

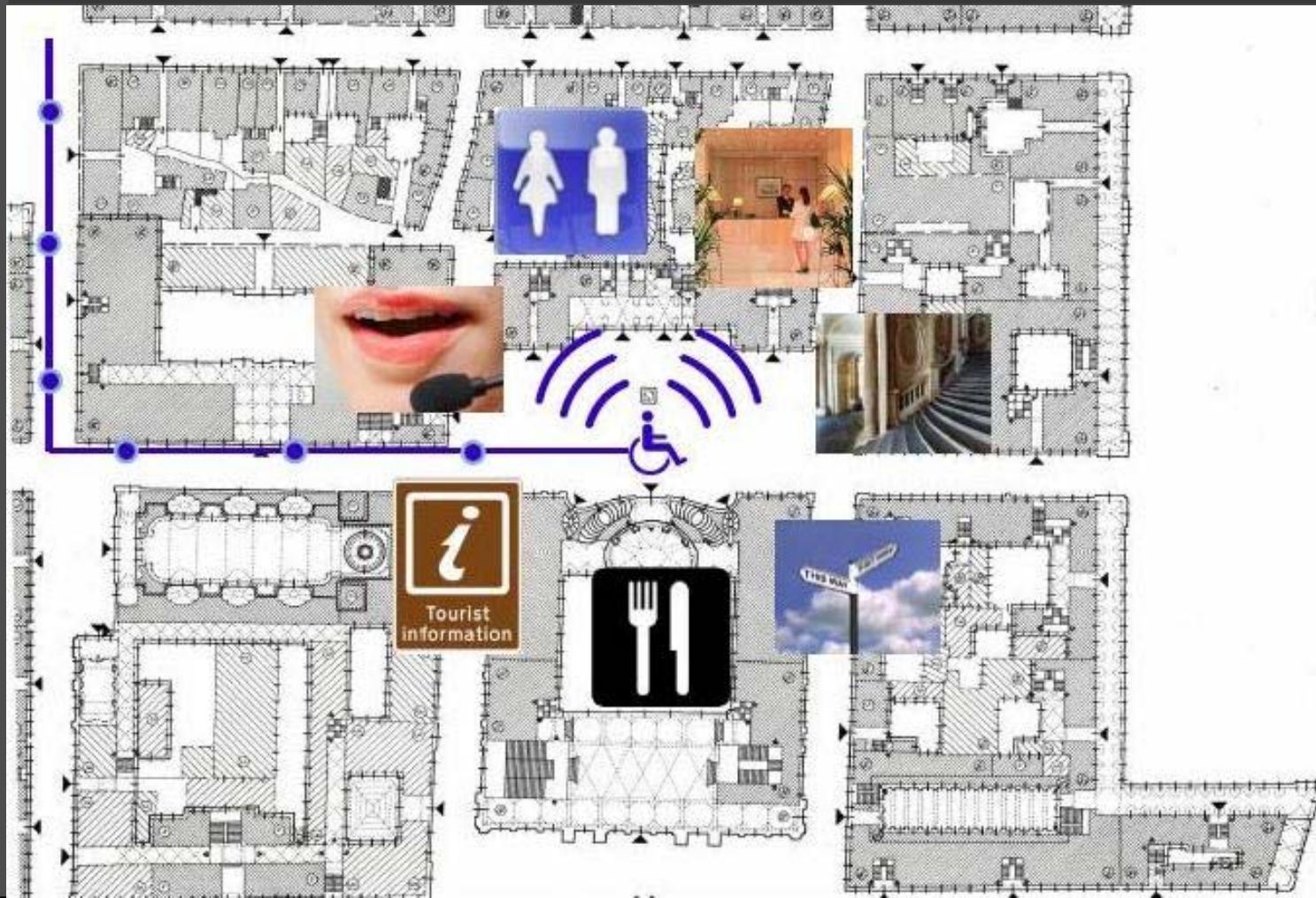


## TURIN FOR ALL

### Multisensory itineraries for the discovery of Turin historic architecture

#### INTERNATIONAL MEETING ON ACCESSIBILITY

16th and 17th June 2011  
Fondazione CRT  
Via XX Settembre 31  
Turin, Italy



#### Working Team

*Prof. Fabrizio Astrua*

*Arch. Eugenia Monzeglio*

*Arch. Mariabeatrice Picco, PhD*

*Eng. Michele Rella, PhD*

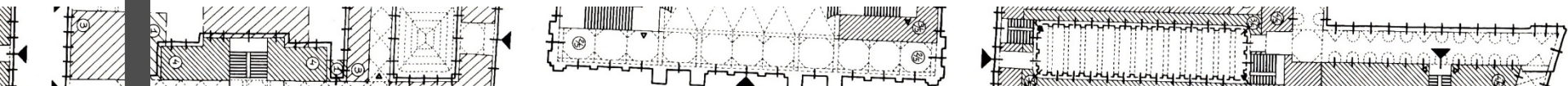
# TURIN, AN AVANT-GARDE CITY

Turin has always been a model city regarding to social inclusion policies.

