles, when planning to build accessible environments, are attitudinal factors, economic/budgetary factors, lack of knowledge, research and information, lack of user participation, lack of co-operation from other organizations/institutions and lack of enforcement mechanism. There is no disability awareness component incorporated in the training of planners, architects and construction engineers²².

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Portugal has signed and ratified both the Convention and the Optional Protocol. The Government has recently presented the National Strategy for Disability, which has accessibility as a fundamental matter.

Specific mention of disabled people is made in the Portuguese Constitution, art 71, which sets out the principles of non discrimination.

Article 71²³(Disabled citizens)

1. Citizens with physical or mental disabilities shall fully enjoy the rights and shall be subject to the duties enshrined in this Constitution, save the exercise or fulfilment of those for which their condition renders them unfit.

2. The state shall undertake a national policy for the prevention of disability and the treatment, rehabilitation and integration of disabled citizens and the provision of support to their families, shall educate society and make it aware of the duties of respect and solidarity towards such citizens, and shall ensure that they effectively enjoy their rights, without prejudice to the rights and duties of their parents or guardians.

3. The state shall support disabled citizens' organisations.

This is supported by the 'Comprehensive Law of Prevention, Rehabilitation and Integration of Handicapped Persons' (1989). Although approved by Parliament, the law was not implemented and was not wholly acceptable to disabled people as its definition of disability was limited and based on the medical model, and it does not comply with the UN Standard Rules.

The UN Convention of the rights of Persons with disabilities has been approved by resolutions n°56/2009 and n°57/2009 of the National Assembly, and was ratified by the following decrees n°71/2009 and n°72/2009, in July 2009.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

The National Rehabilitation Institute (INR) has an annual award for research on Disability-related issues, including Accessibility.

²²Source: Independent Living Institute Report

http://www.independentliving.org/standardrules/InclInt_answers/Portugal.html

²³http://app.parlamento.pt/site_antigo/ingles/cons_leg/Constitution_VII_revisao_definitive.pdf

The National Institute for Housing and Urban Rehabilitation has an annual award for accessible housing.

The *Santa Casa da Misericórdia* (a national charity), in partnership with the National Institute of Architects, has an annual award for accessible architecture.

National plan for the promotion of accessibility: it establishes three basic objectives raise awareness, inform and form. It further defines a set of measures to guarantee the implementation of the [law on accessibility n°163/2006](#)²⁴

Conclusion regarding accessibility in the built environment

A lot is yet to be done, but one can say for sure that Portugal has been registering relevant progress on Accessibility.

On the legal level, the context has changed significantly over the past four years: barriers are now considered a discriminatory practice, whereas in the past they were considered no more than mere disconformities with the building regulations that rarely were corrected. This change has made it legally possible for the Disability community (either through its NGOs or individual members) to play an important pressuring role, namely through lawsuits seeking compensation for discrimination.

The legal accessibility requirements underwent significant improvements (if one considers those originally established in 1997), and the rules set by [Decree-Law 163/2006](#) for their implementation are much more rigorous. Accessibility is an indispensable condition for the issuance of a building permit for new buildings, so the building sector is undergoing a change that is important, and yet invisible (because it will only be seen in future buildings).

Furthermore, the accessibility requirements apply, also, to housing buildings, and that is a great step towards not only accessibility but also future social sustainability.

Adaptation of existing public spaces and buildings will take a long time. Although the present economic crisis will most probably slow the process, it is obviously important to have a rigorous diagnosis of needs and a sensible plan for implementation the necessary corrections. Several cities are now developing their accessibility plans, and an important question remains to be answered: will they be successful?

A final word on the Tourism sector: the concept of accessible tourism seems to be slowly (but steadily) gaining the attention of this sector.

G.2.22 Romania

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State Legislation with accessibility requirements (technical or functional)

[Law 50- 1995](#) – Quality Construction law - as framework

[NP 051- 2001](#) – Regulation for the adaptation of the civil buildings and urban areas to the requirements of the persons with walking difficulties

And

Law no. 448/2006 - Regarding the Protection and Promotion of the Rights of Disabled Persons

Building Regulations

[Law 50](#) – Quality Construction law - as framework

[NP 051- 2001](#) – Regulation for the adaptation of the civil buildings and urban areas to the requirements of the persons with walking difficulties

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

²⁴Source: Plano Nacional de Promoção da Acessibilidade <http://www.inr.pt/content/1/3/pnpa>

No

Other Bodies involved in accessibility of the built environment

National Authority for People with Disabilities under Ministry of Labour, Family and Social Protection.

Public Procurement implementation

All European directives on public procurement are adopted in Romania. There are not explicitly requirements regarding accessibility of built environment or the capability of the providers regarding accessibility. Each contracting authority is free to choose the relevant award criteria. Mostly used award criteria are the lowest price.

Conformance Assessment Schemes

There is a conformance scheme under control of the General Inspectorate for Building but accessibility of built environment is poorly assessed in project or completion phase. Accessibility is not an essential requirement against the plans for a building are normally checked when ask for building permit.

There is also an assessment scheme for the accessibility of public building and urban spaces under the control of National Authority for People with Disabilities under Ministry of Labour, Family and Social Protection. They issued an annual report about the level of accessibility in Romanian cities larger than 50000 habitants. The last report is for 2007. They used three criteria: 100% accessible, partial accessible and notaccessible.

Education/Training of architects, construction engineers, public procurers etc.

There is no formally initiative for such trainings. Some professionals were looking for such training but on their own consideration.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

The UN Convention was adopted in 2006 and is endorsed by Romanian Law 448/2006.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

There was a public awareness campaign "Mobility for the disabled persons" financed by National Authority for Disable People. <http://mobilitateanph.ro/>

There is no award. There is in place a system to finance disabled people. In 2010, was open to finance application for services to familial support and to develop the administrative capacity of the authority.

Conclusion regarding accessibility in the built environment

In Romania, the accessibility in built environment is poor assured. In the 2007 report, representative of National Authority for Disable People appreciated that is a relative accessibility in the cities larger than 50 000 habitants around 50% but almost 10 % is 100% accessible and 40% is partial accessible!

G.2.23 Slovakia

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State Legislation with accessibility requirements (technical or functional)

Slovak legislation for access to the built environment for people with visual impairment:

Regulation of the Ministry of Environment SR nr. 532/2002 Coll.

This regulation states details concerning general technical requirements when constructing a building as well as technical requirements with regard to people with limited mobility and orientation facilities. The fourth part of the regulation deals with requirements with regard to people with limited mobility and orientation abilities. In the Attachment to this regulation there are specific technical requirements referring to barrier-free environment.

Regulation of the Ministry of Interior of SR. 9/2009 Coll.

This regulation states transportation regulations which define inclusive design arrangements for blind and partially sighted people on pedestrian crossing like special road signaling.

Building Regulations

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Other Bodies involved in accessibility of the built environment

Public Procurement implementation

Conformance Assessment Schemes

Education/Training of architects, construction engineers, public procurers etc.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

The Slovak Blind and Partially Sighted Union among other things also develop activities in the area of counseling related to prevention and removal of architectonic barriers with emphasis on people with visual impairment.

Activities of the department for prevention of architectonic and transportation barriers are as follows:

1. Providing consultations and counseling for professionals when including inclusive design principles into architectonic proposals and building plans as well as when carrying out building constructions. Easier mobility and orientation of a person with visual impairment are most often depicted in proposals and implementations of roads and road structures including transportation systems. Concerning structural engineering, we can talk most often about buildings of civil infrastructure also some technical arrangements in housing areas.
2. Seminars focused on identification particular architectonic barriers, to introduce theoretical principles and practical solutions as well as to define the most frequent problems – all with the emphasis on a "design for all." Seminars are designed for architects, civil engineers and building companies, representatives of local and regional authorities, environmental departments, building offices.
3. Methodological activities. The main objective is to create understandable explanations of the regulation of the Ministry of Environment SR nr. 532/2002 Coll. mainly through graphical depictions of basic rules.
4. Dissemination of information concerning the issue of prevention and removing architectonic barriers with the aim to inform professionals (architects and civil engineers), national and local authorities and also the wide public. Through this activity we want to point out the possibilities of removing architectonic barriers within the environment which often do not really require huge financial investment or complicated architectonic changes, just a will to cooperate and an adequate know-how.

Conclusion regarding accessibility in the built environment

G.2.24 Slovenia**Rapporteur/Informant?****State Legislation with accessibility requirements (technical or functional)**

Antidiscrimination mentioned in the constitution, however not in terms of accessibility

Building Regulations

Zakon o graditviobjektov

Nacionalneusmeritvezaizboljšanje

Zakon o urejanjuprostora

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

No standards available

Other Bodies involved in accessibility of the built environment

Ministry for the Environment

Directorate for the Disabled

Public Procurement implementation

NO

Conformance Assessment Schemes

NO

Education/Training of architects, construction engineers, public procurers etc.

Not existing up until now. At the moment slowly moving forward yet still on a very limited scale.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Yes, Dostopna Slovenia

Cultural Access for the Disabled

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

NO

Conclusion regarding accessibility in the built environment

G.2.25 Spain

Rapporteur/Informant: Francesc Aragall [direccio@proasolutions.com]

State Legislation with accessibility requirements (technical or functional)

Spain has developed a clear advancement in the field of accessibility in the last 20 years although the main improvements developed in the legislative terrain have not always being reflected in the reality of the build environment.

The legislation situation is as follows:

Spain has signed and ratified de UN Convention.

There is a [State Law](#) (LIONDAU) to guarantee equal opportunities for people with disability that stress the need for accessibility developed from a Design for All (DfA) perspective. The technical

requirements for fulfilling this Law are developed by Royal Decrees that invade the legislative autonomy of the regions and some of them follow their own autonomic decrees.

The recent Technical Code for Buildings (CTE) contents a section called [Safe Use and Accessibility \(SUA\)](#) with all technical requirements to guarantee accessibility in buildings (including egress in emergencies). To follow this CTE is compulsory for obtaining the building permit. This has improved the accessibility in private buildings but normally administrations don't need the permit to build to construct their own buildings therefore the level of accessibility in public buildings depends on the own knowledge and willingness of each administration.

Several autonomic regions have updated recently their legislation producing very good documents but there is not yet evidence of the level of fulfilment.

Catalonia will soon pass a Decree that stress the need for development of clear procurement, management and conformity schemes (updating also the punishment tools) to guarantee the accessibility in all the aspects of social life.

Building Regulations

The main gap between legislation and reality comes from the fact that building projects are revised but only in the case of dangerous activity in the building the ended works are inspected.

Another important gap comes from the details (bars, knobs, signals, etc.) normally not clearly specified in the project and developed by the constructing company at its own criteria.

The accessibility criteria are, in general the same for new and existing buildings. The law that protect historical buildings is used frequently to escape from accessibility legislation.

Last, but not least, and Spain is not a unique case, it seems that the "Star architects" can be "above the law" and many infractions have been permitted to them.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

The [UNE 170.000](#), a standard developed by AENOR that, in a voluntary base, allows any organisation to control and improve progressively the accessibility of their installations, products and services following procedures similar to ISO 9000.

On the other hand, AENOR has developed along the years many standards related with accessibility in the build environment that several legislations have assumed as compulsory.

Other Bodies involved in accessibility of the built environment

Orders of architects or engineers have published in the past some texts to clarify or simplify the legislative frame.

There are good participatory process with related NGO's on the development of legislation.

Municipalities are the responsible administrations to control accessibility, in some cases the inspection tasks are delegated to private auditing companies that check all quality and legal aspects of the building.

Public Procurement implementation

The transposition of public procurement directives states clearly in the article 100 of the Public Procurement Law the obligation to guarantee accessibility and DfA in every product or service purchased (although it seems that nobody have read this article or don't know how to put it into practise)

But most of the procurement processes requires the generically the fulfilment of the law.

In practise that means that, in general, the recent developments are accessible although minor issues and details show still errors in the construction process.

Conformance Assessment Schemes

Almost all new commercial facilities (bars, schools, medium size shops, etc.) are inspected before the permit to open.

All private permits to build oblige the approval of the project by the municipal authority.

Education/Training of architects, construction engineers, public procurers etc.

Many universities (public and private) are developing education schemes (compulsory or voluntary) in the field of accessibility and Design for All. Although the developments of these schemes are compulsory according the [LIONDAU](#) these initiatives comes from the interest of local leaders normally against the academy structures.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Thanks to the financial support from the IMSERSO (State), Once Foundation and structural EC Funds many municipalities have developed accessibility plans that rarely are followed along the years because they almost never adapted their management structures to include this issue.

The case of Barcelona and some other municipalities in Catalonia is exemplar in the fulfilment of accessibility criteria in private building: To install elevators in private dwellings is financed up to 60% if the project eliminates all the accessibility problems according to the law.

Conclusion regarding accessibility in the built environment

Good practices in the country

Legislative texts are consistent but there is a need for a harmonised legislation based on scientific and international criteria.

Many companies from different sectors (tourism, banking, commerce, products, etc.) start to perceive Design for All as a business opportunity beyond the legal obligations.

There is a need to establish clear conformity procedures, especially for build environment elements were the administration is the promoter or the owner.

The key elements to improve are:

Development of conformity assessments, especially for buildings own by the administration not only in the project phase but “as build” reports.

Unified policy for denounce and to punish non-inclusivity.

Tools to manage accessibility plans to guarantee follow up and monitor processes.

Extend the accessibility responsibility to the professionals who maintain the build environment and who provide services in it.

Compulsory education for professionals related to the field.

In transport the weakest part is the taxi. No one administration in able to pass a valiant law that really achieves a sufficient number of accessible taxis. There is a need for EC harmonisation in this field and also an opportunity for research and innovation in the automotive industry

G.2.26 Sweden

Rapporteur/Informant: Elisabet Svensson [elisabet@handisam.se]

State Legislation with accessibility requirements (technical or functional)

Accessibility requirements have been a part of the building legislation since the middle of the 1960th. The building legislation is now covering buildings containing dwellings, working premises or premises

to which the general public has access which are built or rebuilt. It is also covering new construction of public spaces and areas for constructions other than buildings (such as recreation areas). Concerning existing environment the building legislation says that easily eliminated obstacles shall be removed in existing public buildings and on public spaces.

The accessibility requirements are explicitly addressed through building legislation but also to some extent in anti-discrimination acts (working-places and universities). There is now a proposal to extend the discrimination act to other parts of the environment.

Moveable equipments and furniture like vending machines, desks etc are not covered.

Building Regulations

In the [building regulations](#) there are mandatory functional requirements and recommendations that can be functional or technical. The recommendations indicate how someone should or may act in order to comply with the requirements of the mandatory provisions. That means that they are quite strong and almost could be considered as mandatory.

The regulations are quite detailed that might be the reason there is not any special accessibility standard.

There are some gaps in the regulations for example nothing is said about number of accessible hotel rooms or places for wheelchair users in assembly halls.

The type of wheelchairs that should be possible to use is clearly defined and different indoors and outdoors.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

The building regulations are quite detailed and therefore there has not been considered to be any need for a national accessibility standard. But there are some standards considering accessibility, for example one [standard about measures in dwellings](#) and one about symbols for signs. There are also [standards about acoustics](#) that also consider accessibility issues. [The building regulation](#) refers to some CEN standards.

Guide 6 has not yet been enough implemented in national standards. But there has been established a technical committee working with co-ordination of accessibility standards and that also is supposed to work with the implementation of Guide 6.

Other Bodies involved in accessibility of the built environment

The National Board of Housing, Building and Planning are responsible for building regulations including accessibility. Swedish Agency for Disability Policy Co-ordination is responsible for co-ordination of the handicap policy. Swedish Transport Administration is responsible for accessibility to transports. The Equality Ombudsman is responsible for discrimination issues.

Accessibility guidelines are produced by bodies like Governmental authorities. Many municipalities or regions produce their own guidelines. Guidelines are also produced by organizations like Swedish Association of Local Authorities and Regions, private information companies within the building sector like [Svensk Byggtjänst](#), Disability Organizations etc.

Building Committee within the municipality is responsible for plans (master plans, town plans, building plans etc) and also for the supervision that the building legislation is followed within the municipality. For example they can decide about sanctions if the building regulations are not fulfilled. The County Administration Board has to support and supervise the Building Committee in some questions regarding accessibility.

Public Procurement implementation

Public procurement is regulated by a Public Procurement Act but there is no special legislated procedure concerning accessibility of the built environment.

New building projects in general are accessible. But in the same time there are quite often mistakes, often details for example concerning way finding.

Conformance Assessment Schemes

The site is inspected in connection to building permit (by the local Building Committee in the municipality). Later in the process an inspection plan is established where accessibility of the building is one criterion among many others. The developer is responsible for the inspection plan and the inspections but the local building committee has to approve the plan and can decide that the accessibility inspection must to be done by an independent expert.

If the Building Committee establishes a reasonable cause to assume that there has been a violation of this Building Act or any provision or decision rendered in pursuance of this Act, the Committee shall raise the question of sanctions. The Building Committee may prohibit the continuation of a specific building or may direct an injunction in order to implement the measure within a specified period.

In May 2011 there will be some changes in the [Building and Planning Act](#). Most important from an accessibility aspect is that an assessment of the accessibility and usability of a building for people with impaired mobility or orientation should to be made by the Building Committee already in connection with the building permit. The regulations concerning inspections of construction work are to be strengthened by clarifying the required contents of inspection plans and the tasks and skills required of the inspection supervisor.

Education/Training of architects, construction engineers, public procurers etc.

In the education for architects, accessibility is most often integrated, not a special course (maybe there are one or two days lectures about accessibility) but it doesn't function very well. There have been some project trying to improve the educations for architects and designers, but there are still problems. The schools decide themselves how the education is planned.

There are a few short courses about accessibility at one University. There are also privately organized short courses.

Since a few months it is possible get a certification as an independent accessibility expert.

There used to be a special education in accessibility available only for persons with disability. This education doesn't exist anymore but the persons who attended the course are working as accessibility consultants. That means that there is expertise in accessibility available.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Sweden has signed and ratified the UN Convention. The Swedish Agency for Disability Policy Co-ordination has got the commission by the Government to develop methods for monitoring the Convention and to support local authorities to implement the convention. A national action plan for accessibility came 2000 and will last to the end of 2010. The Government will form a strategy for the work with accessibility for the period 2011-2015.

There is proposed a new provision on prohibiting discrimination in the form of inadequate accessibility for people with disabilities. The provision covers situations in which a person is disadvantaged through failure to take reasonable accessibility measures to put people with disabilities in a situation comparable to that of people without such disabilities.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Accessibility are supposed to be integrated in the design of the building and therefore financed in the same way as the building as a whole. Also when accessibility improvements are done in existing buildings, they should be finances as other improvements of the buildings. Special funds for accessibility are considered to lead to that accessibility is regarded as something "special", not something that always have to be considered.

But in spite of this, there are some possibilities to get subsidies: A person with disability has possibility to get subsidy for individual adaption of the dwelling. There are also some subsidies for some types of assembly halls, nongovernmental premises for cultural activities and dwellings for elderly people.

Competitions for architect to design homes for old people are planned to take place next year.

Conclusion regarding accessibility in the built environment

A weak point is the system for supervision and inspection. For example the inspection is made quite late in the process and sanctions are seldom used. The system with the developer as responsible for the inspection might not always function very well. The system has been discussed and some improvements have been decided. It is too early to say if the changes that have been decided will be enough to get a well functioning system. To great extent it is also dependent on the role of the Building Committees in the municipalities and if they use the possibilities they have to influence the control process.

Another weak point is the lack of knowledge about accessibility within the building sector.

G.2.27 United Kingdom

Rapporteur/Informant: Professor Keith Bright [info.kbc@btinternet.com]

State Legislation with accessibility requirements (technical or functional)

In the UK, legislation was first introduced in 1970 which required the needs of disabled people to be taken into account in the provision of public buildings. Two British Standards were introduced in 1978 and 1979, which evolved through various stages into [BS8300:2009](#).

The introduction of the national anti-discrimination legislation such as the Disability Discrimination Act 1995 (DDA), subsequent amendments and extensions to it in 2001, 2004 and 2005 and the new Equality Act 2010 was the responsibility of the UK government. This legislation covers the whole of the UK (England, Northern Ireland, Scotland and Wales).

Responsibility for its implementation and ensuring that discrimination does not occur however, falls on the providers of goods, facilities and services (whether for profit or not), and on those providing employment or educational opportunities, and transport providers.

Building Regulations are issued by the Government and administered by individual Local Authorities (LA), through a Building Control Officer (BCO), or by a private Approved Inspector (AI). Issues of accessibility at Planning are the responsibility of the relevant Planning Authority. England and Wales have one system for building control although there are different systems of creating and administering building control and planning in Scotland and Northern Ireland, and for Planning in Wales.

[PartM ADM](#) Building Regulations were first introduced in 1985 as 'Part T' which became Part M in 1987. Part M has subsequently been updated in 1991, 1999 and 2004. The 2004 version dropped the terminology 'disabled people' from its title and the document now represents a Regulation for inclusive design rather than designing for 'special needs'. Part M is relevant to England and Wales, Scotland has guidance on accessibility contained within technical documents for Domestic and Non-domestic buildings. Accessibility issues in Northern Ireland are covered by Part R of the Northern Ireland Regulations.

[Building Regulations](#) represent the minimum mandatory legal standard of accessibility, [BS 8300](#) and other British Standards represent latest good practice guidance, but adopting their recommendations is not mandatory (unless referred to by Part M). The DDA required reasonableness in all the circumstances of a particular case, and that may well be judged as being more than what is 'required' from building regulations.

Since the 1st October 2010 discrimination against particular identified groups in the UK, including disabled people, is covered by the Equality Act 2010. Some elements related to the duties of public

bodies and organisations operating in the public sector will come into force in 2011. The Disability Discrimination Acts and other discrimination legislation related to, for example, race, gender, and religion have been subsumed into the Equality Act, 2010. Whilst there are no explicit requirements relating to the built environment in the Equality Act, it requires service providers, employers, and educators not to discriminate in the work they do or the services and opportunities they offer. That discrimination can result either by the attitudes, procedures and policies they adopt and/or in the built environments they operate in. Therefore whilst there is not an explicit requirement in the Equality Act relating to accessibility to the built environment there is an implicit one to consider the provision of the built environment and ensure it does not cause or contribute to discrimination.

The Equality Act refers to the Building Regulations Part M as an indicator of the minimum mandatory specification for accessibility of new buildings and those undergoing major refurbishments.

Building Regulations

[Building Regulations](#) are developed by Government with input from many bodies in the public and private sectors. The responsibility for compliance with the Building Regulations rests with the relevant LA. Developers and design teams may engage the services of an AI to oversee compliance with the Regulations rather than using the services of the LA BCO.

LAs also employ Access Officers to offer advice to developers and to manage the consideration of accessibility issues during the consideration of planning and building control applications. Access Officers will also be part of an Access Group, which are volunteer groups of local disabled people who comment on most major planning applications.

[Building Regulations](#) only apply to existing buildings if they are subject to major refurbishments. Small changes do not trigger the need for Building Regulation approval.

Planning Permission may be granted subject to certain conditions relating to accessibility but these are separate from those required by Building Regulations.

For all buildings works where the [Buildings Regulations](#) apply, the standard laid down is identical for new or works to existing buildings. However, there is a case for requiring what is reasonably achievable in all situations, and this may bring about more compromise for changes to existing buildings. The goal is achieving the overall aim of accessibility and inclusion rather than simply following prescriptive requirements.

Planning

It is mandatory for all applications for planning permission in the UK (outline and full) to be accompanied by a [Design and Access Statement \(DAS\)](#). An application that is not accompanied by a DAS mustnot be considered by the planning authority.

The design component of a DAS will cover issues such as the size and scale of the proposal, how it fits within the context of the site and the areas and its appearance. The access component will identify vehicular and transport impacts for the proposal and how the principles of inclusive design have influenced and informed the design process.

The DAS must also identify what consultation has been undertaken to ensure the proposal is both accessible and inclusive, who has been involved in the consultation and professional expertise in terms of accessibility and inclusion of those preparing and submitting the application. The DAS must also demonstrate that the needs of all those who will use the proposed development have been and are being considered regardless of their age, disability, ethnicity or social grouping.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

In England and Wales, [Part M](#), which is the Regulation, is accompanied by the Approved Document to Part M, which offers guidance on one way the Regulation may be met.

In Scotland it is Technical Regulations relating to domestic and non-domestic buildings and in Northern Ireland it is Part R.

All the Regulations allow for different design solutions and ADM 2004 introduces the concept of the Access Statement by which designers can demonstrate that their proposals meet the Regulation even if they do not precisely follow the guidance in the Approved Document.

The standards identified in UK Regulations and Standards are in line with, and in most places exceed, the functional requirements of CEN/CENELEC Guide 6.

Other Bodies involved in accessibility of the built environment

Other guidance comes from the British Standards Institute (BSI), Charities and organisations representing disabled people, individual Governments departments, transport companies (road, rail, air and waterways), independent and government funded organisations.

Some of these guidance documents are produced collaboratively and some by individual organisations or relating to specific user needs requirements (i.e. vision, hearing, ageing, learning disabilities, mental health etc). Inclusive design guidance is also produced by professional bodies such as the RIBA as is educational materials for the teaching of Inclusive Design in primary and secondary schools.

Local Authorities and Building Control organisations also produce accessibility and inclusive design guidance.

Public Procurement implementation

All new building works must comply with the Building Regulations and for certain types of buildings other requirements also apply. For education buildings there are Building Bulletins which must be adhered to and for Health Buildings there are Health Building notes that also lay down good practice requirements.

All new buildings now have a much greater level of general accessibility than previously. Wherever possible, developers are encouraged to go beyond the minimum mandatory standard laid down in Regulations and to follow the more comprehensive guidance in [BS8300](#).

The introduction of the DDA in 1995 focussed the mind of those offering services, educational or employment opportunities of the need to look beyond simply meeting Regulations to also address the anti-discrimination duties placed on them by the DDA. The DDA also encouraged improved levels of accessibility in existing buildings to meet the anti-discrimination obligations imposed by the Act. This task is now taken up by the Equality Act 2010.

Conformance Assessment Schemes

In the UK, the DDA and its successor, the Equality Act 2010, are pieces of anti-discrimination legislation which relate to people and the opportunities and services available to them. The emphasis is therefore on preventing discrimination rather than one of simply requiring the built environment to be accessible.

The Equality Act does not lay down any performance-based requirements and does not offer any advice on technical issues or specifications. Therefore it is not possible to describe a building or product as being 'Equality Act Compliant'. It is in the actual delivery of services and opportunities to people that the existence of any discrimination is judged, and the physical provision of an environment may be only one factor in making that decision.

All new buildings must meet the minimum requirements of the Building Regulations and CAS operates mainly through the building control process. However, whilst Regulations offer guidance on physical provision they does not consider the 'softer' management and policy issues often also associated with ensuring discrimination does not occur.

For existing buildings, unless building work is being undertaken complying with Building Regulations is not required or applicable It is for the provider of the employment or educational opportunity or the provider of the service to undertake any CAS to ensure that any contribution to discrimination caused by an inaccessible built environment is identified and, if necessary, removed. That may be

discrimination caused by the physical features of an environment or by the policies and procedures adopted by those using it to offer the service or opportunity.

The ultimate test of whether discrimination has occurred, and if that discrimination is unreasonable, will be decided through legal action in the courts instigated by the person who feels they have been discriminated against. In such an assessment process the benchmarks against which reasonableness in terms of the provision of the built environment will be judged is likely to be the good practice guidance contained in British Standard BS8300:2009 rather than the minimum standard contained in the Building Regulations.

Through the mandatory requirement for 'Design and Access Statements' to be submitted with applications for planning permission, CAS form an important part of the planning permission process.

There is no CAS in the post-occupancy evaluation stage but there are clear duties imposed by the Equality Act to ensure discrimination does not occur in the activities taking place in the building. This is an on-going and evolving duty.

The UK National Register of Access Consultants (NRAC) is an independent professional body of Access Consultant that was set up in 1999. Members of the NRAC come from various built environment and health related backgrounds and include architects, open space and landscape designers, surveyors, interior designers, occupational therapists, fire consultants and transport designers. They also comprise both disabled and non-disabled people. Consultants work with a variety of building types and environments including public spaces, commercial, health, educational, transport, retail and banking and housing.

Membership of the NRAC is attained through a peer review process comprising a review of a submitted piece of work and a professional interview with experienced members of the NRAC.

All NRAC members must agree to undertake a programme of appropriate Continuing Professional Development and must provide evidence of their CPD activities annually before their membership is renewed. All members of the NRAC must carry on-going professional indemnity insurance, evidence of which is also a requirement for annual membership renewal.

The status of the NRAC has grown significantly over the past ten years and there is a growing tendency for private and public sector companies, mainly as part of their conformity assessment process, to specify the involvement by an NRAC member as requirement in their procurement and award process.

Education/Training of architects, construction engineers, public procurers etc.

There is very little formal training on Inclusive Design undertaken in architectural courses throughout the UK. Where it is provided it is often seen as a bolt-on topic rather than a philosophy or threads that affects the whole development and in-use phases of a project. This is improving – but slowly.

The Royal Institution of British Architects (RIBA) has an Inclusive Design Committee to promote the ID agenda and improve the delivery of inclusive design in education courses.

Other bodies promoting ID include the Royal Institution of Chartered Surveyors (RICS) and the National Register of Access Consultants (NRAC)

The UK also has several post-graduate and diploma courses specialising in inclusive design and accessibility that are open to people from many professions including architecture, health, construction, transport, planning, interior design, and surveying.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Under the DDA 2005 there was a duty placed on all bodies operating in the public sector to develop disability equality schemes to show how they will eliminate discrimination and how they will actively promote the inclusion of disabled people in the work they undertake.

The Equality Act 2010 takes on this role and the need for action plans to be developed to identify how discrimination based on age, gender, disability, ethnicity, religious beliefs, and sexual orientation will be eliminated.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Funding is not usually available for new privately developed housing or work to existing housing except for situations where improvements may be needed to meet an individual set of needs (for example if a person becomes disabled and alterations are needed to their house).

The duties imposed by the Equality Act encourages those using existing buildings to consider and improve accessibility, any work for which is not covered out of public funds (unless it affects publicly owned buildings).

Conclusion regarding accessibility in the built environment

Good practice points in the UK include the concept of the Design and Access Statement at Planning which requires developers to consider accessibility and inclusion at the earliest stages of any project. The opportunity for designers to use an Access Statement as part of their building regulations application to justify the accessibility and inclusion credentials of their proposals, even if they do not match precisely the guidance accompanying the Regulation is also an excellent safeguard for design freedom and creativity.

The introduction of Inclusive Design education at primary and secondary school levels is also a major and positive step in informing the designers of the future.

Weak points are the lack of cohesion between Building Control and Planning, which seen as separate activities and which are undertaken in most cases by different departments. This often results in little or effective communication between the departments issuing approvals or permissions, although this is to some extent being addressed by Access Officers engaged within individual local authorities.

The **most important starting point** for the UK would be in tackling the Building Control/Planning divide.

G.3 EFTA countries

G.3.1 Liechtenstein

No rapporteur available.

G.3.2 Norway

Rapporteur/Informant: Rudolph Brynn [rbr@standard.no]

State Legislation with accessibility requirements (technical or functional)

History (- development concerning legislation on accessibility for people with disabilities and others).

The Technical Regulations to the Planning and Building Act have had clauses on accessibility since the 1970s. But the revised regulations to the Act entering into force on July 1st 2010 have extensive clauses detailing requirements for universal design of the built environment.

The Norwegian Public Procurement Act of January 1st 2007 requires public procurers to include universal design in the planning phase of procurements, and in the technical annex to public tenders to specify how universal design is to be incorporated in relevant tenders.

The Discrimination and Accessibility Act of January 1st 2009 requires new buildings and adjoining outdoor areas to be universally designed. In addition, certain categories of existing buildings are to have universal design when renovated, for instance schools.

Authorities responsible for legislation on accessibility in the built environment

The Ministry for Local Government and Regional Development (<http://www.regjeringen.no/en/dep/krd.html?id=504>) is responsible for legislation regarding

accessibility in the built environment. The Ministry for Children, Equality and Social Inclusion (<http://www.regjeringen.no/en/dep/bld.html?id=298>) has the overall responsibility for Norwegian antidiscrimination legislation and for universal design policy. Cases regarding violation of disabled people's rights, including lack of accessibility, are referred to the Equality and Antidiscrimination Ombud (<http://www.ldo.no/en/>), who decide whether or not cases are to be taken to court.

Building Regulations

The implementation of the legislation will take time. However the new regulations has already introduced new accessibility solutions in building projects and raised much awareness in the professional environments like entrepreneurs and designers. There is also a great demand for the new Norwegian standard NS 11001-1/2 on universal design of the built environment as a guideline. Another important result of the legislation is its requirement for activity planning and reporting from public authorities on national, regional and local levels, having resulted in a great number of specialised guidelines and handbooks as well as action plans.

The Government has expressed a wish to improve accessibility of existing building according to a/o importance of daily use of public buildings, like schools, libraries etc. Universal design of existing buildings is not required by the Discrimination and Accessibility Act but funding is allocated to ensure universal design of existing buildings during major overhauls/rebuilding projects etc. financed a/o from the Government Action Plan on Universal Design (Norway Universally Designed by 2025).

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

In 2009 Standards Norway published NS 11001 Universal design of building works,

Part 1 Buildings open to the public and

Part 2 Housing.

In addition there are the following national standards:

NS 8175 Sound conditions in buildings - Sound classes for various types of buildings;

prNS 11005 Universal design of developed outdoor areas;

NS 11010:2008 Accessible tourist destinations - Requirements as basis for a labelling system;

NS 3041:2007 Information signs - Rules for details and location.

These standards are in line with CEN/CLC Guide 6 (ISO/IEC Guide 71 has also been translated into Norwegian and a checklist for national standardization committees developed for how to incorporate Guide 71/6 into their work where relevant).

Other Bodies involved in accessibility of the built environment

Accessibility design guidelines?

The Technical regulation to the Planning and Building Act contains specific guidelines on how to ensure universal design of the built environment.

Several counties and municipalities, like Trondheim have developed their own guidelines on universal design of buildings and outdoor areas. This is also relevant regarding handbooks developed transport bodies, concerning infrastructure construction.

Organisations of disabled people, like the Norwegian Blind Union and the Norwegian Association of Disabled people produce their own guidelines focusing on making accessible buildings for their particular target groups.

Co-operation structures between relevant public & private bodies and NGOs

There are several co-operation structures between public authorities and NGOs. On highest political level a committee of state secretaries have regular meetings with the NGO representatives of disabled people. There are councils of disability affairs on national, regional and local levels bringing

together public administration, NGOs and politicians dealing with all issues affecting disabled people, commenting public policies, building projects (local level) and providing position papers on relevant issues.

Bodies that are checking conformity with legislation (public and others).

The applicants for building projects are responsible for including documentation of conformity with legal requirements for universal design. This is checked by the appropriate planning and building authorities (local, regional, governmental) according to the regulations.

Public Procurement implementation

This is part of the general public procurement procedure regulated by the Public Procurement Act of 2007, requiring incorporation of universal design in the planning of tenders and in the technical specifications. The legislation is the national transposition of the EU Public Procurement directive but has made universal design an obligatory part of the public procurement process. This must also be seen in relation to the Discrimination and Accessibility Act of 2009 and the Technical Regulations of 2010 to the Planning and Building Act all of which make clear requirements to universal design being an obligatory aspect of procurement of new buildings.

New building projects with work places, offices, shops etc. are in general now accessible in Norway. In particular the main entrances and public spaces of such buildings, because of the raised awareness following from the new legislation, and because of the obligation of public bodies and private companies whose enterprise "is of public interest" to follow actively the principle of universal design. However, still a lot of new solutions are produced which are unsatisfactory, lack of information of universal design is widespread. Only 1 % of the built environment consists of new buildings, of existing buildings a lot remains to be done to improve accessibility, in particular in the private sector.

Conformance Assessment Schemes

A builder has to provide documentation that universal design is incorporated in the design of a new building, together with other requirements as to the Technical Regulations of the Planning and Building act. When applying for a new project to the building authorities they are to control that the design and plan is according to the requirements specified in the Regulation.

Planning and building authorities on different administrative levels are responsible for controlling that plans are conforming with the requirements for universal design.

Education/Training of architects, construction engineers, public procurers etc.

This is quite a new field in education of architects and engineers and still mostly a voluntary subject as part of mainstream education. There are special courses being held in many higher education facilities but work still remains to make universal design an integrated part of mainstream architecture and engineering education. Expertise is available from many different expert bodies and companies specializing in universal design are established, like the Government centre of excellence in accessibility and universal design Deltasenteret (<http://www.helsedirektoratet.no/deltasenteret/english/>) and the private company Universell Utforming AS (<http://www.universellutforming.org/>).

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

In Norway Government Action Plans for disabled people, including accessibility measures, have been in operation since 1981. The current action plan is called "Norway Universally Designed by 2025" and covers the period 2009-2013.

(http://www.regjeringen.no/nb/dep/bld/tema/nedsatt_funksjonsevne/norge-universelt-utformet-2025.html?id=561345)

There are also governmental action plans in the field of universal design of transport (http://www.ntp.dep.no/2010-2019/index_10_19.html) (including infrastructure) as well as a vast range of regional and local action plans for accessibility.

New action plans, policies?

There are many initiatives in the form of action plans at all administrative levels as well as in larger public enterprises, including universal design in the built environment, public transport, outdoor areas, ICT, education etc. Universal design is included in the present Government's Declaration of policy and is one of the main priorities of public transport policy in Norway as decided by the Parliament.

The above mentioned action plans are regularly reviewed by independent bodies and revised according to responses by for instance NGOs and expert bodies. From 2011 new Regulations on universal design of ICT will be implemented to the Discrimination and Accessibility Act, and this will include regulations for ICT embedded in the built environment.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

The Norwegian State Housing Bank provides funding for universal design of housing and is indeed one of the public bodies supporting universal design in Norway:

(http://www.husbanken.no/Venstremeny/en_universaldesign.aspx)

Funds for existing buildings can be requested from the Norwegian State Housing Bank and from the regional Assistive Technology Centres which assist disabled people to improve housing when needed. This is paid for by the Government as a "loan" to the individuals for the duration of their impairment necessitating special measures.

The Ministry for Children, Equality and Social Inclusion has introduced an **Award for Universal Design of New Buildings** from 2009, and several public bodies like the Norwegian Directorate for Nature Management (<http://english.dirnat.no/>) have awards for examples of good practice in the field of universal design.

The award **Statens byggeskikkpris** (Governmental Award for Best Practice in the field of building) is given to building projects emphasizing universal design and sustainable built environment (<http://www.husbanken.no/Venstremeny/Byggeskikk/Statens%20Byggeskikkpris/pris.aspx>).

The annual award of approximately € 25 000 is managed by The Ministry for Local Government and Regional Development and secretariat for the jury is the State Housing Bank.

Conclusion regarding accessibility in the built environment

Good practices in the country

The Government public buildings authority, Statsbygg, is managing the Government properties in Norway and abroad and has universal design as one of its focusing areas (<http://www.statsbygg.no/System/Topp-menyvalg/English/>). This concerns upgrading existing public property and ensuring universal design of new projects (124 projects in 2006). They have developed BIM (building information module) technology to assess level of universal design in their properties. Statsbygg also have projects regarding universal design of outdoor areas.

There is a special public website with the latest news on universal design projects and examples of good practice managed by the Ministry for Children, Equality and Social Inclusion: <http://www.universell-utforming.miljo.no/>.

16 municipalities have for some years been trailblazing areas for local initiatives on universal design with publicly financed projects to improve accessibility. <http://www.universell-utforming.miljo.no/pilotfylkene/948-pilotkommuner-for-universell-utforming>.

Each year several projects are given awards for good practice in universal design, for instance the 2010 Governmental Award for Best Practice in the field of building was given to a local school building in the municipality of Gjerdrum for excellence in new thinking about an integrative public building:

<http://www.husbanken.no/Venstremeny/Byggeskikk/Statens%20Byggeskikkpris/Vinnere2010.aspx>.

Weak points and gaps in the general situation

There is a need for more information in the field of universal design, and adequate funding for awareness raising projects. There is a need to have more initiatives on mainstreaming universal design into education of architects and designers. There are also a lot of efforts necessary to improve existing built environment.

Most important starting points for improvement

More awareness raising among architects and engineers about the possibilities for innovation arising from the legally based requirements is necessary. Some articles are already highlighting this in Norwegian media (e.g. <http://www.universell-utforming.miljo.no/tema/generelt/1033--uu-krav-tvinger-fram-ny-arkitektur>)

Another important measure is to strengthen education on universal design as part of mainstream education curricula. It is important to focus on the societal gains to be had from accessibility to buildings for increasing employment among disabled people, better access to transport, education and societal participation in general.

Activities to improve the existing building stock according

This is part of the above mentioned action plans, awards and political initiative on multiple levels. An interesting feature is the Ministry for Environment's Action Plan on environmental policy from 2009, linking sustainable development to universal design. Buildings designed according to the universal design regulations will require less restructuring and thereby reducing the danger of harmful emissions resulting from rebuilding during the buildings' lifespan.

G.3.3 Switzerland

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State Legislation with accessibility requirements (technical or functional)

The most important regulation in Switzerland for accessible built environment is since 2004 [the Equal Right Legislation for People with Disabilities \(BehiG\)](#). This law requires non-discrimination within buildings open to the public, public buildings, buildings with more than 50 working places, apartment buildings with more than 8 units and access to the public transport. These functional requirements have to be fulfilled with all new buildings as well as renovation projects. For buildings already existing there is a regulation for adaptations. Adaptations are reasonable if they cost less than 20 percent of the renovation costs or less than 5 percent of the buildings worth. All individual people with a disability as well as the national umbrella organisation have the right to complain the building projects if they are not accessible. Further detailed functional and technical requirements are regulated in the 26th cantonal building codes and building regulations. For the public transport exists a functional and technical regulation on national level.

Building Regulations

Building regulation lies in the competence of the 26 cantons. But today most of them have a regulation for accessibly built environment that conforms to the national equality law.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Nearly all of the cantonal regulations refer to the technical standard [SIA500 Obstacle Free Buildings](#). This means that today the standard SIA500 is uniformly accepted for all technical requirements for accessible building.

For the outdoor environment exist [similar standards \(VSS\)](#) which fulfil the same purpose.

Other Bodies involved in accessibility of the built environment

Public Procurement implementation

Public procurements don't influence the process of accessible building. This is because of the fact that all public buildings have to be accessible based on national and cantonal laws and building codes.

Conformance Assessment Schemes

Today only few building authorities in cantons and communities work with conformance schemes. Where conformance schemes are in use they vary from simple to complex forms.

Education/Training of architects, construction engineers, public procurers etc.

The education and training in accessibility differs a lot within the approximately 20 schools for architects and engineers. Most of the schools only have a minimum of one or two lessons on accessibility per year.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Switzerland has not yet signed the UN Convention but most of what is required in the UN Convention for the field of built environment is already being implemented in Switzerland.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Many cantons and communities have programs available to remove barriers in existing buildings. The available funds are mostly quite limited.

Conclusion regarding accessibility in the built environment

G.4 International countries

G.4.1 USA

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State Legislation with accessibility requirements (technical or functional)

There are a number of disability rights laws in existence within the USA. The most important of these with regard to accessibility is the Americans with Disabilities Act.

On July 26, 1990, President George Bush signed into law the Americans with Disabilities Act (ADA). This significant legislation extends civil rights to an estimated 43 million Americans with disabilities in much the same way that individuals are protected on the basis of race, colour, sex, national origin and religion. The ADA makes it illegal to discriminate on the basis of disability in the areas of employment, public services, public accommodations, transportation and telecommunications. The ADA was later updated in 2008 with changes effective 1st January 2009, a further revision was published in the Federal Register on 15th September 2010, which will take effect on 15th March 2011.

People with disabilities can no longer be denied employment just because they are disabled. In addition, the ADA requires that restaurants, movie theatres, libraries, doctors' offices, parks and millions of other public accommodations be accessible to people with disabilities. The services provided by state and local governments must also conform to ADA requirements.

The ADA applies to all people with physical or mental impairments that substantially limit one or more major life activities. Such activities include walking, talking, hearing, seeing, breathing, learning, performing manual tasks and caring for oneself. Other kinds of major life activities contained in the Equal Employment Opportunity Commission's Interpretive Guidelines include sitting, standing, lifting, and reaching. The law also applies to individuals who have a history of such impairment, as well as those who are perceived as having such impairment.

Attached to the ADA are the 1991 [ADA Standards for Accessible Design](#), (28 CFR Part 36, revised July 1, 1994) issued by the Department of Justice. The Department of Justice have announced that the 2010 ADA Standards for Accessible Design must be used on and after 15th March 2012, which will be released soon. These guidelines are to be applied during the design, construction, and alteration of such buildings and facilities to the extent required by regulations issued by Federal agencies, including the Department of Justice, under the Americans with Disabilities Act of 1990.

The Department of Justice is responsible for enforcing the ADA.

Through lawsuits and both formal and informal settlement agreements, the Department has achieved greater access for individuals with disabilities in hundreds of cases. Under general rules governing lawsuits brought by the Federal Government, the Department of Justice may not file a lawsuit unless it has first unsuccessfully attempted to settle the dispute through negotiations

The Department may file lawsuits in Federal court to enforce the ADA and may obtain court orders including compensatory damages and back pay to remedy discrimination. Under title III the Department may also obtain civil penalties of up to \$55,000 for the first violation and \$110,000 for any subsequent violation.

The Department sometimes resolves cases without filing a lawsuit by means of formal written settlement agreements or in some instances, the public accommodation, commercial facility, or State or local government promptly agrees to take the necessary actions to achieve compliance. In others, extensive negotiations are required.

The ADA requires the Department of Justice to provide technical assistance to businesses, State and local governments, and individuals with rights or responsibilities under the law. The Department provides education and technical assistance through a variety of means to encourage voluntary compliance. Activities include providing direct technical assistance and guidance to the public through the ADA Website and the ADA Information Line; developing and disseminating technical assistance materials to the public; and undertaking outreach initiatives.

The Department of Justice operates a free ADA Information Line to provide information and publications to the public about the requirements of the ADA. A 24 hour automated service, which allows callers to order publications, ask about filing a complaint or speak to specialists regarding technical questions (latter facility only available at specific times).

Building Regulations

The construction or alteration of any freestanding structure over 10m² (108sq.ft.) in area is required to have a Building Permit. A building permit is a licence that is required prior to construction to ensure that the design meets with the standards set out in a particular state. It gives building officials the means to enforce the requirements of the standards.

Many states use the [ADA Standards for Accessible Design](#) or the [International Building Code](#), but others have their own standards for accessibility. These standards are enforced by the state or local city or town authority. Accessibility is reviewed and approved at the same time as other aspects of the design i.e. when the project is submitted for a building permit and during the construction process. There is no requirement for a separate report to be submitted with regard to access at any stage.

Plan Reviewer

The building plan reviewer, or examiner, reviews and inspects engineering and architectural drawings when a project is still in the design phase. They function as a form of quality control by double-checking calculations and verifying compliance with building codes. If plans are not code compliant the plan reviewer must work with the design team (i.e. architects and engineers) to develop solutions that are effective and follow the building codes. The plan reviewer interprets codes if their application is unclear.

Building Inspector

Building inspectors examine all aspects of a building's construction to verify conformance with applicable building codes. According to the U.S. Department of Labor, "inspectors make an initial inspection during the first phase of construction and follow up with further inspections throughout the construction project."

Building inspectors in some municipalities must perform periodic checks on buildings to verify continuing code compliance. These checks can be on certain building systems, such as elevators, or for whole public buildings such as schools or entertainment venues.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Many states use the ADA Standards for Accessible Design or the International Building Code, but others have their own standards.

The USA is not within Europe and therefore the CEN/CLC Guide 6 is not applicable. CEN/CLC Guide 6 is identical with ISO/IEC Guide 71 and therefore also relevant in USA.

Other Bodies involved in accessibility of the built environment

Many states use the [ADA Standards for Accessible Design](#) or the [International Building Code](#), but others have their own standards. The Department of Justice provides education and technical assistance through a variety of means. Activities include providing direct technical assistance and guidance to the public through the ADA Website and the ADA Information Line; developing and disseminating technical assistance materials to the public; and undertaking outreach initiatives.

Public Procurement implementation

ADA requirements may change as regulations are modified to improve access or to provide more detailed guidance for entities covered by the ADA. When new requirements are proposed, a formal procedure is used which calls for public comment and agency review before the requirement is finalized. Changes in existing requirements or new requirements are first issued as a proposed rule and published in the Federal Register. Public comments, which are received by mail and over the Internet, are reviewed by the Department before a proposed Final Rule is published.

Conformance Assessment Schemes

All new buildings must meet the minimum requirements of the State's standards and CAS operates mainly through the building inspection process. However, whilst standards offer guidance on physical provision they do not consider the policies and procedures adopted by the service provider to ensure discrimination doesn't occur.

Education/Training of architects, construction engineers, public procurers etc.

The ADA requires the Department of Justice to provide technical assistance to businesses, State and local governments, and individuals with rights or responsibilities under the law. The Department provides education and technical assistance through a variety of means to encourage voluntary compliance. Activities include providing direct technical assistance and guidance to the public through the ADA Website and the ADA Information Line; developing and disseminating technical assistance materials to the public; and undertaking outreach initiatives.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Awareness/Awards/Funds to improve implementation of accessibility in the built environment, see here some examples

Tax credits are available for small businesses that remove access barriers from their facilities, provide accessible services or take other steps to improve accessibility for customers with disabilities.