This attention to people with difficulties in living the city in comfort and safety has led - over the years - the city council, in accordance with various industry bodies and institutions, to think about new solutions on the urban road network, public transport and access to public and private buildings of historical interest.

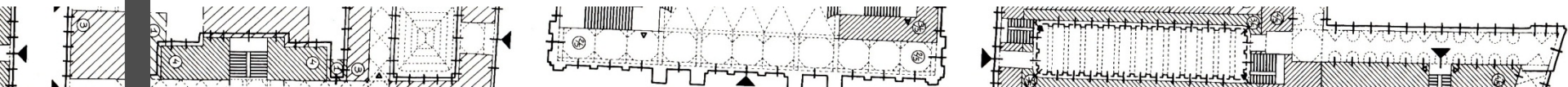


The accessible Museo Egizio of Turin





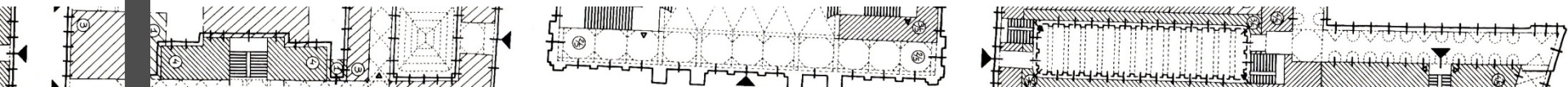
Something has already been done.....