Tax deductions are available for businesses of all sizes that remove access barriers in their facilities or vehicles.

A business that annually incurs eligible expenses to bring itself into compliance with the ADA may use these tax incentives every year. The incentives may be applied to a variety of expenditures; however, they may not be applied to the costs of new construction. All barrier removal must comply with applicable Federal accessibility standards.

Conclusion regarding accessibility in the built environment

Accessibility is considered at the same time as other aspects of the design throughout the design and construction process. If any accessibility issues are missed during this process then anyone feeling they have been discriminated against would have to complain through the Department of Justice. Using this process may prove costly and time consuming.

One good point is the use of incentives, with tax credits and tax deductions available businesses to encourage them to achieve accessibility.

G.4.2 Canada

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State Legislation with accessibility requirements (technical or functional)

Human rights legislation guarantees freedom from discrimination thereby establishing accessibility as a right.

At the National/Federal level

The Canadian Human Rights Act establishes the high level accessibility principles for sectors regulated by the Federal government (Defence, inter-provincial transportation, banking, federal government facilities and services, telecommunications, etc.). The Act is available at <http://laws.justice.gc.ca/en/h-6/243963.html>

The [National Building Code \(NBC\)](#) is the primary source of accessibility requirements for new construction and alteration to existing buildings. The 2010 Code is available for purchase at http://www.nationalcodes.ca/eng/national_codes_home.shtml. It should be noted that the NBC is a model Code only. Provincial codes have the jurisdiction. Some provinces adopt the National Building Code of Canada but the larger provinces have their own Building Codes.

The National Transportation Sector (as against the Provincial Transportation Sectors), are regulated by a series of Acts. A list of the transportation related Acts can be found at <http://www.tc.gc.ca/eng/acts-regulations/menu.htm>

Industry Canada has developed an Accessible Procurement Toolkit which can be accessed at <http://www.apr.gc.ca/>. The Government of Canada's Public Procurement policies and process can be viewed at <http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre01-chapter01-eng.html>

In addition, the Canadian Standards Association developed a suite of accessibility Standards under the B651 identifier including Standards for the built environment, banking machines, interactive self-service devices and point-of-sales terminals. There is also a CSA standard on Inclusive Design for an ageing population - CAN/CSA B659-08 – however this particular Standard is quite generic and lacking in specifics. The Government of Canada has adopted CAN/CSA B651-09 as a standard for accessibility for all of its facilities.

At the Provincial/Territory Level (10 Provinces and 3 Territories)

Each Province/Territory has its own Human Rights Code – establishing accessibility principles for sectors regulated by the Provincial government (Transportation within provinces, land use, building

development, employment, etc.) For example: the Ontario Human Rights Code can be accessed at http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h19_e.htm.

Provinces and Territories either adopt the National Building Code or incorporate sections of the NBC into their own Provincial building codes. Accessibility provisions within the various Provincial Building Codes are not harmonised – there are many variations and inconsistencies. The British Columbia Building Code is considered to be one of the more progressive.

See http://www.bccodes.ca/bccode_building.htm

The Province of Ontario is the first in Canada to develop an Accessibility Act – the [Accessibility for Ontarians with Disabilities Act \(AODA\)](#).

See <http://www.mcsc.gov.on.ca/en/mcsc/programs/accessibility/index.aspx>. This Act regulates accessibility for companies offering goods, service and facilities to persons in Ontario. Regulations are being developed and are in the process of being implemented in the following areas:

Customer Service (enacted)

Information and Communication (likely to be enacted by mid 2011)

Transportation (likely to be enacted by mid 2011)

Employment Practices (likely to be enacted by mid 2011)

Built Environment (date of enactment unclear – much controversy)

Procurement at the Provincial level varies across the country. Ontario Example: <http://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/English/procurement.html>

At the Municipal Level

While accessibility of the building itself is regulated by Provincial Building Codes, the accessibility of the exterior site elements (parking, landscape areas, walkways, etc.) are regulated by Municipal bylaws. Each municipality in Canada has its own bylaws, so they are extremely varied. Some of the Municipalities who have been progressive with their accessibility programs are London (Ontario), Winnipeg (Manitoba) and Saanich (British Columbia). A link to Saanich's Adaptable Housing initiatives <http://www.saanich.ca/business/adaptable/adaptable.html>

Many municipalities have developed their own accessibility standards – in direct response to the inadequate accessibility provisions within the Provincial Building Codes. Some of the most progressive accessibility standards development work is happening at the municipal level in Canada. Such municipal standards are typically mandatory for municipally funded project only. Municipalities have no legislative authority to impose accessibility building standard. At this time, the most progressive Municipal accessibility standard is Winnipeg. See <http://www.winnipeg.ca/ppd/UD/default.stm> (Note there is a 2010 Standard – but it has not yet been approved for publication).

Building Regulations

The Building Codes and municipal bylaws actually control the level of accessibility but human rights agencies can audit, monitor and require accessibility provisions.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Implemented in [CAN-CSA B651 Accessibility of the Built Environment](#)

Other Bodies involved in accessibility of the built environment

The province of Ontario has passed the Accessibility for Ontarians with Disabilities Act and has developed their own standards including one for the Built Environment, one for transportation. They established deadlines and targets for different agencies such as educational facilities, businesses, etc.

They also required municipalities to develop, adopt accessibility guidelines. Many have already. Unfortunately this has created too many documents that are not harmonised.

Municipalities in other provinces have developed guidelines.

The province of British Columbia developed an excellent code 20 years ago and is the leader in Canada.

Public Procurement implementation

The government of Canada has an accessibility requirement built into all their procurements. They have also developed an Accessibility Procurement Toolkit. We have had this for 15 years or so. The European accessibility procurement initiative might be modelled on the Canadian program.

Conformance Assessment Schemes

The building permit system assesses compliance with accessibility code requirements.

Human rights commissions have the right to conduct conformance assessments and do so periodically. The Canadian Human Rights Commissions audited samples of federal offices, banks, bank machines, etc and published reports. They followed up periodically. The Ontario Human Rights Commission did the same but other provinces have not been so active.

At the municipal level, many municipalities are asking their architects and other designers to complete a compliance checklist, and 'sign-off' that everything has been done.

Education/Training of architects, construction engineers, public procurers etc.

A number of schools of architecture include courses on universal design – probably about 10 schools. But it could be questioned if the schools of architecture and professional development programs really are embracing accessibility or universal design in any meaningful way. There are some exceptions for example OCAD University in Toronto, and some of the community colleges programs who are training architectural technologists. There are likely isolated examples in other Provinces. Engineers – not much that I am aware of.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

Canada has signed the convention and is currently negotiating and conferring with the provinces. In reality, there is no news on this lately. But there is an upcoming study planned on the potential implications to the National Building Code of Canada related to Canada signing the UN Convention.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

There is a Federal EnAbling Access program, as well as similar Provincial programs. The Federal program provides funding for accessibility renovations. For example the Ontario Provincial program funds education and awareness initiatives for capacity building in advance of the enactment of the [AODA regulations](#).

Conclusion regarding accessibility in the built environment

We have a problem with the lack of harmonization of accessibility as new documents continue to be introduced by municipalities. However, this has come about because of the history of weak regulation at both the federal and provincial levels.

The accessibility Act which is evolving in Ontario is the first serious attempt to enhance accessibility obligations anywhere in Canada. The Regulations when (and if) enacted will provide enhanced accessibility to goods, services and facilities across all sectors. The Province of Manitoba is soon to release a similar Act, and other Province and Territories are watching the Ontario experiment very carefully.

G.4.3 Singapore

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G.4.4 South Africa

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State Legislation with accessibility requirements (technical or functional)

The framework guiding the implementation of environmental access legislation is the United Nations Convention on the Rights of People with Disabilities. South Africa (SA) signed this in full, including the optional protocol, which several countries opted out of) in 2007.

South Africa's Constitution commits the country to equality, human dignity and a safe environment. Although this was written before South Africa signed the UN Convention, there is nothing conflicting between the two documents.

The Promotion of Equality and Prevention of Unfair Discrimination Act 2000 (PEPUDA 2000) defines equality for people with disabilities in relation to the Constitution. It makes direct reference to the implementation of standards on environmental access published by the South African Bureau of Standards (SABS).

The PEPUDA 2000 applies to any situation where people with disabilities may have experienced discrimination, including when using buildings and environments.

Building Regulations

The main Regulations are included in the Building Regulations and Standards Act 1977, which was amended in 2008. The SABS publishes 'Deemed to Satisfy Rules' or standards to accompany the Regulations.

Part S applies to environmental access for people with disabilities and is in the process of being revised. Standards are currently published as a group of documents and no one part can be revised without the other, so most are being revised in some way.

Significant changes are being proposed for the new Part S and they represent a substantial shift from the existing standards which were published in 1990.

Currently there is no clear relationship between legislation and the implementation of accessibility in practice in some situations although this varies nationally.

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

SABS issues guidance in the South African National Standards (SANS) 0246-1993 which offers guidance on meeting the Regulations laid down in [Part S](#). This is currently being updated.

The relationship between Part S and SANS is similar to that between [Part M](#) and [BS8300](#) in the UK.

These guidelines follow to some extent the functional requirements of CEN/CENELEC Guide 6 although a closer relationship should be established when the proposed new SANS is issued.

Other Bodies involved in accessibility of the built environment

The only major guidance available in SA is the minimum standards that accompany Part S although there are other documents referred to in Part S including SABS 0246 1993 Accessibility of Buildings.

Although not a recognised or official document in SA, the UK's BS8300 is also referred to as an example of good practice guidance.

Other bodies checking compliance and conformity with Regulations include Municipality departments such as Occupational Health and Safety, Department of Works and Planning/Building control.

Public Procurement implementation

The Regulations and Standards formally apply to all new buildings and major refurbishments, although they can also act as a guidance standard for existing buildings.

The PEPUDA 2000 has also enhanced the need for those developing environments to be aware of the inclusivity of their proposals.

Conformance Assessment Schemes

Regulations and standards are occasionally considered at the concept stage for large-scale projects. In the main accessibility tends to be considered at the detailed design stage.

The system of control is inherited from the UK system through past colonial relationships.

Building Control is administered through Local Authorities or 'Municipalities'. However, these appear to be often under-resourced and under-staffed. The National Regulator for Compulsory Specifications (NRCS) has overall responsibility to oversee the building control system, but neither it nor the municipalities appears to have clear responsibility for particular enforcement.

Legal action under the Building Regulations and Standards is rarely taken and complaints of discrimination by individuals need to be taken under PEPUDA 2000.

Part A of the Building regulations defines a competent person as a person who can certify a building being compliant with Part S. However, that person may be an Architect or an engineer with no qualification of training in environmental access. It is hope that a revision will be made to this by the introduction of a competent person (environmental access) classification.

Education/Training of architects, construction engineers, public procurers etc.

Access is taught in some University courses but not as part of a nationally co-ordinated programme. Training tends to be more related to the needs of people with physical and mobility impairments. There are some experts nationally, but not many.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

No nationally co-ordinated action plan, although there is a framework in place to translate the UN convention into action.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Little funding is available for improving accessibility in new or existing housing. No awards known.

Conclusion regarding accessibility in the built environment

Good practices in the country

It is difficult to highlight examples of good practice. However, it is hoped this will change when the next version of Part S is published. What is needed is a Code of Practice giving clear examples on what the PEPUDA 2000 means in detail and how to it address in practice.

G.4.5 Australia

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State Legislation with accessibility requirements (technical or functional)

Federal Legislation: Disability Discrimination Act – 1992 (DDA): Claims based, which is very effective in issues where a person who feels they have been discriminated against can under this legislation make a claim. Approximately 85% of claims are settled at the conciliation stage. If the matter is taken to appeal, it is usually to the Federal Court where the majority of appeals are successful in favour of the claimant. A total success rate of some 96% in claims made under the DDA legislation. The DDA is administered by the Human Rights Australia Commission (HRAC). The guidelines of the DDA call up the total suite of AS1428 standards and other related disability access standards in Australia.

State Legislation: Anti-Discrimination and/or Equal Opportunity Legislation: All states within Australia have Anti-Discrimination and/or Equal Opportunity Legislation, which caters for all types of discrimination in the work place, sexual, disability in fact all areas where discrimination may take

place. These Acts are reviewed whenever significant changes arise and can be justified. All of the State legislation is compliance based as opposed to the Federal claims based legislation.

Building Regulations

- Australian Building Codes Board – This body is responsible for the development of the Building Code of Australia (BCA), which dictates how all buildings throughout Australia are to be constructed. It tells you “what you have to do” whilst the standards “tell you how to achieve the outcome”. We have just recently completed an alignment of the BCA to the DDA legislation which requires the same level of compliance from the Federal legislative base, the DDA and the Federal building regulations, the BCA. Over the past 15 years we have been fortunate in gradually adding building requirements for disability access into the BCA, however the BCA only catered for the 80th percentile of people with disabilities, whereas the DDA required that the 90th percentile must be catered for in our built environment.
- Local Government Building Regulations – These are the City and Shire Councils, which in addition to the BCA have their own specific building requirements that in many cases may be unique to their area. Many of these are additional disability access requirements that go beyond the BCA requirements. They are referred to as Development Controls Plans (DCPs)

Standards/Technical Reports/CEN/CLC Guide 6 implemented in national standardization

Disability Standards for Accessible Transport - 2002.

This standard requires that all public infrastructure and conveyances are to be fully disability access compliant by a legislated set target date. Each type of transport infrastructure has differing dates as per schedule 1 of the standard from 2007 -2032, the majority of which is to be achieved prior to 2017. It is administered by HRAC as part of the DDA legislation.

Design for access & mobility standards – General requirements for access – AS1428

Part 1 – 2009 - New building work. Applies to all new buildings and new building works within a building, e.g. refurbishments.

Part 2 – 1992 - fixtures, fittings and fitments - Internal.

Part 3 - 1992 - Children and adolescents with physical disabilities.

Part 4.1 – 2009 - Means to assist the orientation of people with vision impairment – Tactile Ground surface indicators.

Part 4.2 – Wayfinding – currently under development.

Part 5 – 2010 - Hearing Augmentation.

Part 6 – Aged care – to commence development in late 2012.

Part 7 – External access, Urban & non-urban – currently under development.

Part 8 – Adaptable housing – currently being revised (AS4299 - 1995).includes Accessible housing.

Part 9 – Specific types of buildings – to commence development late 2014.

Parking Facilities Standards – AS2890

- Part 5 – 2009 - On-street parking – sub section on parking for people with disabilities
- Part 6 – 1995 - Off-street parking for people with disabilities.

Lifts – AS1735

- Part 7 – 1998 – Stairway Lifts
- Part 12 – 1986 - Facilities for people with disabilities
- Part 13 – 1986 – Lifts for persons with limited mobility – manually powered.

- Part 14 – 1986 – Low rise platforms for passengers
- Part 15 – 1986 - Lifts for people with limited mobility –Restricted use – non automatically controlled.
- Part 16 – 1986 – Lifts for people with limited mobility – Restricted use – Automatically controlled.
- Part 17 – 1986 – Lifts for people with limited mobility – Restricted use – Water drive.

Slip resistance classification of new pedestrian surface materials – AS4586 – 1999.

Guide to Road Design – Austroads – Part 6A: Pedestrian and Cyclist Paths – 2009.

Other Bodies involved in accessibility of the built environment

Association of Consultants in Access Australia. (ACAA)

State Building Commissions who also play a part in the administering of disability access being incorporated into the built environment.

Tertiary Education bodies in assisting in the training and education of students who will work in the area of the built environment.

Australia is a signatory to the UN convention on Rights of Persons with Disabilities and related action plans.

Public Procurement implementation

All tenders called for by all 3 levels of Government are required to include all aspects of disability access in the designs and an access consultant as part of the process is involved throughout the project. This is a requirement under the Building Code of Australia. As previously mentioned the DDA legislation is claims based and not compliance based, however government Federal and State Governments require that it be adhered to.

Conformance Assessment Schemes

These are administered by in every case by the Building Surveyors, Certifiers and in many cases Access consultants. Involvement takes place in many cases on a project from the planning of the brief. Other projects, access consultants are not brought in until the concept/schematic stages, which in turn are then approved by the local planning authorities. Each of the following stages, detailed design, detailed documentation, site inspections throughout the project and final inspection at practical completion are all certified by building surveyors in every case and in the majority of cases by access consultants. The latter involvement is voluntary in the private to have access consultants approved, but as disability access inclusion in a building or facility is a requirement they are more often than not involved.

Education/Training of architects, construction engineers, public procurers etc.

We have a couple of tertiary courses up and running specifically aimed at disability access. These have only recently been approved. In relation to other professions there are small segments allocated into most courses, but not nearly enough allocated time is given to have the required input needed to ensure that the students are equipped to fully understand the issues.

The writer is an accredited Standards Australia trainer and spends many hours each month training Architects, engineers, urban planners, building surveyors designers, building managers, project managers and maintenance staff in the area of disability access in the built environment.

Implementation of UN Convention of the Rights of Persons with Disabilities: action plans

As a signatory to the UN convention of Rights of Persons with Disabilities and a major contributor to the Bill of Rights, Australia is 100% behind all that it stands for.

Our Federal Disability Discrimination Act - 1992 legislation requires that Disability Action Plans (DAPs) are developed by all organisations, but as this is claims based legislation, many private companies have not provided and registered DAPs. But when a claim is made against them, this is the trigger that encourages them to develop a DAP.

Awareness/Awards/Funds to improve implementation of accessibility in the built environment

Human Rights Australia Commission Access Awards held annually. Nominations of people worthy of the award due to their contribution in making our community more accessible.

Over 120 local government authorities hold their own access awards for good access design, innovative projects that benefit people with disabilities during the past year.

Deafness Forum of Australia have 9 categories all of which relate to Captioning in the media, theatres and community general.

Independence Australia conduct annual "Access Friendly Awards" in conjunction with Department of human Services – Disability and the Transport Accident Commission to formally recognise the efforts and achievements of local businesses that demonstrate what we see as the minimum key components of accessibility, compliant entrances, circulation spaces and unisex accessible WCs.

Access IT awards is relatively new. For the past 3 years have awarded companies or individuals that have been worthy developers of IT innovative products or solutions that make life easier for people with disabilities.

Conclusion regarding accessibility in the built environment

It's been a challenging 32 years since Australia first attempted to change our built environment that would allow people with disabilities to be able to freely move about in an equitable manner, independently with dignity.

Current achievements have been the:

- general acceptance that people with disabilities have the right to enjoy the freedom of choice in all that they do each day and
- the legislation and regulations that call up the disability standards to enable all new buildings and facilities to be accessible.

Areas of improvement are to

- expand the education process to all students undertaking courses that relate to the built environment, and
- on-going education of the public as a whole as to the needs of people with disabilities.

G.5 Coverage of User Needs in European and EFTA countries and International (including ISO 21542)

Table G.5.1 - Table of user needs coverage in European and EFTA countries and International (including ISO 21542)

User Needs (indicated for each country with Generally, partly or not covered: G/P/N and indicated with our colours green/yellow/orange)	Inter-national			EU countries																								EFTA					
	ISO 2142	ADA	CANADA	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	Liechtenstein	Norway	Switzerland
People using a wheelchair	c	c	c	c	c		c	c	c		p	c	c	c	c		c		c	p	c	c	c	p			c		c	c		c	c
People with walking difficulties	c	c	c	c	c		c	c	c		p	c	c	c	c		c			p	c	c	c	c			p		c	c		c	c
People with reduced manual dexterity / arm function / strength	c	p	c	c	p		p	p			n	c	c	p	c		p			p	c	n	c	c			p		c	p		c	c
People with vision impairments / blind	c	p	c	c	p		c	c	c		p	c	c	c	c		p		c	p	c	n	c	p			n		c	c		c	c
People with Hearing impairments / deaf	c	p	c	c	p		p	c	p		p	c	c	p	p		p		c	p	c	n	c	n			p		c	p		c	c
People with Intellectual / cognitive / mental impairments	c	p	c	p	p		p	p	p		n	c	n	p	n		p		n	p	p	n	c	n			p		c	p		c	p
People with allergies	p	n	c	n	p		n	n	p		n	n	n	n	n		n		n	n	n	n	n	n			n		p	n		c	n
People with diversities in age and stature	c	p	c	c	p		c	c	p		p	p	p	c	n		n			n	n	n		p			n		p	c		c	c
Others: users with colostomy (ISO, Sweden); Loendurance (P); Pregnant woman, mothers with prams, mothers guiding children with 3 years (CZ)	p							c	p															p					p				

ANNEX H
Input data of team B report

H.1 Identification of conformity assessment schemes and requirements for technical capacities

Table H.1.1 - CEN 207 Conformity assessment schemes

CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
			43	10	22	38	12	11	19	17	29	16	16	yes
			57%	13%	29%	39%	12%	11%	20%	18%	48%	26%	26%	yes
											31	42	42	no
											27%	37%	37%	no
EUROPEAN UNION (EU) MEMBER COUNTRIES														
AUSTRIA														
AUSTRIA	BEP	Etappenplan für die Adaptierung der Barrierefreiheit in Bundesgebäuden / Stages of adaptation planning for accessibility in buildings of the federal government	BGStG, ASchG, BEinstG	ÖNORM B 1600						x	y	n	y	Internal document for all public buildings used in different responsible departments of different federal ministries (used for adaptation of cultural buildings, tax authorities, police stations, railway stations etc.)
AUSTRIA	ÖNORM B 1610	ÖNORM B 1610 Barrier-free buildings and installations - Requirements for evaluation of accessibility (2008-02-01)	www.as-search.at	ÖNORM B 1600					x		y	y	y	First pilot project by 'Austrian Standards plus Certification' not yet finished

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
Belgium	CWATUPE	Code wallon de l'aménagement du territoire, urbanisme, patrimoine et de l'énergie	http://mrw.wallonie.be/dgatatip			x					y	y	y	
Belgium		Un espace public pour tous								x	y	n	n	
Belgium	Un Logement pour tous » Pour une Wallonie accessible	Un Logement pour tous » Pour une Wallonie accessible								x	y	n	n	
Belgium	Cahier de prescriptions techniques pour l'accessibilité et l'adaptation des logements sociaux pour personnes handicapées	Cahier de prescriptions techniques pour l'accessibilité et l'adaptation des logements sociaux pour personnes handicapées								x	y	n	n	
Belgium	Fiches techniques pour faciliter la réalisation de plans, ANLH-ACCESA 10 fiches (recto/verso)	Fiches techniques pour faciliter la réalisation de plans, ANLH-ACCESA 10 fiches (recto/verso)								x	y	n	n	

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type						Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems		
Belgium	Design For All : « AAoutils – Architecture et Accessibilité	http://www.aanh.be/aaoutils/ind ex.htm								x	y	n	n		
Belgium	RRU	Règlement régional d'urbanisme - http://www.rur.irisnet.be/fr/indexfr.htm				x					y	y	y		
BELGIUM (Flanders)															
BELGIUM (Flanders)	Federale wet van 17 juli 1975 betreffende de toegang van gehandicapt en tot gebouwen toegankelijk voor het publiek. (KB van 9 mei 1977)	Federale wet van 17 juli 1975 betreffende de toegang van gehandicapt tot gebouwen toegankelijk voor het publiek. (KB van 9 mei 1977)	FED75			x					y	n	n		

	CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
	Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems
BELGIUM (Flanders)	Vlaamse Codex Ruimtelijke Ordening (decreet van 16 juli 2010 (B.S. 9/8/2010)); Art. 2.3.1. De Vlaamse Regering kan gewestelijke stedenbouwkundige verordening en vaststellen voor een deel van of voor het hele gewest. Die verordening en bevatten de nodige stedenbouwkundige voorschriften om te zorgen voor: de toegang voor personen met een functiebeperking tot al dan niet bebouwde onroerende goederen of delen ervan toegankelijk voor het publiek, tot installaties en wegen,	Vlaamse Codex Ruimtelijke Ordening (decreet van 16 juli 2010 (B.S. 9/8/2010)): Art. 2.3.1. De Vlaamse Regering kan gewestelijke stedenbouwkundige verordeningen vaststellen voor een deel van of voor het hele gewest. Die verordeningen bevatten de nodige stedenbouwkundige voorschriften om te zorgen voor: de toegang voor personen met een functiebeperking tot al dan niet bebouwde onroerende goederen of delen ervan toegankelijk voor het publiek, tot installaties en wegen,	http://www2.vlaanderen.be/ruimtelijk/wetgeving/decreet/VCRO.html	VCRO			x				y	n	n	

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
BELGIUM (Flanders)	Dossiersamenstelling: 16, 2°, c) zo het een geheel of deels voor het publiek toegankelijk gebouw betreft, een beschrijving van de al dan niet vergunningsplichtige voorzieningen om integrale toegankelijkheid te bereiken voor de personen met verminderde beweeglijkheid. Hierbij wordt bijzondere aandacht besteed aan die voorzieningen die verder gaan dan de wettelijk vastgelegde normen; + ART. 16 13° een mobiliteitsstudie		DS			x					y			
BELGIUM (Flanders)	GSV Besluit van de Vlaamse Regering van 5 juni 2009 tot vaststelling van een gewestelijke stedenbouwkundige verordening betreffende toegankelijkheid	anderen.be/ruimtelijk/wetgeving/uitvoeringsbesluiten/index.html & www.toegankelijk	GSV			x					y	y	n	

	CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
	Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems
BELGIUM (Flanders)	Wet van 10 mei 2007 ter bestrijding van bepaalde vormen van discriminatie (BS 30 V 07) - artikel 4 redelijke aanpassingen van de arbeidspost voor personen met een beperking	Wet van 10 mei 2007 ter bestrijding van bepaalde vormen van discriminatie (BS 30 V 07) - artikel 4 redelijke aanpassingen van de arbeidspost voor personen met een beperking	http://www.diversiteit.be/?action=wetgeving_detail&id=15&select_page=12&setLanguage=1	ADW			x					n	n	n
BELGIUM (Flanders)	DTAH	BS 08/5/2009 - 20 MAART 2009 Decreet houdende de toegankelijkheid van publieke plaatsen voor personen met een assistentiehond	http://staatsbladclip.zita.be/staatsblad/wetten/2009/05/08/wet-	DTAH			x					n	n	n
BELGIUM (Flanders)	MOPPMH	Ministeriële omzendbrief van 3 april 2001 betreffende het voorbehouden van parkeerplaatsen voor personen met een handicap. (B.S. 05.05.2001)	http://www.wegcode.be/wet.php?wet=72	MOPPMH			x				y	n	n	

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
BELGIUM (Flanders)	VD	besluit van de Vlaamse regering van 29 april 1997 houdende vaststelling van een algemene bouwverordening inzake wegen voor voetgangersverkeer (Voetgangersdecreet) bvr 29/4/1997 b.s. 7/5/1997	http://www2.vlaanderen.be/ruimteijk/verordeningen/verordening.html	VD			x				y	n	n	
BELGIUM (Flanders)		Geregistreerde Belgische technisch rapport NBN ISO/TR9527:1994 - Ontwerprichtlijnen.		NBN ISO/TR9527						x	n	n	n	
BELGIUM (Flanders)	EN 81-70	EN 81-70:2003 Veiligheidsregels voor het vervaardigen en het aanbrengen van liften — Bijzondere toepassingen voor personenliften en personen-goederenliften — Deel 70: Toegankelijkheid van liften voor personen inclusief personen met een handicap 6.8.2005		EN 81-70			x				y	y	n	
BELGIUM (Flanders)	VADV	VADEMECUM VOETGANGERSVOORZIENINGEN 2003	http://www.mobielvlaanderen.be/vademecums/vademecumvoet		VADV				x		n	n	n	
BELGIUM (Flanders)	VADF	Vademecum Fietsvoorzieningen dateert van 2002, herzien in 2006 en 2008,	http://www.mobielvlaanderen.be/vademecums/vademecumfiets		VADF				x		n	n	n	
BELGIUM	HBTPG	Handboek Toegankelijkheid			HBT				x		n	n	n	

CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems
(Flanders)		publieke gebouwen			PG								
BELGIUM (Flanders)	MGW	Ontwerpgids Levenslang Wonen (1999) en ontwerpgids Meegroeiwonen (2009)			MGW				x		n	n	n
BELGIUM (Flanders)	ZS	De zilveren sleutel			ZS				x		n	n	n
BELGIUM (Flanders)	WENK	Wenkenbladen toegankelijkheid			WENK		x				n	n	n
BELGIUM (Flanders)	TVWTCB	WTCB-Dossiers – Toegankelijkheid van trappen - Veiligheid en toegankelijkheid van gebouwen - Toegankelijkheid van buitenschrijnwerk - Evacuatie van personen met beperkte mobiliteit bij brand	TVWTCB					x			n	n	n
BELGIUM (Flanders)	VADTPD	Vademecum 'Toegankelijk Publiek Domein'			VADTPD				x		n	n	n

	CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
	Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
BELGIUM (Flanders)	TOEVL	Premie uitgereikt door toerisme vlaanderen voor toegankelijke toeristische accommodaties	http://www.toerismevlaanderen.be/showpage.asp?IPageID=233			TOEVL				x		n	n	n	
BELGIUM (Flanders)	RBLL	Richtlijnen voor de aanpassing van gebouwen voor visueel gehandicapten, Blindenzorg Licht en Liefde	http://www.blindenzorglichtenliefde.be/801_TG.HTM			RBLL					x	n	n	n	
BELGIUM (Flanders)	BN	Brailleenormen - brailleliga	http://www.brailleliga.be/nl/documentatie/andere/default.asp			BN					x	n	n	n	
BELGIUM (Flanders)	TB	Digitale toegankelijkheidsbrochure	http://www.blindenzorglichtenliefde.be/toegbrochure/index.htm			TB					x	n	n	n	
BULGARIA															
BULGARIA															
CYPRUS															
CYPRUS	BCA Cyprus	BCA scheme for safety and accessibility		BCA Cyprus			x								
CZECH REPUBLIC															

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems		
CZECH REPUBLIC	BCA Czech Republic	BCA Czech Republic	BCA Czech Republic			x									
DENMARK															
DENMARK	BCA	Building Control authority schemes	BR 2010			x	x				n	n	n	Partly established through informal BCA schemes	
DENMARK	AR	Accessibility Revision, roads and public areas			HIT				x		n	n	n	Requirements only established for AR roads and public spaces revision	
DENMARK	SBi	SBi checklists, building assessment tool	BR 2010		SBi 230		x								
DENMARK	UBST	UBST standard, University Buildings assessment tool	BR 2010		SBi 230		x				n	n	n	Partly established through informal BCA schemes and UBST consultants	
DENMARK	Godadgang	Godadgang, Tourism Labelling System			x		x		x		n	n	n	Combined rating and updating system partially based on Danish Standard DS 3028.	
ESTONIA															
ESTONIA	BCA	Building Control Authority Scheme	none	EE Build Act		x								§47 of the Act provides an opportunity to	

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type						Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems			
														register as "specialist in charge" in e.g. accessibility		
FINLAND																
FINLAND	SCW	Supervision of construction work	LUBA			x					n	n	n			
FRANCE																
FRANCE	BCA France	BCA France				x										
GERMANY																
GERMANY		privat institutions	x	x	x			x		x	n	n	n			
GERMANY	BCA Bundesländer	BCA Bundesländer	x													
GREECE																
GREECE	GDSBW 7A, 2000	Guide for the Development of School Building Works, Tool no. 7A. First edition, 2000. Management Organisation Unit of Development Programmes S.A. (For administration of the EU Support Framework), Ministry of National Finance.	www.mou.gr			GDSBW 7A, 2000					x	n	n	n		
GREECE	PD 43/2002 MINDEV	Greek National Tourism Organisation. Classification of Hotels		PD 43/2002 MINDEV			x				y	y	y			
GREECE	J-TAP, 2008	"JASON" Programme. Typical Action Plan for Restoring Accessibility at the Local Level. Guideline, ESAMEA. National Organisation of Disabled Peoples' Associations				J-TAP, 2008					x	n	n	n	Proposed checking and conformity scheme for local authorities, designed by national disability NGO	

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems		
GREECE	Circ. 8303/2008 MININT.	Government Circular. Ministry of Interior. 8303/08.02.2008. Accessibility Network for People with Disabilities removing barriers from common areas.	Circ. 8303 /2008 MININT.							x	n	n	n	Government Circular for municipalities, (THESEAS programme 2005-2009), to implement legal framework ref. DGPA 1998 MINENV. For outdoor areas.	
GREECE	MCAPSI, 2009. MININT.	Methodology for Checking Accessibility in Public Services and Infrastructures. 2009. Ministry of the Interior.			MC APS I, 2009. MIN INT.					x	n	n	n	Ministerial conformity checking scheme	
HUNGARY															
HUNGARY	BCA Hungary	BCA Hungary													
IRELAND															
IRELAND	PA	Planning Authority Scheme	www.environ.ie/en/Publications/DevelopmentandHousing/Planning/Download	Planning & Development Regulations 2001			x		x	x	n	n	n	PA Scheme potentially important but rarely used for implementation & control of accessibility standards	
IRELAND	BCA	Building Control Authority Scheme		Building Control Regulations 1997 - 2009			x	x		x	n	n	y	Notification of intention to commence works must be given to BCA. Limited training of BC Officers	

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems		
IRELAND	BCA FSC	Building Control Authority Fire Safety Certificate Scheme			TGD B 2006	x	x		x		n	n	y	Emergency evacuation of people with disabilities considered under Fire Safety Certificate application. Limited training of fire officers in access issues	
IRELAND	BCA DAC	Building Control Authority Disability Access Certificate Scheme	www.environmentandhousing.gov.ie/Standards/Publications/Documents/FileDownload,1594,en.pdf	Building Control Regulations 2009		TGD M 2000	x	x			n	n	y	BCA certifies compliance at design stage with requirements of Part M of the Building Regulations. Very limited training of building control officers. Scheme introduced 2010	
ITALY															
ITALY	BCA Italy	BCA Italy		BCA Italy			x								
LATVIA															
LATVIA	BCA	Building Control Authority Scheme	none	LV Construction Law			x				n	n	n		
LITHUANIA															
LITHUANIA	BCA	Building Control Authority Scheme	none	LT Construction Law			x							Article 10, §2 of the Act: The qualification requirements for planners, designers etc. shall be laid down by an institution authorised by the Government.	

	CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
	Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
LUXEMBOURG															
LUXEMBOURG															
MALTA															
MALTA															
NETHERLANDS															
NETHERLANDS	RBP	REGULAR BUILDING PERMIT		Building Decree+Local Development Plan		Aesthetic issues	x		x			y	y	n	
NETHERLANDS	LBP	LIGHT BUILDING PERMIT		Building Decree+Local Development Plan			x		x			y	y	n	For some minor construction works
NETHERLANDS	UP	USE PERMIT		Building Decree+Fire Safety			x		x			y	y	y	For special buildings, using by many people
Norway															

	CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
	Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
Norway	NORWAY			Plan- og bygningsloven, Byggeteknisk forskrift, Byggesaks forskriften (into force 1 July 2010)			x	x (from 1 July 2011)	x (voluntary)			n	n	n	Par 9-13 in the Planning and Building Act regulates the qualification requirements for companies seeking approval as exerting responsibility for a set of domains, specified in the Act. Accessibility is, however, not such a domain. From 2013, accessibility will be a prioritized domain for supervision by the municipalities
POLAND															
POLAND	BCA Poland	BCA Poland		BCA Poland			x							y	Required for persons checking access issues
PORTUGAL															
PORTUGAL															
ROMANIA															
ROMANIA	BIS	Building Inspection Scheme	http://www.isc-web.ro/	Law 50			X	N	X	X		y	N	N	
SLOVAKIA															
SLOVAKIA	BCA Slovak Republic	BCA Slovak Republic		BCA Slovak Republic			x								

	CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
	Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
SLOVENIA															
SLOVENIA	BCA Slovenia	BCA Slovenia		BCA Slovenia											
SPAIN															
SPAIN	LO	Building permit - Licencia de Obra		CTE + regional decree+ local rules			x		x			y	y		
SPAIN	PO-LA	First Occupation / Opening License - Primera Ocupación / Licencia de Apertura		CTE + regional decree+ local rules			x		x			y	y		
SPAIN	CA	Accessibility Certificate - Certificado de Accesibilidad			UNE 170001		x		x	x				y	
SWEDEN															

CEN 207 Conformity assessment schemes			Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems
SWEDEN	PBL	In Sweden accessibility is an essential requirement on construction works, and the same conformity assessment rules apply as for other essential requirements. No specific schemes for conformity assessment of accessibility requirements exist. But there are regulations about when and by whom the controls have to be done. The site is controlled in connection to building permission (by the local building committee) and the building later in the process. The builder is responsible but the local building committee might decide that the accessibility control must to be done by an independent expert (see column I). A controlplan is done where accessibility is one control among many others. No further details how the control should be done are given. What is controlled is that the building law (including building code) is followed. (Some changes in the process described above are decided).								See note			Note: The municipality can decide that the accessibility control has to be done by person approved by the municipality or a person with a certification
SWEDEN	PBL	The site is controlled in connection to building permission. The building is											

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?			
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems		
	controlled in a later stage in the process when a controlplan is established. Accessibility is usually mentioned as one control that has to be done, but no more details are given.														
UNITED KINGDOM															
UNITED KINGDOM	Building Control	Building Regulations				x					y	y	y		
UNITED KINGDOM	Approved Inspector Scheme	Building Regulations				x			x		y	y	y	Applies to accredited Approved Inspectors only.	
UNITED KINGDOM	Planning	Town and Country Planning Acts								x	y	y	y		
INTERNATIONAL - NON-EU MEMBER COUNTRIES															
AUSTRALIA															
AUSTRALIA	BCA Australia	BCA Australia		BCA Australia		x		x						Access consultants more often than not are involved in all stages	
CANADA															
Canada	TB	CAN/CSA-B651-04													

CEN 207 Conformity assessment schemes				Conformity assessment schemes are addressed or enforced through:			Conformity assessment scheme type					Requirements for technical capacities established in documents (regulations, standards, guidance) that enforce conformity schemes on accessibility?		
Inventory abbreviation	Name	Link	Regulations	Standards	Guidance	Building control authority scheme	Supplier self-declaration	Certification or accreditation of suppliers	Third party certification	Other	Requirements established for planners and designers	Requirements established for building contractors	Requirements established for bodies or persons operating BC systems	
CANADA	OBC	Building Inspection Scheme	http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_92b23_e.htm	Ontario Building Code Act			x				y	y	y	
CANADA	ASCS	Compliance Assessment Scheme	http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_070429_e.htm	Ontario Regulation 429/07, Accessibility Standards for Customer Service				x	x	x	y	y	y	
CANADA	IAS	Integrated Accessibility Standard		Ontario Regulation (TBD)									Anticipated that regulation will be enacted mid-2011	
CANADA	FADS	Facility Accessibility Design Standards	http://www.london.ca/d.aspx?s=/Accessibility/standards	Municipal Council Policy Approval				x			y		Only a requirement for projects funded by the municipality - compliance is encouraged for others	
UNITED STATES OF AMERICA (USA)														
UNITED STATES OF AMERICA (USA)	USA BCA Example	USA BCA Example		USA BCA Example	USA BCA Example		x							

H.2 Data collected for conformity assessment of the accessibility requirements during building phase in EU Member States

H.2.1 Austria

Country		Austria				
Scheme name including abbreviation		W-BO				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning	<p>Planning (design) drawings and reports for application for building project, see below.</p> <p>Only authorized experts (architects, civil engineers, government-approved masterbuilder or responsible construction site manager) have to sign the plans and can apply for a building permit.</p> <p>Plans should follow the requirements of the building regulation and the state of the art.</p> <p>Plans* and reports about emergency exits</p>	<p>Accordance of the project with local development plan assessed by planning authority.</p> <p>Building permission process is different in small municipalities and cities. In cities different departments of building control authority have to give their final approval in the building permit's process (architectural design, fire safety, stability etc.) depending on the size and use of the building. In public building works where</p>	<p>Building authority is generally the local authority.</p> <p>Only in the following three cases it is the district authority as part of the federal government responsibilities (e.g. for employment issues, transport, railway, streets, public spaces:</p> <ul style="list-style-type: none"> - for buildings of the federal government, - for buildings for trade, commerce and industry with employees (employee-protection legislation Asch) 	<p>Routing sheet where architects (or other authorized planners) are collecting approvals of different governmental departments of the building control authority concerning their planning and design before the application of a building permit.</p>	<p>Slight differences between provinces (9 different countries).</p> <p>5 (6) countries have already incorporated the harmonized building regulation according accessibility and usability of the built environment in their building regulation which is stated in OIB-Guideline 4. OIB-Guideline 4 makes strong references to different clauses in ÖNORM B 1600 where the principles of accessible built environment are described as state of the</p>

Country		Austria				
Scheme name including abbreviation		W-BO				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		and escape routes concept depending on the size and use of the building. *planned by fire-safety experts together with architect	the owner is the city government (Vienna) the access board department is included in the approval process as authorized expert and gives the final approval for accessibility design.	- in small municipalities which have transferred this task to the district authority.		art. Generally architects have to follow all technical requirements which are 'state of the art'. This is usually required in the building design and procurement process by the building authority and also by private building owner/ customers.
2	Application/building project	Documentation of construction drawing and details Technical reports where necessary (fire safety, emergency exit plans) Declaration of conformity with	Accordance of the project with building regulation.	Building authority issuing building permit. For certain projects, small adaptation works for which a simplified procedure applies: architect, civil engineer, government-	Building permit Confirmation of architect about fulfilment of accessibility requirements (only in Vienna)	---

Country		Austria				
Scheme name including abbreviation		W-BO				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		accessibility guide lines has to be delivered by the planning architect (only in Vienna required)		approved masterbuilder or responsible construction site manager delivers a notice of commencement		
3	Construction	Documentation of construction drawing and details	In public building works concerning public spaces and streets the access board department is included in the construction process as authorized expert and gives the final approval for special accessibility design solutions – in special cases supported by experts with mobility impairment and/or sensual (vision) impairment.	Building construction firms supervised by architect, In case of accidents building authority is involved;	Notes, entry into the building book	---

Country		Austria				
Scheme name including abbreviation		W-BO				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			Participation of technical supervisor if facultative included as an integral partner in planning and construction phase,			
4	Completion	As-built drawings	Technical handover,	Contractor manager, technical supervisor (access consultant) who confirms fulfilment with building regulation and accessibility requirements (only in Vienna)	Application of occupancy permit after delivery of all necessary confirmations; in Vienna also with confirmation of architect or supervisor (civil engineer) to prove the fulfilment of accessibility requirements –may be supported by a certificate of access consultants (not usual practice)	General the architect is the responsible authorized expert in planning within the framework of the state of the art + building regulation
5	Use	certification of access consultant to prove the	---	---	Occupancy permit	---

Country		Austria				
Scheme name including abbreviation		W-BO				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		fulfilment of accessibility requirements				

New certification standard ÖNORM B 1610 “Barrier-free buildings and installations - Requirements for evaluation of accessibility” under pilot testing phase within Austrian Standards Certification department!

H.2.2 Australia

Country		Australia				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Building Code of Australia BCA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning	Planning or Development Application depending in which state the project will be.	Evaluation of planning/development application. Certificate issued, often with conditions in relation to access.	Local Government Planning Authority or State/Federal Government if a State /Federal facility	Compliance certificate that the submitted plan fulfils all of the DDA/BCA access Requirements.	Often conditions relate to the inclusion of access requirements into the detailed plans and documentation.

Country		Australia				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Building Code of Australia BCA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			Opportunity for community to comment on if likely to affect their amenity.			
2	Application/building project	Application for a building permit	Detailed evaluation of all plans and opportunity for public to comment on if likely to affect their amenity.	Local Government Planning Authority or State/Federal Government if a State /Federal facility	Report detailing issue that need rectification followed by re-auditing of detailed plans & letter of confirmation .	No compliance requirements in the form of a letter at this stage.
3	Construction		Regular site visits at critical times to ensure setouts, clearances and gradients will be achieved. Form work needs to be checked before the pouring of concrete.	Report on issues immediately and ensure that appropriate action is taken, if not work through the issues with the builder and building surveyor in order to resolve the issue. No need to issue any	None to date.	Site visits and inspections must be timed to ensure that critical issues are evaluated for compliance.

Country		Australia				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Building Code of Australia BCA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
				discontinuation notices as yet due to all involved being aware of their responsibilities.		
4	Completion		Final inspection at practical completion	Audit final facility for full compliance. If issues are present, provide a detailed report of issues with compliant solution/s to fix.	Letter of compliance when issues have been rectified.	Letter of compliance to building surveyor who will not issue certificate of occupancy (CofO) until rectification work has been carried out. If of a minor nature a conditional CofO will be issued.
5	Use	These all vary according to the class of building, which is clearly set out in the BCA.	Appropriate licences to be obtain, depending on the type of facility.	BCA	Valid licences if required.	

H.2.3 Belgium

Country		Belgium (Flanders)				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		- Vlaamse Codex Ruimtelijke Ordening (VCRO) - Dossiersamenstelling: 16, 2°, c (DS) - Gewestelijke stedenbouwkundige verordening betreffende toegankelijkheid (GSV)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					**
2	Application/building project	Building permit to be obtained from local authority (city). (DS) determines the file composition of a building license and says that there has to be a note on accessibility. If there is an accessibility advice it is added (not required)	The local authority has to check if the building permit is ok. They have to check if there is a note on accessibility and if the regulation on accessibility (for public buildings) is applied.	Architect, owner and builder are responsible for the correctness of the planning application. The local authority has to check this.	Building permit	
3	Construction	Notification of the local authority at the start of	A safety coordinator controls the building site at safety	Architect, owner, contractor	/	

Country		Belgium (Flanders)				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		- Vlaamse Codex Ruimtelijke Ordening (VCRO) - Dossiersamenstelling: 16, 2°, c (DS) - Gewestelijke stedenbouwkundige verordening betreffende toegankelijkheid (GSV)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		the work	regulations. In case of an accessibility advice, a Accessibility consultancy can do a control of the building site if the works that concern accessibility are going ok.			
4	Completion	/	/	/	/	
5	Use	/	provisional acceptance of the building, final acceptance after 1 year	Builder, architect, contractor	/	

Red gives everything on accessibility.

*Remarks: these 3 documents determine the building control system in case of accessibility.

**Every region in Belgium has his own planning.

- Ruimtelijk Structuurplan Vlaanderen (RSV)= zoning in Flanders

- **Gewestelijk bestemmingsplan (GBP)** = zoning in Brussels

- **Schéma de Développement de l'Espace régional d'Aménagement (SDER)** = zoning in Wallonne.

Spatial planning in Flanders is determined by spatial structure plans and spatial implementation plans at the level of Flanders, the provinces and the municipalities.

H.2.4 Cyprus

Country:		Cyprus				
Scheme name (as in spreadsheet):		SUABW-2010 - Approved Prototype for the Safe Use and Accessibility of Building Works, April 2010. Ministry of the Interior.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/ planning	-	-	-	-	Planning permission is covered elsewhere, not in this conformity scheme. After the planning permission is approved, then the building permit is applied for.
2	Application/building project	The architect submits the design drawings to public authority. Architect also submits a 'Statement of Safe Use and Accessibility'.	Approved Adviser of Safety of Use and Accessibility checks the design. The Adviser approves and signs the Statement when it is correct, in order for it	The public authority is responsible for issuing the build permit, which includes the Adviser checking the statement covering all aspects of the safe use and accessibility of the project.	With the signed Statement, the building permit is issued.	

Country:		Cyprus				
Scheme name (as in spreadsheet):		SUABW-2010 - Approved Prototype for the Safe Use and Accessibility of Building Works, April 2010. Ministry of the Interior.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			to be submitted with the drawings.			
3	Construction	-	-	-	-	
4	Completion		Adviser checks the completed building	Public authority and Adviser	With the end of work of building, the Authority evaluates the level of achievement of accessibility work and publishes the Certificate of Safe Use and Accessibility. After the guarantee of which, the building owner is compelled to display the International Symbol of Access in the entry of building.	The certificate of Safe Use and accessibility accompanies the application for publication of final approval of building from the responsible authority and no such application will be examined without the above Certificate.
5	Use	-	-	-	-	The conformity scheme does not cover the use period of the building.