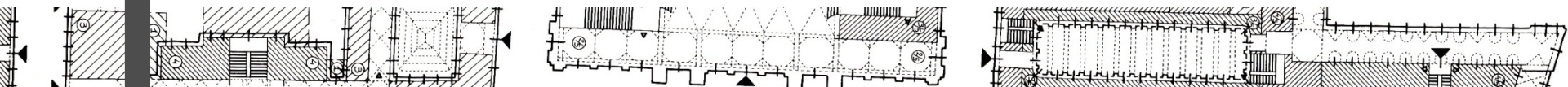
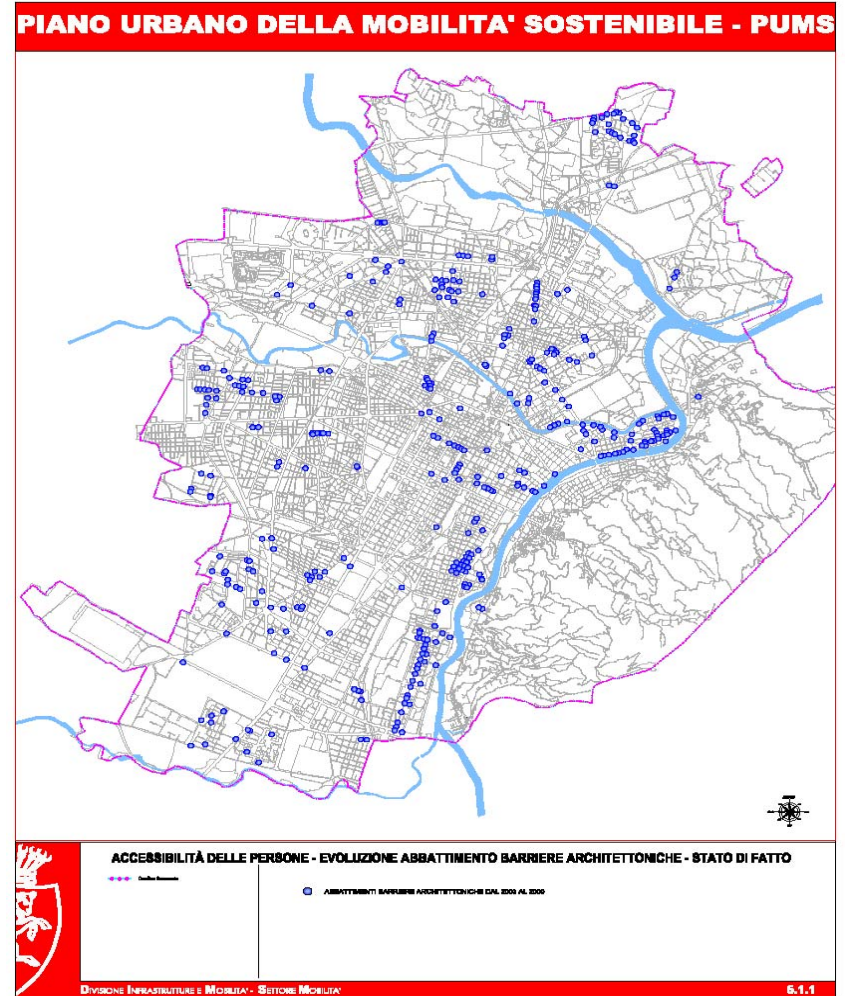
## GTT – Accessible public transport system



The GTT public transport system tactile map and the low-floor tram



**Commune of Turin**  
**PUMS - Urban Plan for Sustainable Mobility**  
The removal of architectural barriers

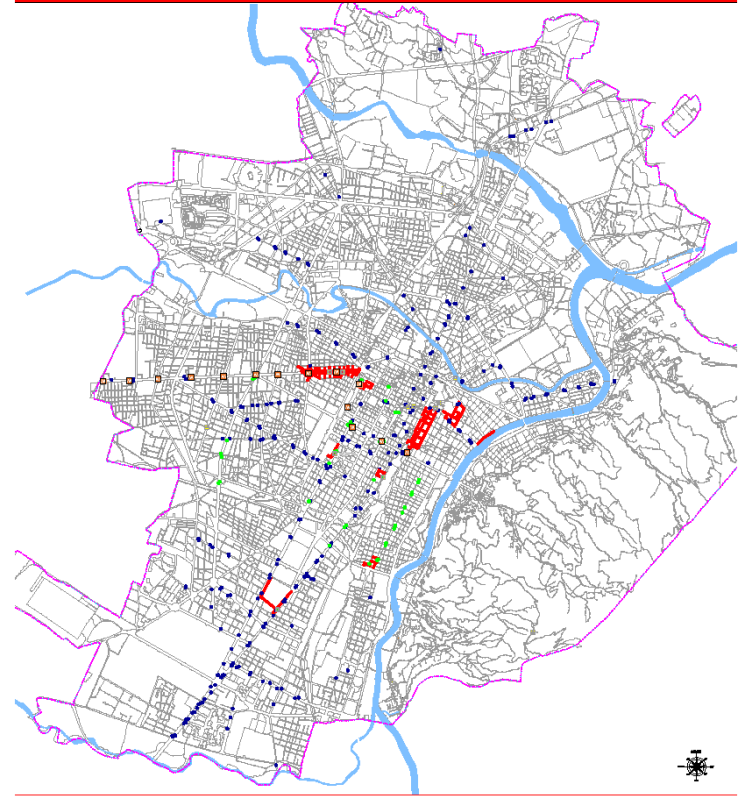




Commune of Turin  
PUMS - Urban Plan for Sustainable Mobility  
Infrastructures for the visually impaired