H.2.5 Denmark

Conformance Assessment Schemes

- Conformity schemes are designed by the Municipal Authority Building Control departments themselves, and no detailed or harmonized National schemes as such exist; foundations as such are simply the Building Regulations, and these have to be met. The stage of the building process at which assessment is introduced may for this reason vary, but it normally first happens along with the application for a building permit or prior introductory talks.
- Municipal Authority Building Control departments are the principal bodies involved in conformity assessment

An interesting third type of mechanism for conformity assessment is appearing in later years, as it is being stressed more clearly in legislation today that responsibility for compliance with requirements lie almost entirely with the owner/builder, and not with the municipal authorities. Even when projects and plans have been checked by the authorities the burden still lies with the applicant/builder/owner. This in theory entitles third parties to intervene if they after completion discover that a building does not comply with regulations at a certain point. The system then allows the person to contact the municipal authorities and file a complaint, and the municipality then is obliged to direct itself towards the owner of the building and demand the flaw be corrected. There's no law suit to it for the third party person. This mechanism does not apply to buildings erected before building regulations started to include accessibility measures, but in principle works retrospectively for two or three sets of regulations. The full extent of this type of control remains to unfold, also as it represents a shift towards less municipal involvement in the first round of procedures, and most likely because procedures differ from municipality to municipality

H.2.6 Estonia

Country		Estonia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006, the Estonian Building Act, and information from Jüri Järve, Estonian Union of Persons with Mobility Impairment)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning	Levels of plans: - State (regional) plan - County master plan - Local master plan	Approval by: - Regional Minister (Government) - County Governor	- Ministry of Internal Affairs - County Governor - (Planning division of)	Approved plans	

Country		Estonia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006, the Estonian Building Act, and information from Jüri Järve, Estonian Union of Persons with Mobility Impairment)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		- Local detailed plan Provide detailed plan in rural areas or plan of location	(Regional Minister) - Municipality Council (local plans)	local government		
2	Application/building project	- Output from planning process - Master drawings by designer (in case of simpler buildings by contractor) - Building permit - When needed: results of geologic research, approvals of Authorities	Control of compliance to a plan and to building regulations When needed, control and approvals of Authorities (Rescue Board, Environment Inspectorate, etc)	Planning division of local government Authorities (Rescue Board, Environment Inspectorate, etc)	Building permit	Master drawings of buildings for large human crowds are subject to assessment. Building permit is being inserted into buildings Register. In Tallinn, a disability organisation, TLIÜ, examine building design projects and street/road design for city planning

Country		Estonia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006, the Estonian Building Act, and information from Jüri Järve, Estonian Union of Persons with Mobility Impairment)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
						departments.
3	Construction	Project for execution and records of completion of specific construction works.	Continuous control by owner's representative approved by local government. Site checks by local government and State surveillance authority	Owners control representative, local government, Technical Inspectorat		The Estonian Building Act contains no specific provision on conformity assessment of accessibility requirements. The provisions on conformity assessment refer to the building design documentation and legal requirements. The building design documentation shall comply with requirements laid down in §3 of the Building Act, of which accessibility is one. Hence, accessibility control is part of construction control.

Country		Estonia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006, the Estonian Building Act, and information from Jüri Järve, Estonian Union of Persons with Mobility Impairment)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
4	Completion	All above with instructions for use and maintenance. Application for permit for use	Final inspection by local government. When needed, involvement of Authorities (Rescue Board, Environment Inspectorate, etc) Site checks by State surveillance authority.	Local government When needed, Authorities (Rescue Board, Environment Inspectorate, etc) Technical Inspectorate	Permit for use	Permit for use is being inserted into buildings register
5	Use	All above	Site checks by local government and by State surveillance authority	Planning division of local government Authorities (Rescue Board, Work Environment Inspectorate, Technical		Building owner is responsible of condition

Country		Estonia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006, the Estonian Building Act, and information from Jüri Järve, Estonian Union of Persons with Mobility Impairment)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
				Inspectorate		

H.2.7 Finland

Country		Finland				
Scheme name including abbreviation:						
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/ planning	Regional plan, sets out the principles of land use and community structure, and designates areas as necessary for regional development. Local master plan provides general	Taking into account different aspects, such as <ul style="list-style-type: none"> • appropriate regional and community structure of the region; • ecological 	The regional plan is approved by the regional council's highest decision-making body. Following approval, the regional plan is submitted to the competent ministry for ratification.	Approval of plans	

Country		Finland				
Scheme name including abbreviation:						
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		<p>guidance regarding the community structure and land use of a municipality or a part thereof, and to integrate functions.</p> <p>Detailed local plan</p> <p>The local detailed plan is drawn up for the purpose of detailed organization of land use, building and development, with the aim of designating areas necessary for different purposes and of steering building and other land use, as required by local conditions, townscape and landscape, good</p>	<p>sustainability of land use;</p> <ul style="list-style-type: none"> • environmentally and economically sustainable arrangement of transport and technical services; • sustainable use of water and extractable land resources; • operating conditions for the region's businesses; • protection of landscape, natural values, and cultural heritage; and • sufficient 	<p>The local master plan is approved by the local council.</p> <p>The local detailed plan is approved by the local council.</p>		

Country		Finland				
Scheme name including abbreviation:						
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		building practice, promoting the use of existing building stock and other steering goals of the plan.	availability of areas suitable for recreation.			
2	Application/building project	Applications shall include proof that the applicant is the titleholder of the building site, and the master drawings signed by the designer.	Neighbours shall be notified. Check of drawings.	The local building supervision authority	Building permit	
3	Construction	Before construction work is commenced, the local building supervision authority shall be notified thereof	Start-up meeting Inspections by the building control authority during the course of the work. Inspections may be assigned to the	Site manager, The local building supervision authority	Inspection record	No accessibility experts are available on the market. The building authorities have to master accessibility issues. Some municipalities

Country		Finland				
Scheme name including abbreviation:						
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			<p>developer or the designer, or to experts.</p> <p>In order to guarantee that construction work has been carried out properly and to verify inspections an inspection record is kept at the building site. Checks, inspections by the authorities and inspections of work specified as being carried out by private parties are entered in the record.</p>			have disability councils with some expertise in accessibility.
4	Completion	Application for final inspection, presuming that the work is finalized, the building is	<p>Checking that</p> <ul style="list-style-type: none"> Obligations in the permit are 	The local building supervision authority	Approval for use	

Country		Finland				
Scheme name including abbreviation:						
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		ready for use, and the prescribed inspections and correctives measures are made. When applying for a final inspection, the building's instructions for use and maintenance, if such have been required, must be sufficiently complete and ready to be handed over to the owner of the building.	<p>fulfilled,</p> <ul style="list-style-type: none"> • Inspection record is complete • Prescribed restriction of use (if any) <p>are arranged</p>			
5	Use		Buildings and their surroundings must be kept in a condition that meets standards of health, safety and fitness for use at all times and does not cause environmental harm or damage the beauty of the	If the duty to keep a building in proper repair is neglected, the local building supervision authority may intervene.		

Country		Finland				
Scheme name including abbreviation:						
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			environment.			

H.2.8 Germany

Country		Germany				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Regulation/standards or guidelines enforcing the conformity assessment schemes for control/inspection of construction works including architects' services:				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning		In accordance with the Official Scale of Fees for Services by Architects and Engineers (HOAI), planning is divided in two phases. Depending on the complexity of the construction project, certain items may be excluded. Planning must take account of the relevant statutory and technical provisions. The aim of building regulations is to ensure the safety and serviceability of the finished structure. The designer must	Architects, engineers, landscape designers and other designers		HOAI Official Scale of Fees for Services by Architects and Engineers

Country		Germany				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Regulation/standards or guidelines enforcing the conformity assessment schemes for control/inspection of construction works including architects' services:				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			take the relevant provisions, also referred to as recognized rules of technology in the field of construction, into consideration. In addition, compliance with other legal regulations and laws (such as building codes) is required.			
			Planning: -Specification of fundamentals		Clarification of tasks and technical and economic issues	
			Planning: -Preliminary planning and estimating cost of		Design concept, Possibly proposals for alternative solutions.	

Country		Germany				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Regulation/standards or guidelines enforcing the conformity assessment schemes for control/inspection of construction works including architects' services:				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			projects		Ascertaining costs as specified in DIN 276	
			Planning: -Design and calculation of costs		Design drawings on scale of 1:100, project description, calculation of costs as specified in DIN 276	
			-Plans for submission with applications for planning permission		Drafts for submission with applications for planning permission	
			-Execution planning		Execution drawings on scale of 1:50, detail drawings on scale of 1:5 to 1:20, project description for execution	

Country		Germany				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Regulation/standards or guidelines enforcing the conformity assessment schemes for control/inspection of construction works including architects' services:				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
2	Application/building project		Invitation to tender: -Preparation of tender documents including including bill of quantities (LV)		Building specifications including bill of quantities for obtaining tenders for execution of the construction project	German Construction Contract Procedures (VOB Vergabe- und Vertragsordnung für Bauleistungen) VOB/A General provisions relating to the award of construction contracts (Allgemeine Bestimmungen für die Vergabe von Bauleistungen) VOB/B General conditions of contract relating to the execution of construction work

Country		Germany				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Regulation/standards or guidelines enforcing the conformity assessment schemes for control/inspection of construction works including architects' services:				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
						(Allgemeine Vertragsbedingungen für die Ausführung von Bauleistungen) VOB/C General technical specifications in construction contracts (ATV) - General rules applying to all types of construction work (Allgemeine Technische Vertragsbedingungen für Bauleistungen)
			Invitation to tender: - Participation in procedures for awarding contracts including estimation of		Assessing tenders, drawing up a price comparison	

Country		Germany				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Regulation/standards or guidelines enforcing the conformity assessment schemes for control/inspection of construction works including architects' services:				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			costs			
3	Construction		Management of works: -supervision of construction and determining cost		Daily site records	Supervising the construction of the building and checking for compliance with design plans, bill of quantities and recognized rules of technology, drawing up and supervision of time schedule, checking site measurements and invoices submitted by construction companies, approval of work, and establishing any defects or deficiencies in the works, supervising remedial work

Country		Germany				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Regulation/standards or guidelines enforcing the conformity assessment schemes for control/inspection of construction works including architects' services:				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			9.Maintenance and documentation			
4	Completion					<p>Declaration of compliance with accessibility requirements submitted to building authorities who check compliance with building regulations when the completed structure is inspected prior to approval.</p> <p>Approval of public works has been reduced in recent building regulations. In the majority of cases, only random inspections are now carried out.</p>

Country		Germany				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Regulation/standards or guidelines enforcing the conformity assessment schemes for control/inspection of construction works including architects' services:				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
						Approvals exist for the following: - profiles (setting-out) - building carcass - finished structure
5	Use					

VOB (German Construction Contract Procedures)

The revised version, VOB 2009 is now available and was officially published in German Federal Gazette No. 155 on 15 October 2009, p. 3549. Part A in particular has been amended extensively. The application of VOB 2009 has been mandatory since an amendment to the regulations concerning the award of construction contracts, in which the application of the revised version of VOB/A is stipulated, came into effect on 11 June 2010.

HOAI

The HOAI, the Official Scale of Fees for Services by Architects and Engineers), *Bundesrat* (Upper Chamber of Parliament in Germany), publication no. 395/09, 30 April 2009

Annex 11 states nine phases for the design and construction of buildings and interior work as defined in article 33 of HOAI:

Planning and design	1.Specification of fundamentals
	2.Preliminary planning and estimating cost of projects
	3.Design and calculation of costs
Plans for submission with applications for planning permission	4.Plans for submission with applications for planning permission
Execution planning	5.Execution planning
Invitation to tender	6.Preparation of tender documents including bills of quantities
	7. Participation in procedures for awarding contracts including estimation of costs
Management of works	8.Supervision of construction and determining cost
Maintenance and documentation	9. Maintenance and documentation

H.2.9 Greece

Country		Greece				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Greek National Tourist Organisation (GNTO) Classification of main hotel types, in categories (star system) and their technical requirements. PD 43/2002 MINDEV.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning	Planning Application, Approval of suitability of land Legal permits, including plans to be submitted, technical reports about location, access and utilities, local architecture, infrastructure, environmental impact assessment. Bank certificate of fee payment	Application checked by the relevant bodies and GNTO.	Min. Environment GNTO	GNTO approval certificate to build a hotel on the selected site.	Requirements are set by the law

Country		Greece				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Greek National Tourist Organisation (GNTO) Classification of main hotel types, in categories (star system) and their technical requirements. PD 43/2002 MINDEV.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
2	Application/building project	Architectural design plan. Architectural design plan and other studies e.g. Fire Protection Study.	Checked by GNTO Building Permit Office	GNTO Building Permit Office	GNTO approval for architectural study Building permit	The access requirements are checked in the drawings, according to the legal requirements for various categories of hotels.
3	Construction			Project Manager		
4	Completion	The completed hotel buildings and facilities	Accessibility measures as built are checked as part of star category award procedure	GNTO	GNTO Hotel Operating Licence	
5	Use	The completed hotel buildings and facilities	Accessibility measures may be checked during use period	GNTO	GNTO Hotel Operating Licence	

H.2.10 Hungary

Country		Hungary				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		---				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/ planning	Documentation of building plan and statement of designer to prove fulfilment of building requirements	Building permission process, *supervision of rehab. engineer	Authorities issuing building permit and designer, *rehab. engineer	Building permit *	certification of rehab. engineer to prove the fulfilment of accessibility requirements
2	Application/ building project	Documentation of construction drawing and details	*Supervision of rehab. engineer	Designer *rehab. engineer	**Certification of rehab. engineer to prove the fulfilment of accessibility requirements	---
3	Construction	Documentation of construction drawing and details	Participation of technical supervisor, *Supervision of rehab. engineer	Authorities responsible for building supervision (building inspector), technical supervisor, **rehab. engineer	Notes, entry into the building book	---
4	Completion	As-built drawings	Technical handover, *Supervision of rehab.	Contractor manager, technical supervisor,	Occupancy permit*,	

Country		Hungary				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		---				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			engineer	*rehab. engineer		
5	Use	---	---	---	---	---

Notes:

*In case of building projects financed by governmental bodies, when rehabilitation engineers must be involved in the projects or rehabilitation engineers are involved by contract.

**In case of building projects, when rehabilitation engineers are involved by contract.

H.2.11 Ireland

Country		Ireland				
Scheme name including abbreviation		Building Control Authority Disability Access Certificate Scheme - BCA DAC				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					

Country		Ireland				
Scheme name including abbreviation		Building Control Authority Disability Access Certificate Scheme - BCA DAC				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
2	Application/building project	Application form, drawings and compliance report demonstrating that design complies with Part M (Access for People with Disabilities) of the Building Regulations	Assessment of application documents. Issue of Disability Access Certificate with or without conditions attached. Decision may be appealed.	Building Control Authority, Appeals Board	Disability Access Certificate. Revised Disability Access Certificate	Building Control Authority has discretionary powers. Legal requirement to comply with Building Regulations lies with owners and contractors. Also a legal requirement to obtain a Disability Access Certificate.
3	Construction		Random monitoring of construction / inspection of works for compliance with the regulation, technical guidance and Disability Access Certificate documents	Building Control Authority may apply to the Courts for an order to remove, alter or make safe or to discontinue non compliant works.	Enforcement Notice	The level of inspection by the BCA is very low - sometimes only one inspection and only 12% to 15% of projects inspected.
4	Completion		Random inspections by Building Control Authority (BCA)	BCA may apply to the Courts for an order to restrict or prohibit use of the building until DAC		Owners / third parties such as law agents, or insurance companies may require Opinions

Country		Ireland				
Scheme name including abbreviation		Building Control Authority Disability Access Certificate Scheme - BCA DAC				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
				is granted and complied with .		on Compliance on the completed building from the designers and contractors / suppliers.
5	Use		Enforcement in relation to non compliance. Prosecution for non compliance	Building Control Authority		<p>Building may not be opened or used without a Disability Access Certificate. BCA has limited functions in relation to management and maintenance of accessibility</p> <p>assessment only made of applications for Fire Safety Certificates and Disability Access Certificates - see also BCA-FSC and BCA-DAC schemes. No mandatory checks of other bldg regarding documents.</p>

Country		Ireland				
Scheme name including abbreviation		Building Control Authority - BCA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					
2	Application/building project	Commencement notice must be lodged with BCA 14 - 28 days before starting works, alterations or changing use.	BCA may check and approve / disapprove design documents and calculations but not obliged to. Decisions may be appealed.	Building Control Authority and Appeals Board	BCA maintains register of commencement notices and decisions	Responsibility of designers, builders and building owners to comply with regulations. Formal
3	Construction		Random monitoring of construction for Building Regulation compliance. Issuing of Enforcement Notices for non-compliant works. Prosecution	Building Control Authority	Enforcement Notices	
4	Completion		Enforcement Notices may be issued up to 5 years after completion. .			Provision in BC Act for regulations to be made requiring lodgement of self assessment Certificates of Compliance by

Country		Ireland				
Scheme name including abbreviation		Building Control Authority - BCA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
5	Use	Some bars, clubs etc are licensed by District Court and documents demonstrating compliance with building regulations may be required	Safety notices may be served	Fire Authority, Health Board, Local Authority dangerous buildings section		Health issues & Dangerous structural defects monitored and controlled. Fire safety and fire management issues monitored and controlled - see also BCA-FSC and BCA-DAC schemes

Country		Ireland				
Scheme name including abbreviation		Building Control Authority Fire Safety Certificate Scheme – BCA FSC				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					See PA scheme
2	Application/building project	Application form, drawings and compliance report demonstrating that design complies with Part B (Fire) of the Building Regulations	Assessment of application documents. Issue of Fire Safety Certificate with or without conditions attached.	Building Control Authority (Fire Department)	Fire Safety Certificate. Revised Fire Safety Certificate. Regularisation Certificate	It is a Legal requirement to obtain a Fire Safety Certificate. Note: In some local authorities the fire departments and building control department are one. In others they are separate. Issues of evacuation for people with disabilities dealt with under Part B
3	Construction		Random monitoring of construction / inspection of works for compliance with Fire Safety Certificate documents	Building Control Authority (Fire Department) may apply to the Courts for an order to remove, alter or make safe or to discontinue non compliant works.	Enforcement Notice	The level of inspection by the BCA is very low - sometimes only one inspection and only 12% to 15% of projects inspected.

Country		Ireland				
Scheme name including abbreviation		Building Control Authority Fire Safety Certificate Scheme – BCA FSC				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					See PA scheme
4	Completion		Random inspections by Building Control Authority (BCA) / Fire Department	BCA may apply to the Courts for an order to restrict or prohibit use of the building until FSC is granted and complied with .		Owners / third parties such as law agents, or insurance companies may require Opinions on Compliance on the completed building from the designers and contractors / suppliers.
5	Use		<p>Inspection of premises in use (under the Fire Services Act).</p> <p>Enforcement in relation to non compliance.</p> <p>Prosecution for non compliance</p>	Building Control Authority (Fire Department)		Building may not be opened or used without a Fire Safety Certificate. Some uses, bars, clubs etc require licences which are granted by the Courts. The Courts generally seek confirmation that planning permission and Fire requirements are met but rarely seek confirmations on

Country		Ireland				
Scheme name including abbreviation		Building Control Authority Fire Safety Certificate Scheme – BCA FSC				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					See PA scheme
						accessibility. Most inspections are done of places of assembly

Country		Ireland				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Planning Authority Scheme - PA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					

Country		Ireland				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Planning Authority Scheme - PA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					
		<p>Planning (design) drawings and reports. (Some developments may require Environmental Impact Assessments and / or Conservation reports. Very occasionally Access Statements are required but are not mandatory)</p>	<p>Documents are assessed by Planning Authority against policies contained in a Development Plan and a decision made to grant or refuse permission subject to other statutory requirements being met. Decisions may be appealed by applicant / third parties to an independent body, the planning appeals board.</p>	<p>Planning Department (Local Authority) and Planning Appeals Board make decisions and carry out limited inspections.</p>	<p>Planning Permission with / without conditions attached</p>	<p>Planning legislation relates to spatial, environmental, societal and cultural objectives. Generally permission is required for any development including building, demolition and alterations and also if significantly changing the use of a building. Planning Authority is separate to Building Control Authority. Planning approval is sought early in the design process and before building control approvals. Accessibility frequently incorrectly considered to be primarily a building control and not a planning control matter. Most private developments are</p>

Country		Ireland				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Planning Authority Scheme - PA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					
2	Application/building project	Additional documents sometimes required for lodgement with planning authority before construction can begin to demonstrate that planning permission conditions have been complied with in the design.	Additional Documents may require agreement by the Planning Authority. During construction there may be random inspections by the planning authority.			
3	Construction					Inspections during the construction period by the planning authority are rare and mainly relate to enforcement of regulations if they are known to be in breach

Country		Ireland				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Planning Authority Scheme - PA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					
4	Completion	Nothing on public file except if Enforcement notice served. For some developments the building owner and other parties, law agents, insurance companies etc may require the design team and contractors / suppliers to certify or give opinions on compliance of the development with planning permission			Planning Authority maintains a register of all decisions made incl. enforcement notices	NOTE During construction or up to 7 years after completion planning authority may issue legal Enforcement Notice requiring compliance work to be done.
5	Use					Unauthorised development or use of a building may result in legal action to prevent

Country		Ireland				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		Planning Authority Scheme - PA				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					
						its use until the situation is regularised

H.2.12 Italy

Conformance Assessment Schemes

Conformance Assessment Schemes exist principally in the area of Building Control as operated by the Local Authorities. These schemes commence reasonably early in the design process but are mainly reliant on a process of “self-certification”.

H.2.13 Latvia

Country		Latvia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006; Latvian Construction Law)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks

Country		Latvia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006; Latvian Construction Law)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/ planning	<p>- Application card for registering construction in the construction board of local government.</p> <p>- Public discussion of proposed development plan in the following cases:</p> <ol style="list-style-type: none"> 1. structure of public importance is planned; 2. building is to be financed by the government or the municipality; 3. the planned building is going to seriously affect the environment, the living conditions of the inhabitants or the 	<p>Positive conclusion (construction on the compliance with the master plan, building provisions, detailed plan) or motivated refusal of the construction board of local government.</p>	<p>The construction board of local government</p>	<p>Approved plans</p>	<p>In Latvia there are 3 levels of building control:</p> <ol style="list-style-type: none"> 1. supervision on the building site; 2. control of building inspectors of the construction board (local government); 3. The state control of building work is the responsibility of the State Building Inspectorate.

Country		Latvia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006; Latvian Construction Law)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		<p>real estate value;</p> <p>4. the planned building will be located in the public used area.</p> <p>- Planning and architecture provisions on positive conclusion for planned building</p>				
2	Application/building project	<p>To commence designing the following documents and materials are required:</p> <p>1. the topography plan of the land plot to scale M1:500–M1:1000;</p> <p>2. the site plan to scale M1:2000 – M1:10000;</p> <p>3. the inventory materials of the building</p>	<p>- Checking all provisions and other documents for designing</p> <p>- Control qualification (designer)</p> <p>- Project expertise</p>	<p>Architecture division of local government</p> <p>The construction board of local government</p> <p>The State Building Inspectorate</p>	Construction permit	<p>The Latvian Construction Law states that “a structure shall be designed and constructed so as to ensure (...) accessibility of the environment (...) as well as [the 6 essential requirements]” (section3, item 3). Hence, accessibility is included, on equal</p>

Country		Latvia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006; Latvian Construction Law)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		<p>if the construction plan is based on an existing building;</p> <p>4. the technical examination data of the building, where appropriate;</p> <p>5. the terms of reference concerning ecology in compliance with the law "On State Ecological Expertise";</p> <p>6. the terms of reference concerning sanitary hygienic issues, if so required by the construction board;</p> <p>7. the technical provisions issued by the construction board or by the owner or user of the service lines;</p>	<p>- Making the decision on the acceptance of the construction plan or motivated refusal to accept</p> <p>- Control qualification (contractor, supervisor)</p> <p>- Building permission (building permit for a specialised building shall be issued by the ministry supervising the specialised construction, the respective ministry may delegate the said</p>	<p>The construction board of local government</p> <p>The construction board of local government</p> <p>The construction board of local government</p>		<p>terms, in the list of mandatory attributes.</p> <p>Section 4 states that the Ministry of Economics shall "monitor and control compliance with the requirements for the accessibility of the environment in public buildings and structures".</p> <p>No further provisions on conformity assessment of accessibility requirements are stated in the Law.</p>

Country		Latvia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006; Latvian Construction Law)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		<p>8. the consent on principle by the respective institutions on demolition the existing buildings and dismantling the service lines and on cutting trees and bushes where appropriate;</p> <p>9. the technical provisions issued by the Fire and Rescue Emergency Service of the Ministry of Internal Affairs;</p> <p>10. others materials required for designing, if so stipulated by construction provisions, the detailed plan, the terms of reference concerning planning and architecture or specialised building</p>	rights to the construction board)			

Country		Latvia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006; Latvian Construction Law)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		provisions; 11. planning and architecture provisions; 12. specialized building provisions.				
3	Construction	<ul style="list-style-type: none"> - Customer (client) and contractor agreement - Contractor and subcontractors agreements - Customer provide the contractor with all documents required (e.g., accepted building project) and receive permits and licenses relevant to the construction work. - Construction register - Register for special work 	Performing control: 1. notes of state and local government authority in registers; 2. checking acts. Construction surveillance by supervisors	<ul style="list-style-type: none"> - Inspectors of the construction board of local government - The State Building Inspectorate 		

Country		Latvia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006; Latvian Construction Law)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		- Register of authorship supervision				
4	Completion	<ul style="list-style-type: none"> - Construction plan - Building permit - Construction register - Register for special work - Register of authorship supervision - Declarations and certificates of building materials - Test of building materials reports - Acceptance certificates of the finished elements of major constructions and non-accessible work - Conclusions of Fire 	<ul style="list-style-type: none"> Checking Documents completion 	<ul style="list-style-type: none"> - The construction board of local government - The State Building Inspectorate - Regional environmental board - Fire authority - Health authority - Workplace authority 		The Latvian construction Law does not specify any final certificate

Country		Latvia				
Scheme name including abbreviation		(Sources: Building Control Systems in Europe, Consortium of European Building Control, June 2006; Latvian Construction Law)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		authority, Health authority, Workplace authority (ready for use) - Positive statement of customer about building (ready for use)				
5	Use		The Latvia Building Standard set the procedure of a structure approval for use Construction work guarantee –at least 2 years	Construction board of local government The State Building Inspectorate Fire authority Health authority Workplace authority		

H.2.14 Lithuania

Country		Lithuania				
Scheme name including abbreviation		Sources: paper of Branco Pedro, Meijer, Visscher: "Comparison of tasks and responsibilities in the building control systems of European Union countries", September 2009; Lithuanian Construction Law				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					
2	Application/building project	Several, inter alia: - a design documentation of a construction works; - findings of expert examination of a design documentation of a construction works (where mandatory); - a document of approval of a design documentation of a construction works (where mandatory);	The Permanent Construction Commission must check and establish whether design documentation meets the requirements (regulations) for the improvement of a construction plot laid down in physical planning documents as well as the requirements of a set of design conditions and the legal acts specified in the regulations of the Permanent	The director of the administration of a municipality	Construction permit	

Country		Lithuania				
Scheme name including abbreviation		Sources: paper of Branco Pedro, Meijer, Visscher: "Comparison of tasks and responsibilities in the building control systems of European Union countries", September 2009; Lithuanian Construction Law				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			Construction Commission.			
3	Construction		Article 16, par. 2: The technical supervisor of construction or a construction works must: 1) monitor the compliance of construction with the design documentation of a construction works, check the quality of construction products and equipment used during the construction, and prevent them from being used in case	A building surveyor appointed by the applicant conducts site inspections, with the building authority participating as well for some categories of construction works		Article 6, item 3: Design, construction, reconstruction and major repairs of buildings and engineering works must be carried out in such a way that they will satisfy the specific needs of the disabled persons in compliance with the Law on Social Integration of Invalids.

Country		Lithuania				
Scheme name including abbreviation		Sources: paper of Branco Pedro, Meijer, Visscher: "Comparison of tasks and responsibilities in the building control systems of European Union countries", September 2009; Lithuanian Construction Law				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			<p>they do not comply with the design documentation of a construction works, normative technical construction documents, normative documents pertaining to the safety and purpose of a construction works, and if no documents in confirmation of the quality have been provided;</p> <p>2) check the quality of construction operations and the scope thereof, inform the builder (client) about the carried-out construction operations which do</p>			

Country		Lithuania				
Scheme name including abbreviation		Sources: paper of Branco Pedro, Meijer, Visscher: "Comparison of tasks and responsibilities in the building control systems of European Union countries", September 2009; Lithuanian Construction Law				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			not satisfy requirements for normative quality of a construction works; 3) check and accept hidden construction operations and hidden structures of a construction works, participate in testing and accepting as fit for use engineering and utility networks, engineering systems, equipment and structures; 4) jointly with the contractor prepare documents for accepting the construction works as fit for use and			

Country		Lithuania				
Scheme name including abbreviation		Sources: paper of Branco Pedro, Meijer, Visscher: "Comparison of tasks and responsibilities in the building control systems of European Union countries", September 2009; Lithuanian Construction Law				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			participate during the acceptance of the construction works as fit for use. 5) perform functions of the head of general technical supervision of the construction (general construction operations), co-ordinate special technical supervision of the construction (special construction operations) and activities of the heads of such supervision.			
4	Completion			The building authority (different for different types of buildings) issues the completion		

Country		Lithuania				
Scheme name including abbreviation		Sources: paper of Branco Pedro, Meijer, Visscher: "Comparison of tasks and responsibilities in the building control systems of European Union countries", September 2009; Lithuanian Construction Law				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
				certificate.		
5	Use	-	-	-	-	-

H.2.15 Luxembourg

In Luxembourg regulations around accessibility were limited to some safety criteria in public schools until 2001.

In 1999, the Ministry of Family (responsible for disability questions in Luxembourg) trusted the national disability information and meeting centre Info-Handicap to setup an interdisciplinary workgroup and to develop accessibility criteria to be anchored in a national legislation.

The members of the group analyzed the existing approaches at European level and adapted them to the national situation in order to come up with a set of recommendations to be published in a document called "Guide des Normes".

In parallel an "interministerial committee" worked on the elements to be included in the legislation. The new legislation was composed of 2 parts:

- a) the main law that anchored the obligation for accessibility of all new "public" buildings and all "public" buildings to be substantially renovated;
- b) the technical execution text of the law precising the type of buildings, the elements, and the accessibility criteria to consider.

The law was (and still is) limited to "public" buildings, meaning buildings built or rented with public money by national or municipal authorities. The criteria address mainly spaces meant for the "visitors".

As there is no school for architecture in Luxembourg, the awareness raising at that level has to take place via special actions and information sessions organized on the initiative of Info-Handicap. Although there is a general awareness towards the importance of an accessibility/ design for all approach, experience and consequence are lacking.

The control activities if the legislation is implemented are placed under the authority of a Governmental body, the “national office for safety in the public administration”. This body works with agreed companies, in general specialized in safety and energy saving activities, and trusts them with the accessibility controls. The law foresees that all checked buildings should be identifiable through a particular label, but this has never been done.

Public procurement activities in Luxembourg follow strict rules and the mandatory technical sheets for responding to calls have to be downloaded from a Governmental server. Although the recent Directives on public procurement have been transposed in Luxembourg, including the options for accessibility and for social criteria, the technical sheets do not yet take on board accessibility in a consequent way and the process for adapting them is quite heavy as it must be done in cooperation with the professional Chambers of each single profession.

Any accessibility related activity in the private sector (shops, restaurants, hotels, etc...) is purely volunteer and Info-Handicap, together with several partners have set up a National Accessibility Concept out by the MEGA (Multidisciplinary Experts Group for Accessibility) in order to raise awareness, provide technical guidance and organize training activities for the private sector. The concept includes also a label called “EureWelcome” to identify the private buildings that have been assessed.

For the time being, the situation in Luxembourg can be summarized as follows:

- there is a general “good-will” attitude towards accessibility, but only as long as there are no costs
- Technicians are lacking information and craftsmen rely to architects (“I install what they tell me”)
- lobbying of people with disabilities is quite poor in Luxembourg

H.2.16 Norway

Country		Norway				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		This conformity assessment scheme follows from provisions in the Plan- and Building Act, and the Technical Regulations (Teknisk forskrift) to the Act, in force since 1 July 2010 (some provisions from 1 July 2011), and the regulation on works (byggesaksforskriften).				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning	Three levels of plans: national, regional and	Plans are publicly published for allowing	Municipality management	Approved and decided plan(s)	The Norwegian legislation uses the Norwegian words for

Country		Norway				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		This conformity assessment scheme follows from provisions in the Plan- and Building Act, and the Technical Regulations (Teknisk forskrift) to the Act, in force since 1 July 2010 (some provisions from 1 July 2011), and the regulation on works (byggesaksforskriften).				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		municipality. The municipality plan has two parts: one about the activities of the municipality, one about use of land. In the latter part, the municipality may lay down provisions on universal design. The municipality plan will be broken down in area plans and detail plans. In such plans, the municipality may lay down further provisions on universal design.	stakeholders to review and submit remarks.			the term “universal design”, not “accessibility”.
2	Application/building project	The application for building permit shall include information on how universal design is taken into account,	Where appropriate, a preparatory meeting may be held for mutual information between the	Municipality	Building permit	

Country		Norway				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		This conformity assessment scheme follows from provisions in the Plan- and Building Act, and the Technical Regulations (Teknisk forskrift) to the Act, in force since 1 July 2010 (some provisions from 1 July 2011), and the regulation on works (byggesaksforskriften).				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		where relevant for the building in question.	<p>municipality and the applicant.</p> <p>Based on the information in the application, the municipality shall approve it, provided that the application does not violate provision in or following the planning and building Act.</p>			
3	Construction	The party responsible for the construction shall have a quality management system (QMS), capable of ensuring and recording that the provisions of	According to the QMS	The party responsible for control	According to the QMS	There is no particular provision concerning control that requirements on universal design are fulfilled.

Country		Norway				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		This conformity assessment scheme follows from provisions in the Plan- and Building Act, and the Technical Regulations (Teknisk forskrift) to the Act, in force since 1 July 2010 (some provisions from 1 July 2011), and the regulation on works (byggesaksforskriften).				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		<p>the Act are fulfilled.</p> <p>The municipality may decide that an independent body performs an inspection of the QMS.</p>				
4	Completion	Final documentation, showing that subjects of control the works complies with the building permit and provisions in the Act or following the Act. The documentation shall include recording of control activities, including attestation that deficiencies have been corrected.	<p>Checking submitted documentation</p> <p>Issuing a certificate of completion</p>	Municipality	Certificate of completion	

Country		Norway				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		This conformity assessment scheme follows from provisions in the Plan- and Building Act, and the Technical Regulations (Teknisk forskrift) to the Act, in force since 1 July 2010 (some provisions from 1 July 2011), and the regulation on works (byggesaksforskriften).				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
5	Use	For subjects where a building permit is required, the final documentation shall include information which can serve as a basis for management, operation and maintenance of the subject.				

H.2.17 Netherlands

Country		THE NETHERLANDS				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data		RBP - REGULAR BUILDING PERMIT LBP - LIGHT BUILDING PERMIT				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks

Country		THE NETHERLANDS				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data)		RBP - REGULAR BUILDING PERMIT LBP - LIGHT BUILDING PERMIT				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning	<ul style="list-style-type: none"> • Together with application for building project. 	-Accordance with local development plan			
2	Application/building project	<ul style="list-style-type: none"> • Drawings including site plan • Technical calculation and drawings. Headlines only 	-Checking on building decree and building regulations	Building Control Division of the local authority	-[RBP] Regular Building Permit -[LBP] Light Building Permit	- Small alterations to dwellings, buildings in gardens, road works, etc are exempt from building permit. - Report of building application to be published in a local paper
3	Construction	<ul style="list-style-type: none"> • Technical calculations and working drawings in detail 	-Checking on building decree and building regulations - Inspection on the building site	Building Control Division of the local authority (municipality)		
4	Completion	<ul style="list-style-type: none"> • No documents required 	- No action required by the applicant. The municipality can forbid	Building Control Division of the local authority (municipality)		

Country		THE NETHERLANDS				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data)		RBP - REGULAR BUILDING PERMIT LBP - LIGHT BUILDING PERMIT				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			the use of the building when works are not done according to building permit			
5	Use	<ul style="list-style-type: none"> For special buildings (used by many people) an application is needed to use the building 	<ul style="list-style-type: none"> - Fire safety - The municipality may inspect the conformity of a building with the building decree or building regulations 	<ul style="list-style-type: none"> -Fire department or Building Control Division of the local authority - Building Control Division of the local authority (not structural) 	- [UP] Use Permit	Application for use is purely focused on fire safe use of the building, number of people, etc.

H.2.18 Romania

Country:		Romania				
Scheme name (as in spreadsheet):		Building Inspection Scheme				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks

Country:		Romania				
Scheme name (as in spreadsheet):		Building Inspection Scheme				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/ planning	Design request related to the land characteristics and owner request	Application for the urbanism certificate issued by the local authority	An chartered architect carried out the first paper to document request Authority representatives reviewed the application	Urbanism certificate that is a formal answer to the intention to erected a building for those land	When accessibility requirements are included in the scope of urbanism certificate and the project, those are followed during the normal flow of the construction works, checks and inspections.
2	Application/ building project	Urbanism certificate	Architects and/or Design bureau carried out the project with all component related taking into consideration the regulatory requirements and functional requirements as well as the existing limitations.	Chartered architects, construction engineers for structures and installations, Chartered verifiers for each essential requirement.	Technical project with all written and drawn pieces together with verification report(s) issued by the chartered verifiers. Building permit	

Country:		Romania				
Scheme name (as in spreadsheet):		Building Inspection Scheme				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			<p>A such project includes parts as follows:</p> <ul style="list-style-type: none"> - architecture - resilience and structure - electrical, thermal and sanitary installations - verification of the project for all essential requirements for its class 			
3	Construction	Building permit Technical project	<p>Starting the construction</p> <p>The construction activities are progressing according project plans. Owner</p>	<p>Owner notice the local authority about the open the construction yard.</p> <p>The constructor has the responsibility to respect the technical project.</p>	<p>Formal notification of starting works.</p> <p>Write report for each phase indicated in the project.</p>	

Country:		Romania				
Scheme name (as in spreadsheet):		Building Inspection Scheme				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			has the responsibility to hire a competent person to follow these activities. This person is also qualified and chartered by the governmental authority for building – in this case is a governmental department..	Owner by his/her representative has the responsibility to assure that construction is erected according the project. During this phase, the representative of local authority for building could inspect the yard.	Declaration of conformity for the construction products that are included in the building.	
4	Completion	Building permit Technical project	At the end of construction activity, the owner and constructor ask to architect to ascertain that building was erected according to the technical project.	All the report filled during construction phase, test report for the construction materials and declaration of conformity with CE marking together with technical project are compiled into file and give indication about	Records regarding building	Or Building Book The role of this report is to ascertain the conformity of the

Country:		Romania				
Scheme name (as in spreadsheet):		Building Inspection Scheme				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
				the Owner and construction representative ask to architect to release a report regarding the reception of the building		building with the technical plans by the architect
5	Use	Building permit Technical project	The owner has to assure for the safety of the building. In some cases – very old building – the inspectors from local government have the responsibility to notice the owner about any danger to population safety.	Owner Local government	- Formal notification	

H.2.19 Spain

Country		Spain				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		LO Licencia de Obra – <i>Building License</i> - PO-LA Licencia de Primera Ocupación y/o Licencia de Apertura – <i>First Occupation Permit / License Opening</i> - CA Certificado de Accesibilidad – <i>Accessibility Certificate</i> -				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/ planning	(together with application for building project)	<ul style="list-style-type: none"> • Accordance with local development plan. 	<ul style="list-style-type: none"> • The City Council • Regional or National Authorities (in case of protected places or protected buildings) 	---	---
2	Application/ building project	<ul style="list-style-type: none"> • Application for building execution license • Basic preliminary project • Health and Safety Study 	<ul style="list-style-type: none"> • Checking whether Architect and Technical Architect are authorized to draw up the building project • Checking whether project comply with 'CTE' (Technical Building Code) and regulations 	<ul style="list-style-type: none"> • Official College of Architects • The City Council 	<ul style="list-style-type: none"> • [LO] Building License 	---
3	Construction	<ul style="list-style-type: none"> • Building Execution 	<ul style="list-style-type: none"> • Inspections on site by Works Director 	<ul style="list-style-type: none"> • Works Director 	---	<ul style="list-style-type: none"> • Building license, Health and Safety at

Country		Spain				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		LO Licencia de Obra – <i>Building License</i> - PO-LA Licencia de Primera Ocupación y/o Licencia de Apertura – <i>First Occupation Permit / License Opening</i> - CA Certificado de Accesibilidad – <i>Accessibility Certificate</i> -				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		Project <ul style="list-style-type: none"> Notification of commencement of works to the Labour Authorities by the contractor 	(architect) Director of the Execution of the Works (Technical Architect) and Health and Safety Coordinator <ul style="list-style-type: none"> Inspections by a technician of a Technical Control Office 	<ul style="list-style-type: none"> Director of the Execution of the Works Health and Safety Coordinator Technical Control Office (only for collective housing) 		Work Plan, Book of Technical Orders and Incidents Book have to be on site during the construction process
4	Completion	<ul style="list-style-type: none"> Works Final Certificate stamped by the Professional College of Architects and the Professional College of Technical Architects The called 'Book of the Building', must include all the documentation related with quality 	<ul style="list-style-type: none"> Checking whether the works have been executed in compliance with building laws, regulations, the approved building project and the building license 	<ul style="list-style-type: none"> Works Director and Director of the Execution of the Works The City Council 	<ul style="list-style-type: none"> [PO-LA] First Occupation Permit (dwellings) or License Opening 	<ul style="list-style-type: none"> Slight differences among regions

Country		Spain				
Scheme name including abbreviation (as in spreadsheet 'CEN 207 Data Collection 100809'):		LO Licencia de Obra – <i>Building License</i> - PO-LA Licencia de Primera Ocupación y/o Licencia de Apertura – <i>First Occupation Permit / License Opening</i> - CA Certificado de Accesibilidad – <i>Accessibility Certificate</i> -				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		control				
5	Use	<ul style="list-style-type: none"> Application for Activity License with Technical Project (no required for dwellings) 	<ul style="list-style-type: none"> Inspections by municipal technical (in any cases regional technicians) 	<ul style="list-style-type: none"> The City Council (in any cases regional technicians) 	<ul style="list-style-type: none"> Activity License 	<ul style="list-style-type: none"> [CA] Accessibility Certificate (optional process)

H.2.20 Sweden

Country		Sweden				
Scheme name including abbreviation		This conformity assessment scheme concerns buildings and some specified other works, to be complied with by private and public developers. Conformity assessment of requirements for public places is not regulated.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning	Overall plan over the area, showing the use of land and water and how	Checking with environmental and regional provisions	Building committee of the municipality	Approval of plan(s)	Municipalities have monopoly of local planning of the built

Country		Sweden				
Scheme name including abbreviation		This conformity assessment scheme concerns buildings and some specified other works, to be complied with by private and public developers. Conformity assessment of requirements for public places is not regulated.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
		<p>the municipality intends to develop and maintain the built environment;</p> <p>Detailed plan showing location for roads, public places, infrastructure, buildings for residential areas, industry etc.</p> <p>Accessibility requirements may be specified in functional terms at an overall level.</p>				environment. For regional and national infrastructure, e.g. roads, concerned municipalities must be consulted.
2	Application/building project	Application for building permit, including site plan, drawings, descriptions and other information necessary for control against regulations.	<p>Checking that the building, the site and its use are in accordance with the overall plan and the detailed plan.</p> <p>Checking of the building location on the site and the external design of the</p>	Building committee of the municipality	Building permit	

Country		Sweden				
Scheme name including abbreviation		This conformity assessment scheme concerns buildings and some specified other works, to be complied with by private and public developers. Conformity assessment of requirements for public places is not regulated.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			building. Conformity to technical requirements, such as accessibility, are not assessed in the permit process.			
3	Construction	A notification from the developer to the building committee that the work will start and who is appointed as Quality Assurance Supervisor	Consultative meeting to examine the construction project and to decide on an inspection schedule.	The meeting is under responsibility of the Building Committee. The developer has the full responsibility for ensuring that technical requirements are fulfilled. As regards legal requirements, this is under surveillance by the Quality Assurance Supervisor	An inspection schedule containing: <ul style="list-style-type: none"> • inspections to be carried out; • attestations and other documents to be shown to the Committee; • notifications to be made to the Committee. Inspections can be made by means of the developer's own control	

Country		Sweden				
Scheme name including abbreviation		This conformity assessment scheme concerns buildings and some specified other works, to be complied with by private and public developers. Conformity assessment of requirements for public places is not regulated.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
					process, by third party experts or, if necessary, by the Building Committee. A conformity assessment scheme of accessibility requirements, where applicable, will be specified in the inspection schedule.	
4	Completion	All required documentation according to the inspection schedule	Checking submitted documentation Issuing a certificate of completion	Building Committee	Certificate of completion	
5	Use		The building owner is responsible for maintaining the building in order to keep it conformant to	National and local regulation authorities for e.g. health, work environment, fire safety etc.		

Country		Sweden				
Scheme name including abbreviation		This conformity assessment scheme concerns buildings and some specified other works, to be complied with by private and public developers. Conformity assessment of requirements for public places is not regulated.				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			legal requirements.			

H.2.21 Great Britain

Country):		Great Britain				
Scheme name (as in spreadsheet):		Approved Inspector Scheme				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					
2	Application/building project	Notice to Local Authority that project will be supervised by an Approved Inspector.	Checks compliance of drawings and details with the Building Regulations. Approval may be given at stages as the design/construction	Local Authority	Initial notice to Local Authority of the appointment of an Approved Inspector. Issue of a plans certificate certifying the design and plans have	There are two types of Approved inspector – organisations and individuals. The reasons a developer, client or contractor may use an

Country):		Great Britain				
Scheme name (as in spreadsheet):		Approved Inspector Scheme				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
			work develops.		been checked and comply with the Building Regulations.	Approved Inspector is purely personal and may range from a wish to operate with people in the private sector rather than the public sector to a simple preference to work with an AI who can operate on a nationwide scale rather than a local one (perhaps leading to more consistency in the decision making process).
3	Construction		Visits as required			
4	Completion		Certificate of completion		Issue of a final certificate on completion	
5	Use					

Country		Great Britain				
Scheme name (as in spreadsheet):		Building Control (England and Wales)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
1	Application/planning					
2	Application/building project	Building notice must be lodged with the local authority, usually 2 days prior to the commencement of work. The Local Authority cannot approve or reject the building notice but can ask for drawings and details it need to complete its building control function.	Local Authority must check drawings. Approval may be given for various stages at a time. Conditions and time limits may be imposed.	Local Authority	Details of projects and decisions	It is the responsibility of the designers and building contractors to comply with the Building Regulations.
3	Construction	Additional details if requested.	At least one building site visit should be made. Random monitoring. Issue of notices for non-compliance of works. Enforcement by prosecution.	Local Authority		The Building Control System should be as a checking agency although some advice and guidance related to the Regulations is often given.

Country		Great Britain				
Scheme name (as in spreadsheet):		Building Control (England and Wales)				
No. crt	Building phase	Input documents	Activities performed	Responsibilities	Output documents	Remarks
4	Completion		Completion Notices			Completion notices issued when work meets the Building Regulations.
5	Use	Some responsibility for public assembly premises.	Safety and non-compliance notices may be served	Local Authority		Health and Safety issues and defects leading to dangerous structures.

H.3 Description of the modules used for assessment of the infrastructure under TSI Directive

Description of the modules used for assessment of the infrastructure under TSI Directive

We present below an extract from TSI directive concerning the description of the modules used in conformity assessment of the accessibility requirements for TSI subsystems. We preserve the same numbering because in the body text are links to different sections and any changes could affect the understanding of text.

Description of the modules used for assessment of the infrastructure

Description of the conformity assessment modules are very detailed and include a information about tasks and responsibilities of the contractors, manufacturer and notified bodies involved as well indication about the document issues for each type of conformity. We preserved the same numbering as is indicated in the TSI directive for checking purposes.

F.3.Modules for the EC Verification of Subsystems

F.3.1. Module SB: Type Examination

1. This module describes the **EC verification procedure** whereby a notified body checks and certifies at the request of a contracting entity or its authorised representative established within the Community, that a type of an infrastructure or rolling stock subsystem, representative of the production envisaged,

- complies with this TSI and any other applicable TSI, which demonstrate that the essential requirements (13) of Directive 01/16/EC have been met
- complies with the other regulations deriving from the Treaty.

The type examination defined by this module could include specific assessment phases — design review, type test or review of manufacturing process, which are specified in the relevant TSI.

2. The contracting entity (14) shall lodge an application for EC verification (through type examination) of the subsystem with a notified body of his choice.

The application shall include:

- name and address of the contracting entity or its authorised representative
- the technical documentation, as described in point 3.

3. The applicant shall place at the disposal of the notified body a specimen of the subsystem (15), representative of the production envisaged and hereinafter called ‘type’.

A type may cover several versions of the subsystem provided that the differences between the versions do not affect the provisions of the TSI.

The notified body may request further specimens if needed for carrying out the test programme. If so required for specific test or examination methods and specified in the TSI or in the European specification (16) referenced to in the TSI, a specimen or specimens of a subassembly or assembly or a specimen of the subsystem in a pre-assembled condition shall to be provided. The technical documentation and specimen(s) shall enable the design, manufacture, installation, maintenance and operation of the subsystem to be understood, and shall enable conformity with the provisions of the TSI to be assessed.

The technical documentation shall include:

- a general description of the subsystem, overall design and structure,
- the infrastructure or rolling stock register, including all information as specified in the TSI
- conceptual design and manufacturing information, for example drawings, schemes of components, subassemblies, assemblies, circuits, etc.,

— descriptions and explanations necessary for the understanding of the design and manufacturing information, the maintenance and the operation of the subsystem,

(13) The essential requirements are reflected in the technical parameters, interfaces and performance requirements, which are set out in Chapter 4 of the TSI.

(14) In the module, 'the contracting entity' means 'the subsystem contracting entity, as defined in the directive. or his authorised representative established within the Community'.

(15) The relevant section of a TSI may define specific requirements in this regard.