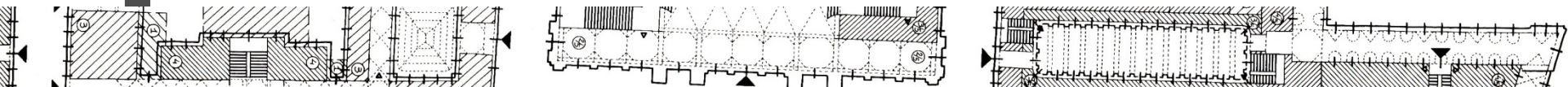
## PIANO URBANO DELLA MOBILITA' SOSTENIBILE - PUMS



**ACCESSIBILITÀ DELLE PERSONE - INFRASTRUTTURE IPOVEDENTI**

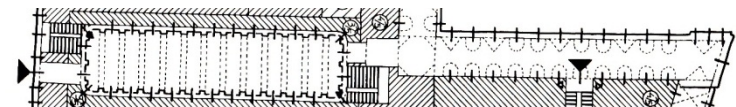
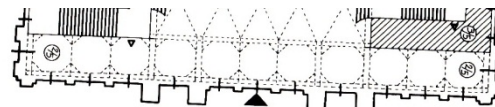
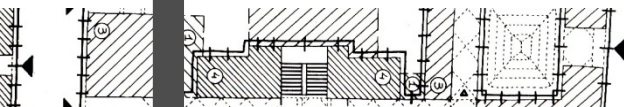
- PERCORSI LOGES
- PERMATE ACCESSIBILI
- PERMATE ACCESSIBILI CON PAVI TATTILE
- INFRASTRUTTURE PER IPOVEDENTI
- PERMATE SERTIFICATA ACCESSIBILI

Divisione Infrastrutture e Mobilità - Settore Mobilità





## THE 2006 TURIN PARALYMPIC WINTER GAMES



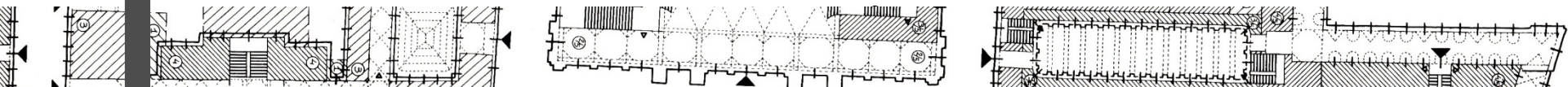


The Venaria Reale court of honor

## The Venaria Reale disabled project

The Venaria Reale, a baroque urban settlement on the outskirts of Turin, places among its main objectives the accessibility as a right of any person to enjoy the artistic and cultural heritage. To guarantee to every visitor the ability to enjoy the space and cultural events offered, the Venaria Reale has prepared the follow up services to the public, in particular assessing the needs of disabled people, through four different initiatives:

- Tactile path for the blind or visually impaired;
- Video-guide for the deaf;
- Accessibility for motor disabled;
- Welcome activities for people with mental illness and disabilities.