(16) The definition of a European specification is indicated in the directives 96/48/EC and 01/16/EC. The guide for application of HS TSIs explains the way to use the European Specifications.

— the technical specifications, including European specifications, that have been applied,

— any necessary supporting evidence for the use of the above specifications, in particular where European specifications and the relevant clauses have not been applied in full,

— a list of the interoperability constituents to be incorporated into the subsystem,

— copies of the EC declarations of conformity or suitability for use of interoperability constituents and all the necessary elements defined in annex VI of the directives,

— evidence of conformity with the other regulations deriving from the treaty (including certificates)

— technical documentation regarding the manufacture and the assembly of the subsystem,

— a list of manufacturers, involved in the subsystem's design, manufacturing, assembly and installation,

— conditions for use of the subsystem (restrictions of running time or distance, wear limits etc),

— conditions for maintenance and technical documentation regarding the maintenance of the subsystem

— any technical requirement that shall be taken into account during production, maintenance or operation of the subsystem

— results of design calculations made, examinations carried out, etc.,

— test reports.

If the TSI requires further information for the technical documentation, this shall be included.

4. The notified body shall:

4.1. Examine the technical documentation,

4.2. Verify that the specimen(s) of the subsystem or of assemblies or subassemblies of the subsystem, has (have) been manufactured in conformity with the technical documentation, and carry out or have carried out the type tests in accordance with the provisions of the TSI and the appropriate European specifications. Such manufacture shall be verified using an appropriate assessment module.

4.3. Where a design review is requested in the TSI, perform an examination of the design methods, the design tools and the design results to evaluate their capability to fulfil the requirements for conformity for the subsystem at the completion of the design process

4.4. Identify the elements which have been designed in accordance with the relevant provisions of the TSI and the European specifications as well as the elements which have been designed without applying the relevant provisions of those European specifications;

4.5. Perform or have performed the appropriate examinations and necessary tests in accordance with points 4.2. and 4.3 to establish where the relevant European specifications have been chosen, these have actually been applied;

4.6. Perform or have performed the appropriate examinations and necessary tests in accordance with point 4.2. and 4.3. to establish whether the solutions adopted meet the requirements of the TSI when the appropriate European specifications have not been applied.

4.7. Agree with the applicant the location where the examinations and necessary tests will be carried out.

5. Where the type meets the provisions of the TSI, the notified body shall issue a ***type-examination certificate*** to the applicant. The certificate shall contain the name and address of the contracting entity and the manufacturer(s) indicated in the technical documentation, conclusions of the examination, conditions for its validity and the necessary data for identification of the approved type. A list of the relevant parts of the technical documentation shall be annexed to the certificate and a copy kept by the notified body.

If the contracting entity is denied a type-examination certificate, the notified body shall provide detailed reasons for such denial. Provision shall be made for an appeals procedure.

6. Each notified body shall communicate to the other notified bodies the relevant information concerning the type-examination certificates issued, withdrawn or refused

7. The other notified bodies may receive on request copies of the type-examination certificates issued and/or their additions. The annexes to the certificates shall be kept at the disposal of the other notified bodies.

8. The contracting entity shall keep with the technical documentation copies of type-examination certificates and any additions throughout the service life of the subsystem. It shall be sent to any member state which so requests.

9. During the production phase, the applicant shall inform the notified body that holds the technical documentation concerning the type-examination certificate of all modifications which may affect the conformity with the requirements of the TSI or the prescribed conditions for use of the subsystem. The subsystem shall receive additional approval in such cases. In this case, the notified body shall perform only those examinations and tests, those are relevant and necessary to the changes. This additional approval may be given either in the form of an addition to the original type-examination certificate, or by issue of a new certificate after withdrawal of the old certificate.

F.3.2. Module SD: Production Quality Management System

1. This module describes the EC verification procedure whereby a notified body checks and certifies, at the request of an contracting entity or its authorised representative established within the Community, that an infrastructure or rolling stock subsystem, for which already a type-examination certificate has been issued by a notified body,

- complies with this TSI and any other applicable TSI, which demonstrate that the essential requirements (17) of Directive 01/16/EC have been met
- complies with the other regulations deriving from the Treaty, and may be placed in service.

2. The notified body carries out the procedure, under the condition, that:

- the type examination certificate issued prior to the assessment remains valid for the subsystem subject to the application,
- the contracting entity (18) and the main contractor involved are satisfying the obligations of point 3. The 'main contractor' refers to companies, whose activities contribute to fulfil the essential requirements of the TSI. It concerns:
 - the company responsible for the whole subsystem project (including in particular responsibility for subsystem integration),

— other companies only involved in a part of the subsystem project, (performing for example assembly or installation of the subsystem). It does not refer to manufacturer sub contractors supplying components and interoperability constituents.

3. For the subsystem that is subject of the EC verification procedure, the contracting entity, or the main contractor when employed, shall operate an approved quality management system for manufacture and final product inspection and testing as specified in point 5 and which shall be subject to surveillance as specified in point 6.

(17) The essential requirements are reflected in the technical parameters, interfaces and performance requirements, which are set out in Chapter 4 of the TSI.

(18) In the module, 'the contracting entity' means 'the subsystem contracting entity, as defined in the directive. or his authorised representative established within the Community'.

When the contracting entity itself is responsible for the whole subsystem project (including in particular responsibility for subsystem integration), or the contracting entity is directly involved in the production (including assembly and installation), it has to operate an approved quality management system for those activities, which shall be subject to surveillance as specified in point 6. If a main contractor is responsible for the whole subsystem project (including in particular responsibility for subsystem integration), it shall operate in any case an approved quality management system for manufacture and final product inspection and testing, which shall be subject to surveillance as specified in point 6.

F.3.3. Module SF: Product Verification

1. This module describes the **EC verification procedure** whereby a notified body checks and certifies at the request of an contracting entity or its authorised representative established within the Community, that an infrastructure or rolling stock subsystem, for which a type-examination certificate has already been issued by a notified body,

— complies with this TSI and any other applicable TSI, which demonstrate that the essential requirements (21) of Directive 01/16/EC have been met

— complies with the other regulations deriving from the Treaty and may be placed into service

2. **The contracting entity** (22) shall lodge an application for EC verification (through product verification) of the subsystem with a notified body of his choice.

The application shall include :

— The name and address of the contracting entity or its authorised representative

— the technical documentation.

3. Within that part of the procedure the contracting entity checks and attests that the subsystem concerned is in conformity with the type as described in the type examination certificate and satisfies the requirements of the TSI that apply to it. The notified body shall carry out the procedure under the condition that the type examination certificate issued prior to the assessment remains valid for the subsystem subject to the application.

4. The contracting entity shall take all measures necessary in order that the manufacturing process (including assembly and integration of interoperability constituents by main contractor (23) when employed) ensures conformity of the subsystem with the type as described in the type-examination certificate and with the requirements of the TSI that apply to it.

5. The application shall enable the design, manufacture, installation, maintenance and operation of the subsystem to be understood, and shall enable conformity with the type as described in ***the type examination certificate*** and the requirements of the TSI to be assessed.

The application shall include:

- the technical documentation regarding the approved type, including the type examination certificate, as issued after completion of the procedure defined in module SB, and, if not included in this documentation,
- a general description of the subsystem, overall design and structure,
- the infrastructure or rolling stock register, including all information as specified in the TSI,
- conceptual design and manufacturing information, for example drawings, schemes of components, subassemblies, assemblies, circuits, etc.,
- the technical documentation regarding the manufacture and the assembly of the subsystem,
- the technical specifications, including European specifications (24), that have been applied,
- any necessary supporting evidence for the use of the above specifications, in particular where these European specifications and the relevant clauses have not been applied in full,
- evidence of conformity to other regulations deriving from the treaty (including certificates) for the production phase
- a list of the Interoperability Constituents, to be incorporated into the subsystem,

(21) The essential requirements are reflected in the technical parameters, interfaces and performance requirements, which are set out in Chapter 4 of the TSI.

(22) In the module, 'the contracting entity' means 'the subsystem contracting entity, as defined in the directive. or his authorised representative established within the Community'.

(23) The 'main contractor' refers to companies, whose activities contribute to fulfil essential requirements of the TSI. It concerns the company that can be responsible for the whole subsystem project or other companies only involved in a part of the subsystem project, (performing for example assembly or installation of the subsystem). (24) The definition of an European specification is indicated in the directives 96/48/EC and 01/16/EC. The guide for application of HS TSIs explains the way to use the European Specifications.

— copies of the EC declarations of conformity or suitability for use with which said constituents shall be provided and all the necessary elements defined in annex VI of the directives,

— a list of manufacturers involved in the subsystem's design, manufacture, assembly and installation, If the TSI requires further information for the technical documentation, this shall be included.

6. The notified body shall first examine the application concerning the validity of the type examination and the type examination certificate.

If the notified body considers the type examination certificate no longer remains valid or is not appropriate and that a new type examination is necessary, it shall justify its decision.

The notified body shall carry out the appropriate examinations and tests in order to check the conformity of the subsystem with the type, as described in the type examination certificate and with the requirements of the TSI. The notified body shall examine and testing of every subsystem manufactured as a serial product, as specified in point 4

7. Verification by examination and testing of every subsystem (as a serial product)

7.1. The notified body shall carry out the tests, examinations and verifications, to ensure conformity of the subsystems, as serial products as provided for in the TSI. The examinations, tests and checking shall extend to the stages as provided for in the TSI.

7.2. Each subsystem (as serial product) shall be individually examined, tested and verified (25) in order to verify its conformity with the type as described in the type-examination certificate and the requirements of the TSI that apply to it. When a test is not set out in the TSI, (or in a European Standard quoted in the TSI), the relevant European Specifications or equivalent tests are applicable.

8. The notified body shall agree with the contracting entity (and the main contractor) the locations where the tests will be carried out and shall agree that final testing of the subsystem and, whenever required in the TSI, tests or validation under full operating conditions, are carried out by the contracting entity under direct supervision and attendance of the notified body. The notified body shall have entrance for testing and verification purposes to production workshops, locations of assembly and installations, and where appropriate, prefabrication and testing facilities in order to carry out its tasks as provided for in the TSI.

9. Where the subsystem meets the requirements of the TSI, the notified body shall draw up the certificate of conformity intended for the contracting entity, which in turn draws up the EC declaration of verification intended for the supervisory authority in the Member State where the subsystem is located and/or operates. These NB activities shall be based on the type examination and the tests, verifications and checks carried out on all serial products as indicated in point 7 and required in the TSI and/or in the relevant European specifications.

The EC declaration of verification and the accompanying documents shall be dated and signed. The declaration shall be written in the same language of the technical file and shall contain at least the information included in Annex V of the Directive.

10. The notified body shall be responsible for compiling the technical file that has to accompany the EC declaration of verification. The technical file shall include at least the information indicated in Art.18 (3) of the Directives, and in particular as follows:

- all necessary documents relating to the characteristics of the subsystem
- the infrastructure or rolling stock register, including all information as specified in the TSI,
- the list of interoperability constituents incorporated into the subsystem,

(25) In particular, for the rolling stock TSI, the notified body will participate in the final in service testing of rolling stock or train set. This will be indicated in the relevant chapter of the TSI.

- copies of the EC declarations of conformity and, where appropriate, of the EC declarations of suitability for use, which the constituents shall be provided in accordance with Article 13 of the Directive, accompanied, where appropriate, by the corresponding documents (certificates, quality management system approvals and surveillance documents) issued by the notified bodies,
- all elements relating to the maintenance, the conditions and limits for use of the subsystem,
- all elements relating to the instructions concerning servicing, constant or routine monitoring, adjustment and maintenance,
- the type-examination certificate for the subsystem and accompanying technical documentation, as defined in the module SB
- certificate of conformity of the notified body as mentioned in point 9, accompanied by corresponding calculation notes and countersigned by itself, stating that the project complies with the directive and the TSI, and mentioning, where appropriate, reservations recorded during performance of activities and not withdrawn. The certificate should also be accompanied, if relevant, by the inspection and audit reports drawn up in connection with the verification.

11. The records accompanying the certificate of conformity shall be lodged with the contracting entity. The contracting entity shall keep a copy of the technical file throughout the service life of the subsystem and for a further period of three years; it shall be sent to any other Member State which so requests.

F.3.4. Module SG: Unit verification

1. This module describes the **EC verification procedure** whereby a notified body checks and certifies, at the request of an contracting entity or its authorised representative established within the Community, that an infrastructure or rolling stock subsystem

— complies with this TSI and any other applicable TSI, which demonstrate that the essential requirements (26) of Directive 01/16/EC have been met

— complies with the other regulations deriving from the Treaty, and may be placed in service.

2. The contracting entity (27) shall lodge an application for EC verification (through unit verification) of the subsystem with a notified body of his choice.

The application shall include:

- name and address of the contracting entity or its authorised representative
- the technical documentation.

3. The technical documentation shall enable the design, manufacture, installation and operation of the subsystem to be understood, and shall enable conformity assessment with the requirements of the TSI.

The technical documentation shall include:

- a general description of the subsystem, its overall design and structure,
- the infrastructure or rolling stock register, including all information as specified in the TSI,
- conceptual design and manufacturing information, for example drawings, schemes of components, sub-assemblies, assemblies, circuits, etc.,

(26) The essential requirements are reflected in the technical parameters, interfaces and performance requirements, which are set out in Chapter 4 of the TSI.

(27) In the module, 'the contracting entity' means 'the subsystem contracting entity, as defined in the directive. or his authorised representative established within the Community'.

- descriptions and explanations necessary for the understanding of the design and manufacturing information, the maintenance and the operation of the subsystem,
- the technical specifications, including European specifications (28), that have been applied,
- any necessary supporting evidence for the use of the above specifications, in particular where European specifications and the relevant clauses have not been applied in full,
- a list of the interoperability constituents to be incorporated into the subsystem,
- copies of the EC declarations of conformity or suitability for use with which said constituents shall be provided and all the necessary elements defined in annex VI of the directives,
- evidence of conformity with other regulations deriving from the treaty (including certificates)
- technical documentation regarding the manufacture and the assembly of the subsystem,
- a list of manufacturers involved in the subsystem's design, manufacturing, assembly and installation, — conditions for use of the subsystem (restrictions of running time or distance, wear limits etc),
- conditions for maintenance and technical documentation regarding the maintenance of the subsystem,
- any technical requirement that shall be taken into account during production, maintenance operation of the subsystem,
- results of design calculations made, examinations carried out, etc.,
- all other appropriate technical evidences, which can demonstrate that previous checking or tests have been successfully performed, under comparable conditions, by independent and competent bodies If the TSI requires further information for the technical documentation, this shall be included.

4. The notified body shall examine the application and the technical documentation, and identify the elements which have been designed in accordance with the relevant provisions of the TSI and the European specifications, as well as the elements which have been designed without applying the relevant provisions of those European specifications.

The notified body shall examine the subsystem and verify that the appropriate and necessary tests to establish whether, where the relevant European specifications have been chosen, these have actually been applied or whether the solutions adopted meet the requirements of the TSI when the appropriate European specifications have not been applied.

The examinations, tests and checks shall extend to the following stages as provided for in the TSI:

- overall design
- structure of the subsystem, including, in particular and when relevant, civil-engineering activities, constituent assembly, overall adjustments
- final testing of the subsystem
- and, whenever specified in the TSI, the validation under full operational conditions.

The notified body may take into account evidence of examinations, checking or tests that have been successfully performed, under comparable conditions by other bodies (29) or by (or on the behalf of) the applicant, when this is specified by the relevant TSI. The notified body will then decide as to whether it shall use the results of these checks or tests.

(28) The definition of a European specification is indicated in the directives 96/48/EC and 01/16/EC. The guide for application of HS TSIs explains the way to use the European Specifications.

(29) The conditions to entrust checking and tests must be similar than the conditions, respected by a notified body to subcontract activities (see § 6.5 of the Blue Guide on the New Approach).

The evidences gathered by the notified body shall be suitable and sufficient to show the conformity with the requirement of the TSI and that all required and appropriate checks and tests have been carried out.

Any evidence to be used that originates from other parties shall be considered prior to any tests or checks being carried out, since the notified body may wish to undertake any assessment, witnessing or review of the tests or checks at the time they are performed.

The extent of such other evidence shall be justified by documented analysis using, among others, the factors listed below (30). This justification shall be included in the technical file. In all case the notified body keeps the final responsibility of them.

5. The notified body shall agree with the contracting entity the locations where the tests will be carried out and shall agree that final subsystem tests and, whenever required in the TSI, tests in full operating conditions, are carried out by the contracting entity under direct supervision and attendance of the notified body.

6. The notified body shall have entrance for testing and verification purposes to the locations of design, building sites, production workshops, locations of assembly and installations, and where appropriate, prefabrication and testing facilities in order to carry out its tasks as provided for in the TSI.

7. Where the subsystem meets the requirements of the TSI, the notified body shall then, based on the tests, verifications and checks carried out as required in the TSI and/or in the relevant European specifications, draw up the certificate of conformity intended for the contracting entity, who shall in turn draw up the EC declaration of verification intended for the supervisory authority in the Member State where the subsystem is located and/or operates.

The EC declaration of verification and the accompanying documents shall be dated and signed. The declaration shall be written in the same language as the technical file and shall contain at least the information included in Annex V of the Directive.

8. The notified body shall be responsible for compiling the technical file that has to accompany the EC declaration of verification. The technical file has to include at least the information indicated in Art.18 (3) of the Directive, and in particular as follows:

- all necessary documents relating to the characteristics of the subsystem
- the list of interoperability constituents incorporated into the subsystem,
- copies of the EC declarations of conformity and, where appropriate, of the EC declarations of suitability for use, which the constituents shall be provided in accordance with Article 13 of the Directive, accompanied, where appropriate, by the corresponding documents (certificates, quality management system approvals and surveillance documents) issued by the notified bodies,
- all elements relating to the maintenance, the conditions and limits for use of the subsystem,
- all elements relating to the instructions concerning servicing, constant or routine monitoring, adjustment and maintenance,

(30) The notified body shall investigate the various parts of the subsystem work and establish before, during and on completion of the work:

- the risk and safety implications of the subsystem and its various parts
- the use of existing equipment and systems:
 - used identically as before
 - used before but adapted for use in the new work
- the use of existing designs, technologies, materials and production techniques.
- the arrangements for design, production, testing and commissioning
- the operational and service duty
- previous approvals from other competent bodies
- the accreditations of other involved bodies:
 - it is permissible for the nb to take account of valid accreditation to EN45004, providing that no conflict of interest exists, that accreditation covers the testing being performed and that accreditation is current.
 - where no formal accreditation exists, the nb shall confirm that the systems for control of competence, independence, testing and material handling processes, facilities and equipment and other processes relevant to the contribution to the subsystem are controlled.
 - in all cases, the notified body shall consider the appropriateness of the arrangements and decide the level of witnessing required
- the use of homogenous lots and systems consistent with module f.
- certificate of conformity of the notified body as mentioned in point 7, accompanied by verification and/or corresponding calculation notes and countersigned by itself, stating that the project complies with the directive and the TSI, and mentioning, where appropriate, reservations recorded during performance of activities and not withdrawn; the certificate should also be accompanied, if relevant, by the inspection and audit reports drawn up in connection with the verification,
- evidence of conformity with other regulations deriving from the treaty (including certificates)
- the infrastructure or rolling stock register, including all information as specified in the TSI.

9. The records accompanying the certificate of conformity shall be lodged with the contracting entity. The contracting entity shall keep a copy of the technical file throughout the service life of the subsystem and for a further period of three years; it shall be sent to any other Member State which so requests.

F.3.5. Module SH2: Full Quality Management System with Design Examination

1. This module describes the **EC verification procedure** whereby a notified body checks and certifies, at the request of an contracting entity or its authorised representative established within the Community, that an infrastructure or rolling stock subsystem

- complies with this TSI and any other applicable TSI, which demonstrate that the essential requirements (31) of Directive 01/16/EC have been met;
- complies with the other regulations deriving from the Treaty and may be placed in service

2. The notified body shall carry out the procedure, including a design examination of the subsystem, under the condition, that the contracting entity (32) and the main contractor involved are satisfying the obligations of point 3.

The 'main contractor' refers to companies, whose activities contribute to fulfil the essential requirements of the TSI. It concerns the company:

- responsible for the whole subsystem project (including in particular responsibility for subsystem integration),
- other companies involved only in a part of the subsystem project (performing for example design, assembly or installation of the subsystem).

It does not refer to manufacturer sub contractors supplying components and interoperability constituents.

3. For the subsystem that is subject of the EC verification procedure, the contracting entity or the main contractor, when employed, shall operate an approved quality management system for design, manufacture and final product inspection and testing as specified in point 5 and which shall be subject to surveillance as specified in point 6

The main contractor responsible for the whole subsystem project (including in particular responsibility for subsystem integration), shall operate in any case an approved quality management system for design, manufacture and final product inspection and testing, which shall be subject to surveillance as specified in point 6. In the case that the contracting entity itself is responsible for the whole subsystem project (including in particular responsibility for subsystem integration) or that the contracting entity is directly involved in the design and/or production (including assembly and installation), it shall operate an approved quality management system for those activities, which shall be subject to surveillance as specified in point 6. Applicants which are only involved in assembly and installation, are permitted to operate only an approved quality management system for manufacture and final product inspection and testing

4. EC verification procedure

4.1. The contracting entity shall lodge an application for EC verification of the subsystem (through full quality management system with design examination), including co ordination of surveillance of the quality management systems as in points 5.4. and 6.6., with a notified body of its choice. The contracting entity shall inform the manufacturers involved of his choice and of the application.

4.2. The application shall enable the design, manufacture, assembly, installation, maintenance and operation of the subsystem to be understood, and shall enable conformity with the requirements of the TSI to be assessed.

The application shall include:

- name and address of the contracting entity or its authorised representative,

- the technical documentation including:
- a general description of the subsystem, overall design and structure,
- the technical design specifications, including European specifications (33), that have been applied,
- any necessary supporting evidence for the use of the above specifications, in particular where the European specifications and the relevant clauses have not been applied in full,
- the test programme,
- the infrastructure or rolling stock register, including all information as specified in the TSI,
- the technical documentation regarding the manufacture, the assembly of the subsystem,
- a list of the interoperability constituents to be incorporated into the subsystem,
- copies of the EC declarations of conformity or suitability for use with which the constituents shall be provided and all the necessary elements defined in annex VI of the directives,
- evidence of conformity to other regulations deriving from the treaty (including certificates),
- a list of all manufacturers, involved in the subsystem's design, manufacturing, assembly and installation,
- conditions for use of the subsystem (restrictions of running time or distance, wear limits etc),
- conditions for maintenance and technical documentation regarding the maintenance of the subsystem,
- any technical requirement that shall be taken into account during production, maintenance or operation of the subsystem,
- the explanation, of how all stages, as mentioned in point 5.2, are covered by quality management systems of the main contractor and/or of the contracting entity, if involved, and the evidence of their effectiveness,
- indication of the notified body (ies) responsible for the approval and surveillance of these quality management systems.

4.3. The contracting entity shall present the results of examinations, checking and tests (34) including type tests when required, carried out by its appropriate laboratory or on their behalf.

(33) The definition of an European specification is indicated in the directives 96/48/EC and 01/16/EC. The guide for application of HS TSIs explains the way to use the European Specifications.

(34) The presentation of the results of the tests can be at the same time as the application or later.

4.4. The notified body shall examine the application concerning the design examination and assess the results of the tests. Where the design meets the provisions of the Directive and of the TSI that apply to it shall issue a design examination certificate to the applicant. The certificate shall contain the conclusions of the design examination, conditions for its validity, the necessary data for identification of the design examined and, if relevant, a description of the subsystem's functioning. If the contracting entity is denied a design examination certificate, the notified body shall provide detailed reasons for such denial. Provision shall be made for an appeals procedure.

4.5. During the production phase, the applicant shall inform the notified body that holds the technical documentation concerning the design examination certificate of all modifications which may affect the conformity with the requirements of the TSI or the prescribed conditions for use of the subsystem. The subsystem shall receive additional approval in such cases. In this case, the notified body shall perform only those examinations and tests, those are relevant and necessary to the changes. This additional approval may be given either in the form of an addition to the original design examination certificate, or by issue of a new certificate after withdrawal of the old certificate.

5. *Quality management system*

5.1. The contracting entity, if involved, and the main contractor, when employed, shall lodge an application for assessment of their quality management systems with a notified body of their choice.

The application shall include:

- all relevant information for the subsystem envisaged,
- the quality management system documentation.

For those only involved in a part of the subsystem project, the information to be provided is only that for the relevant part.

5.2. For the contracting entity or the main contractor responsible for the whole subsystem project, the quality management system shall ensure overall compliance of the subsystem with the requirements of the TSI.

The quality management system(s), for other contractors, has (have) to ensure compliance of their relevant contribution to the subsystem, with the requirements of the TSI.

All the elements, requirements and provisions adopted by the applicants shall be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. This quality management system documentation shall ensure a common understanding of the quality policies and procedures such as quality programmes, plans, manuals and records.

The system shall contain in particular an adequate description of the following items:

- for all applicants:
 - the quality objectives and the organisational structure,
 - the corresponding manufacturing, quality control and quality management techniques, processes and systematic actions that will be used,
 - the examinations, checking and tests that will be carried out before, during and after design, manufacture, assembly and installation and the frequency with which they will be carried out,
 - the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.,
- for the main contractor, as far as relevant for its contribution to the design of the subsystem:
 - the technical design specifications, including European specifications that will be applied and, where the European specifications will not be applied in full, the means that will be used to ensure that the requirements of the TSI that apply to the subsystem will be met,
 - the design control and design verification techniques, processes and systematic actions that will be used when designing the subsystem,
 - the means to monitor the achievement of the required design and subsystem quality and the effective operation of the quality management systems in all phases including production.
- and also for the contracting entity or the main contractor responsible for the whole subsystem project:
 - responsibilities and powers of the management with regard to overall subsystem quality, including in particular the subsystem integration management.

The examinations, tests and checking shall cover all of the following stages:

- overall design,
- structure of the subsystem, including, in particular, civil-engineering activities, constituent assembly, final adjustment,
- final testing of the subsystem,
- and, where specified in the TSI, the validation under full operation conditions.

5.3. The notified body chosen by the contracting entity shall examine, if all stages of the subsystem as mentioned in point 5.2 are sufficiently and properly covered by the approval and surveillance of the quality management system(s) of the applicant(s) (35).

If the compliance of the subsystem with the requirements of the TSI is based on more than one quality management system, the notified body shall examine in particular,

- if the relations and interfaces between the quality management systems are clearly documented
- and if overall responsibilities and powers of the management for the compliance of the whole entire subsystem for the main contractor are sufficiently and properly defined.

5.4. The notified body referenced in point 5.1. shall assess the quality management system to determine whether it satisfies the requirements of point 5.2. It presumes compliance with these requirements if the applicant implements a quality system for design, production, final product inspection and testing in respect of the Standard EN/ISO 9001-2000, which takes into consideration the specificity of the subsystem for which it is implemented.

When an applicant operates a certified quality management system, the notified body shall take this into account in the assessment.

The audit shall be specific for the subsystem concerned, taking into consideration the specific contribution of the applicant to the subsystem. The auditing team shall have at least one member experienced as an assessor in the subsystem technology concerned. The evaluation procedure shall include an assessment visit to the applicant's premises.

The decision shall be notified to the applicant. The notification shall contain the conclusions of the examination and the reasoned assessment decision.

5.5. The contracting entity, if involved, and the main contractor shall undertake to fulfil the obligations arising out of the quality management system as approved and to uphold it so that it remains adequate and efficient.

(35) In particular, for the rolling stock TSI, the notified body will participate in the final in service testing of rolling stock or train set. This will be indicated in the relevant chapter of the TSI. They shall keep the notified body that has approved their quality management system informed of any significant change that will affect the fulfilment of the requirements by the subsystem. The notified body shall evaluate any modifications proposed and decide whether the amended quality management system will still satisfy the requirements of point 5.2 or whether a re-assessment is required.

It shall notify its decision to the applicant. The notification shall contain the conclusions of the examination and the reasoned assessment decision.

6. Surveillance of the quality management system(s) under the responsibility of the notified body

6.1. The purpose of surveillance is to make sure that the contracting entity, if involved, and the main contractor duly fulfil the obligations arising out of the approved quality management system(s).

6.2. The contracting entity, if involved, and the main contractor shall send the notified body referenced in point 5.1. (or have sent) all the documents needed for that purpose and in particular the implementation plans and technical records concerning the subsystem (as far as relevant for the specific contribution of the applicant to the subsystem), including:

- the quality management system documentation, including the particular means implemented to ensure that
- for the contracting entity or the main contractor, responsible for the whole subsystem project, overall responsibilities and powers of the management for the compliance of the whole entire subsystem are sufficiently and properly defined,

- for each applicant, the quality management system is correctly managed for achieving integration at subsystem level,
- the quality records as foreseen by the design part of the quality management system, such as results of analyses, calculations, tests, etc.,
- the quality records as foreseen by the manufacturing part (including assembly, installation and integration) of the quality management system, such as inspection reports and test data, calibration data, competency records of the personnel concerned, etc.

6.3. The notified body shall periodically carry out audits to make sure that the contracting entity, if involved, and the main contractor maintain and apply the quality management system and shall provide an audit report to them. When they operate a certified quality management system, the notified body shall take this into account in the surveillance. The frequency of the audits shall be at least once a year, with at least one audit during the time period of performing the relevant activities (design, manufacture, assembly or installation) for the subsystem being the subject of the EC verification procedure mentioned in point 4.

6.4. Additionally the notified body may pay unexpected visits to the sites mentioned in point 5.2 of the applicant(s). At the time of such visits, the notified body may conduct complete or partial audits and may carry out or cause to be carried out tests in order to check the proper functioning of the quality management system where necessary. It shall provide the applicant(s) with an inspection report and audit and/or test reports as appropriate.

6.5. The notified body chosen by the contracting entity and responsible for the EC verification, if not carrying out the surveillance of all the quality management system(s) concerned as under point 5, shall co ordinate the surveillance activities of any other notified bodies responsible for that task, in order:

- to be ensured that correct management of interfaces between the different quality management systems relating to subsystem integration has been performed.
- to collect, in liaison with the contracting entity, the necessary elements for the assessment to guarantee the consistency and the overall supervision of the different quality management systems.

This co ordination includes the right of the notified body

- to receive all documentation (approval and surveillance), issued by the other notified body(s),
- to witness the surveillance audits as in point 5.4.,
- to initiate additional audits as in point 5.5. under its responsibility and together with the other notified body(s).

7. The notified body as referenced under point 5.1. shall have entrance for inspection purposes, audit and surveillance to the locations of design, building sites, production workshops, locations of assembly and installation, storage areas and where appropriate, prefabrication or testing facilities and, more general, to all premises which it considers necessary for its task, in accordance with the applicant's specific contribution to the subsystem project.

8. The contracting entity, if involved, and the main contractor shall, for a period of 10 years after the last subsystem has been manufactured, keep at the disposal of the national authorities:

- the documentation referenced in the second indent of the second subparagraph of point 5.1,
- the updating referenced in the second subparagraph of point 5.5,
- the decisions and reports from the notified body which are referenced in the points 5.4, 5.5 and 6.4

9. Where the subsystem meets the requirements of the TSI, the notified body shall then, based on the design examination and the approval and surveillance of the quality management system(s), draw up the certificate of conformity intended for the contracting entity, who shall in turn draw up

the EC declaration of verification intended for the supervisory authority in the Member State within which the subsystem is located and/or operates.

The EC declaration of verification and the accompanying documents shall be dated and signed. The declaration shall be written in the same language of the technical file and shall contain at least the information included in Annex V of the Directive.

10. The notified body chosen by the contracting entity shall be responsible for compiling the technical file that has to accompany the EC declaration of verification. The technical file shall include at least the information indicated in Art 18 (3) of The Directive, and in particular as follows:

- all necessary documents relating to the characteristics of the subsystem
- the list of interoperability constituents incorporated into the subsystem,
- copies of the EC declarations of conformity and, where appropriate, of the EC declarations of suitability for use, which the constituents shall be provided in accordance with Article 13 of the Directive, accompanied, where appropriate, by the corresponding documents (certificates, quality management system approvals and surveillance documents) issued by the notified bodies,
- evidence of conformity to other regulations deriving from the treaty (including certificates)
- all elements relating to the maintenance, the conditions and limits for use of the subsystem,
- all elements relating to the instructions concerning servicing, constant or routine monitoring, adjustment and maintenance
- certificate of conformity of the notified body as mentioned under point 9, accompanied by corresponding verification and/or calculation notes and countersigned by itself, stating that the project complies with the Directive and the TSI, and mentioning, where appropriate, reservations recorded during performance of the activities and not withdrawn.

The certificate should also be accompanied, if relevant, by the inspection and audit reports drawn up in connection with the verification, as mentioned in points 6.4. and 6.5.;

- the infrastructure or rolling stock register, including all information as specified in the TSI.

11. Each notified body shall communicate to the other notified bodies the relevant information concerning the quality management system approvals and the EC design examination certificates, which it has issued, withdrawn or refused.

The other notified bodies may receive on request copies of:

- the quality management system approvals and additional approvals issued and
- the EC design examination certificates and additions issued

12. The records accompanying the certificate of conformity shall be lodged with the contracting entity. The contracting entity shall keep a copy of the technical file throughout the service life of the subsystem and for a further period of three years; it shall be sent to any other Member State which so requests.

ANNEX I
CEBC Report updated data 2011

Table I.1 - CEBC Report 2007 – updated data 2011 (partial – where data have been available)

Type	Topic	Austria	Belgium	Croatia	Cyprus	Czech Republic	Denmark	England & Wales	Estonia	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Latvia	Lithuania	Luxembourg	Netherlands	Northern Ireland	Norway	Poland	Romania	Scotland	Slovak Republic	Slovenia	Spain	Sweden
Non-domestic	Is disabled access covered by legislation?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Is disabled access a Building Regulation matter?	yes	no	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Are the Regulations performance based?	partly	no	yes	partly	yes	yes	yes	yes	partly	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	no	yes	yes	yes
Non-domestic	Is there supporting technical guidance?	yes	no	yes	no	no	yes	yes	no	no	no	yes		yes	yes	yes	yes	no		yes	yes	yes	yes		yes	no	yes	yes	yes
Non-domestic	Do the Regulations apply to non-dwellings?	yes	no	no	yes	no	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations apply to extensions as well as new buildings?	yes	no	no	yes	no	yes	yes	yes	yes	yes	no		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations apply to approach to the building?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes		yes	partly	yes	yes		yes	yes	yes	yes	yes

Type	Topic	Austria	Belgium	Croatia	Cyprus	Czech Republic	Denmark	England & Wales	Estonia	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Latvia	Lithuania	Luxembourg	Netherlands	Northern Ireland	Norway	Poland	Romania	Scotland	Slovak Republic	Slovenia	Spain	Sweden
Non-domestic	Are maximum gradients to external ramps specified?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations apply to external stairways?	partly	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes		no	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations apply to minimum width of entrance doors?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations stipulate automatic doors at entrances?	partly	yes	yes	no	no	no	no	no	no	no	no		no	partly	no	no	no		no	no	yes	no		no	no	no	no	no
Non-domestic	Do the Regulations control visibility of large glazed areas?	yes	yes	yes	no	yes	no	yes	no	no	yes	yes		no	yes	yes	yes	yes		no	yes	yes	yes		yes	no	yes	yes	yes
Non-domestic	Are reception areas and lobbies controlled by the Regulations?	yes	yes	yes	yes	yes	yes	yes	no	partly	yes	yes		no	yes	yes	yes	yes		no	yes	yes	yes		partly	no	yes	yes	no
Non-domestic	Do the Regulations control widths of corridors and hallways?	yes	yes	yes	yes	yes	yes	yes	no	no	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	no		yes	yes	no	yes	yes

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Non-domestic	Do the Regulations control internal door widths?	yes	yes	yes	no	yes	yes	yes	no	no	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations control the gradient of internal ramps?	yes	yes	yes	no	yes	yes	yes	no	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations control internal stairs?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Are passenger lifts required by the Regulations?	yes	yes	yes	no	yes	yes	yes	no	yes	yes	partly		yes	yes	yes	yes	yes		partly	no	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Min no of storeys	3				5	3				3			2	2							0	5			2	3		2
Non-domestic	Can platform lifts and stairlifts be considered as an alternative?	yes	yes	yes	no	yes	no	yes	no	yes	no	no		yes	yes	yes	yes	yes		no	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations require toilets for the disabled?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	no		yes	yes	yes	yes		yes	yes	yes	yes	yes
Non-domestic	Do the Regulations control the colour/contrast of internal surfaces?	yes	no	yes	no	no	no	yes	yes	no	yes	yes		no	yes	yes	yes	yes		no	yes	yes	no		yes	no	yes	no	yes
Non-domestic	Do the Regulations require low level counters etc at reception areas?	no	yes	yes	no	yes	no	yes	no	yes	yes	yes		no	yes	yes	yes	yes		no	yes	yes	no		yes	no	yes	yes	no

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Non-domestic	Are induction loops required for the deaf?	partly	no	yes	no	yes	no	yes	no	yes	yes	no		yes	yes	no	yes	no		no	yes	yes	no		yes	yes	yes	yes	no
Non-domestic	Are wayfinding signs required?	partly	no	yes	no	yes	no	yes	yes	yes	yes	yes		no	yes	yes	yes	yes		no	yes	yes	no		no	yes	yes	yes	yes
Non-domestic	Is artificial lighting controlled by the Regulations?	yes	no	yes	no	partly	no	yes	yes	no	yes	yes		yes	yes	yes	yes	no		no	no	yes	yes		no	no	yes	yes	yes
Non-domestic	Is means of escape in case of fire for disabled people controlled?	yes	no	yes	no	yes	partly	no	no	no	yes	no		no	yes	no	no	no		no	no	yes	no		no	no	yes	yes	no
Non-domestic	Are building management action plans accepted with trade off for alarms, refuges etc?	yes	no	yes	no	yes	no	yes	yes	no	yes	no		no	yes	yes	no	no		no	yes	yes	no		yes	no	yes	no	no
Dwellings	Is disabled access covered by legislation?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Dwellings	Is disabled access a Building Regulation matter?	yes	no	yes	yes	yes	yes	yes	no	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes

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Dwellings	Are the Regulations performance based?	partly	no	yes	partly	yes	yes	yes	no	partly	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	no	yes	yes	yes
Dwellings	Is there supporting technical guidance?	yes	no	yes	no	no	yes	yes	no	no	no	yes		yes	yes	yes	yes	no		yes	yes	yes	yes		yes	yes	yes	yes	yes
Dwellings	Do the Regulations apply to dwellings?	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes		yes	yes	yes	partly	no		yes	yes	yes	yes		yes	yes	yes	yes	yes
Dwellings	Do the Regulations apply to extensions as well as new buildings?	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	no		yes	yes	yes	yes	yes		yes	partly	yes	yes		yes	yes	yes	yes	yes
Dwellings	Do the Regulations apply to approach to the building?	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Dwellings	Are maximum gradients to external ramps specified?	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Dwellings	Do the Regulations apply to external stairways?	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes		yes	yes	no	yes	yes		no	yes	yes	yes		yes	yes	yes	yes	no

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Dwellings	Do the Regulations apply to minimum width of entrance doors?	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Dwellings	Do the Regulations control visibility of large glazed areas?	yes	yes	no	no	no	no	no	no	no	yes	yes		no	yes	yes	yes	yes		no	yes	yes	yes		partly	no	yes	yes	yes
Dwellings	Do the Regulations control widths of corridors and hallways?	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes		yes	yes	yes	partly	yes		yes	yes	yes	yes		yes	no	no	yes	yes
Dwellings	Do the Regulations control internal door widths?	yes	yes	no	no	yes	yes	yes	no	yes	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	no	yes	yes	yes
Dwellings	Do the Regulations control the gradient of internal ramps?	yes	yes	no	no	yes	yes	yes	no	partly	yes	yes		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	no	yes	yes
Dwellings	Do the Regulations control internal stairs?	yes	yes	no	yes	yes	yes	yes	no	yes	yes	no		yes	yes	yes	yes	yes		yes	yes	yes	yes		yes	yes	yes	yes	yes
Dwellings	Are passenger lifts required by the Regulations?	yes	yes	no	no	yes	yes	no	no	yes	yes	yes		yes	yes	yes	partly	yes		yes	no	yes	yes		yes	yes	yes	yes	yes

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Dwellings	Min no of storeys	3				5	3			3	3	6		4		4				3		3	5		5		5	3	3
Dwellings	Can platform lifts and stairlifts be considered as an alternative?	yes	yes	no	no	yes	no	no	no	yes	no	no		yes	no	yes	no	yes		no	no	yes	no		no	yes	yes	yes	yes
Dwellings	Do the Regulations require toilets for disabled people?	yes	yes	no	yes	yes	no	yes	no	yes	yes	yes		yes	yes	yes	no	no		yes	yes	yes	yes		yes	yes	yes	yes	yes
Dwellings	Do the Regulations control the colour/contrast of internal surfaces?	yes	no	no	no	no	no	no	no	no	no	yes		no	no	yes	yes	yes		no	no	yes	no		no	yes	yes	no	no
COE data	Legislation on UD/DFA	yes	no	no			partly	yes		yes	yes	yes			yes				yes	no		yes	yes						
COE data	Disability Discrimination Act	yes	no	yes			no	yes		no	yes	yes			yes				no	yes		yes	no						
COE data	National monitoring system on UD	yes	no	no			yes			no	no	yes			no				no	no		partly	no						

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COE data	Awareness programmes on UD/DFA	partly	no	yes			yes			no	yes	yes			partly				yes	yes		yes	yes						
COE data	Public procurement policies include UD/DFA	partly	no	yes			partly			no	partly	yes			yes				no	no		yes	yes						
COE data	UD in built environment education curricula	partly	yes	yes			partly			yes	yes	no			partly				partly	partly		yes	yes						
COE data	Labelling system on UD/DFA	no	no	yes			yes			no	partly	no			yes				yes	yes		yes	yes						
BCA CAS	BCA certification only																												
BCA CAS	Accessibility training required for BCA staff																												
BCA CAS	Comments to BCA procedures																												
BCA CAS	First party/Self-certification exists	yes	no	no	yes	no	yes	yes	yes	yes	yes	yes		no	no	yes	yes	yes		yes	no	yes	yes	no	yes	yes	yes	yes	yes
BCA CAS	Whole building design self-assessable	yes					yes	no	yes	yes	no	yes				no	yes			no		yes	yes		no	yes	no	yes	yes

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BCA CAS	Qualifications required for self-assessment	no			no		partly	no	no	no	no	no				no	partly	no		no		no	no		no	no	no	no	no
BCA CAS	Self-assessment of completion permitted	yes	no	no	yes	no	yes	no	partly	no	no	houses		no	no		yes			no	no	yes	yes		yes	no	yes	yes	yes
BCA CAS	Municipal inspection besides self-assessment	no			yes	yes	random			yes	no				no		yes			yes		Spot checks		yes			Can inspect	Random	
BCA CAS	Who can certify completion in case of self-assessment	freelance civil engineer			Supervisor engineer						M&E Contractor						See sheet							Relevant person	Authority			Quality assurance	

ANNEX J

Education and training of architects, public procurers, construction engineers etc.

J.1 Education and training in EU Member States

In most of the countries, basic education does not contain any obligatory training on accessibility of the built environment for architects, engineers, technicians, professionals, and authorities involved in public procurement, execution and supervision. Exceptions are Hungary, Malta, Poland and Slovakia. In Hungary the issue is dealt with in student design projects. Thus, all subjects should contain an accessibility related part. In Malta accessibility issues are part of the general design education.

In Poland the universal design approach is promoted and all relevant requirements are taught at a higher education level in many design schools (architectural design, industrial design). All design courses require implementation of universal design as stated in the building regulation. Another approach is provided in the UK, where Inclusive Design education is introduced at primary and secondary school levels in order to inform designers of the future.

In Slovakia *design for all* courses are implemented obligatorily in the curricula for architects. In 2008 VUT Bratislava has organised for a two weeks course one Erasmus Intensive Programme “Tourism for all” and in 2009 followed by “Culture for all” where each time 20 architecture students and their teachers of different European universities of technology participated (Austria as co-partner, Belgium, Czech Republic, Germany, Poland).

Some countries provide post-graduate studies for architects as well as for other professional groups. For example, in Hungary at the Budapest University of Technology Economics’ Faculty of Architecture a Rehabilitation Engineering Programme has been accredited eight years ago. So called “Rehabilitation engineers” receive a two-year training. Since 2006 a lecture and project work on “Universal Design” is introduced in the Facility Management MBA Programme and since this year also in the post-graduate course “Sustainable built environment” at the Vienna University of Technology.

To conclude, there are several offers for voluntary training available in many of the countries, but the awareness of the importance of getting trained in terms of accessibility among the professionals concerned leaves a lot to be desired. In some countries there are no such offers at all available and there seems to be a lack of experts in this field in most of the countries.

J.2 Good practice examples for education in Europe

Chamber of architects in Berlin: Training course for certified experts on accessibility with 126 hours in 2 day courses with 9 units

Handwerkskammer Hamburg: courses for carpenter, plumbers etc.

DIN: courses for architects and engineers on accessibility

Chamber of Architects in Madrid (COAM): Universal Accessibility and Design for all course with 45 hours, architectural students can also attend this course; no fees!

Technical University of Bratislava: CEDA (Centre of Excellence in Design for All, founded 2007) with partner Vienna University of Technology offerst two Erasmus Intensive Programmes on “Tourism for all” and “Culture for all” in 2008 and 2009.

Austrian Standards Training plus: starts 2011 a course for “**Certified Experts on Accessibility**” with 48 hours; final project work and testing

Vienna University of Technology:

MBA Facility Management: Universal Design included with facility check on accessibility of an existing office building; since 2008

Training course on “**Sustainability of the built Environment**” where Universal Design is included in the course with 4 hours; since autumn 2010 in co-operation with Graz University of Technology

J.3 Low level of expertise on accessibility among architects, engineers and public procurers

We must remember the low level of expertise on accessibility in the vast majority of public procurers but also among architects and construction engineers. Therefore to guarantee the appointment of experts in this field for the calls preparation and the evaluation of the projects/works/products delivered by the provider is a must.

In 2001 the Council of Europe with the Committee of Ministers has adopted Resolution **ResAP (2001)1 “Universal Design”** on the introduction of the principles of universal design into the curricula of all occupations working on the built environment:

<https://wcd.coe.int/ViewDoc.jsp?id=186495&BackColourInternet=B9BDEE&BackCol.>

Has this resolution been introduced in European universities, technical colleges etc. sufficiently – or is here a Missing Link?

The recent study of *design for all “Barrierefreies Bauen – Ausbildung und Beratung in Österreich”*²⁵ includes the result of an English online survey among all European technical universities who participate in the Schindler Award.

More than 300 technical colleges and universities in Europe have been asked in which amount and in which phase of the education of architects Universal Design / Design for all / Inclusive Design is included in the curricula.

The return rate with 8, 4 % - received after twice reminders - has been rather disappointing. 28 universities from Turkey to Portugal, from Greece to Finland have answered the questionnaire:

The answers have been very opposite: some universities have integrated the content of Design for all in the different design studios. Others make specific DfA courses combined with special design projects. In 4 universities DfA is educated from the very beginning, 10 universities start in the second or third year and 7 universities in the master studies. Some courses are also under preparation.

Three courses have been established in the early 1990 one even earlier in 1965 at Vienna Technical University, the most courses in the last 10 years with a large range of 4 to 162 hours.

6 from 28 universities are active involved in the implementation of the UN Convention and will focus more on Design for all education in their architectural curricula.

See here some comments what should be the goal of all architectural education:

» I am a professor in architecture, and these questions are for me „strange“ questions, because our vocation is to do architecture for everybody. My PHD was about blind people and space, I was 24 years old, now I am forty five ...“

Cath Rannou, Ecole Nationale supérieur d'architecture de Bretagne

» We do not teach accessibility and inclusivity as separate subjects within architecture. We assume that all work produced in our School is both accessible and inclusive. We do not allow any other design parameters. By making this an assumed subject (and ensuring that all staff and students understand this assumption) we think that this is a more successful way of enshrining the subject in our thinking and teaching.“

Jeremy Gould, University of Plymouth

Our long-term experience gives the same poor result as the recent study has shown although not with a representative return rate. Currently, Universal Design/Design for All/Inclusive Design is hardly introduced at all within architects' curricula. In some cases, students have the possibility to take

²⁵see www.designforall.at – free download mainly in German

facultative courses. In order to educate a generation of architects capable of dealing with accessibility issues, appropriate courses should be compulsory for students.

J.4 Recommendation for education and training of architects, public procurers etc.

Member States should be made aware about this missing link and the missing implementation of the *Universal Design* Resolution from 2001. This has an important influence on the implementation of Design for all approach within the built environment.

Following the same argument, as in the previous point (although the better education of architects and engineers in accessibility is clearly desirable), the amount of knowledge needed to achieve good results requires certain degree of specialisation. Companies such as ARUP have experts to check the development in the UK and other countries. The access consultant is a profession well defined and with clear commitments in the projection, design, construction and inspection processes).

That is a similar approach that is used for structures calculation, building physics, fire safety engineering or electrical installations. Therefore we would suggest including in future procurement standards the need to involve access consultants (as personnel of the procurer administration to contribute in the call preparation, awarding and assessment but also being part of the providers staff to guarantee the requested accessibility quality level).