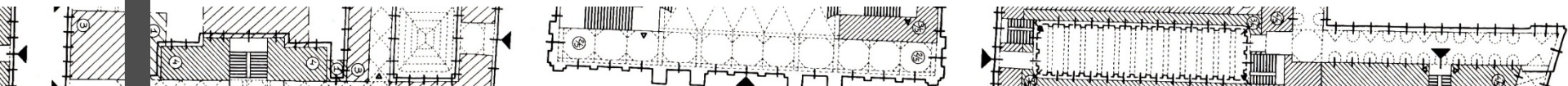




The Dictionary of Contemporary Art in Italian Sign Language presentation

## The Dictionary of Contemporary Art in Italian Sign Language

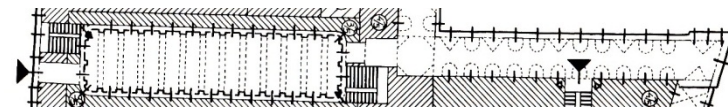
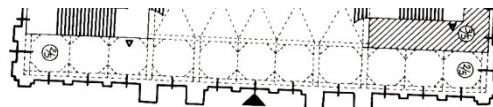
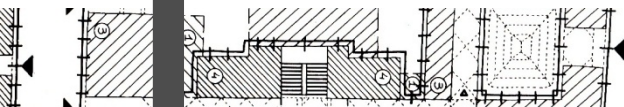
The Dictionary of Contemporary Art in Italian Sign Language, published by Italian Umberto Allemandi under the patronage of Italian Contemporary Art Museums Association, a collaboration between the Castello di Rivoli Department of Education ,the Museum of Contemporary Art in Turin and the Institute of the Deaf, is the result of a unique project in the world that has an unusual vocabulary, reported 80 new signs specific to contemporary art, designed by a research team consisting of representatives of two bodies, deaf and hearing people together.





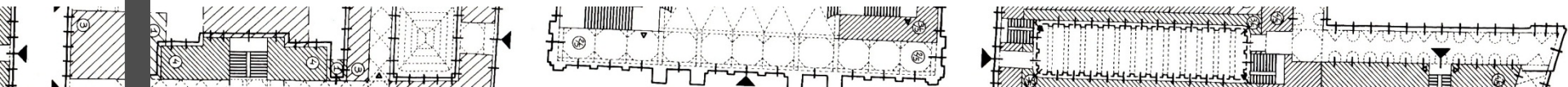
Main contacts :

- **Comune di Torino / Urban Masterplan for Accessibility (PUMS)**
- **Comune di Torino / Informa DisAble**
- **TurismoTorino**
- **GTT Gruppo Trasporti Torinesi Regione Piemonte – TurismAble**
- **Fondazione CRT**
- **IsITT – Italian Institute for Tourism for All**
- **Politecnico di Torino – DISET - Post Graduate Course on Universal Design**
- **Associations for people with disabilities**



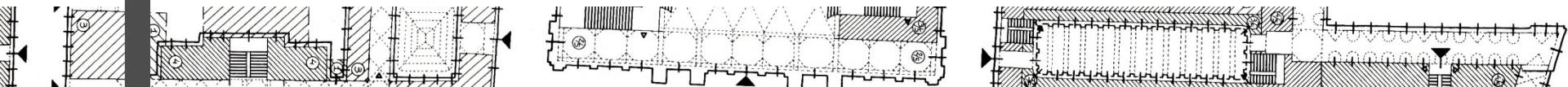


But we live in a historical heritage.....





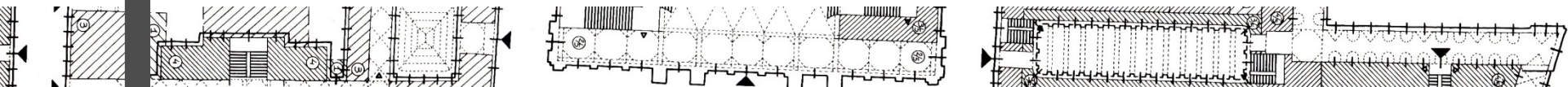
## THE PALAZZO CARIGNANO HISTORIC STAIRCASE





Our goals:

- Use our «state of the art» as a rich and useful information database;
- Think a new project of accessible itineraries developing innovative ideas:
  1. **tematic itineraries in the historical town, including architecture, enogastronomic culture, history**
  2. **independent visiting**
  3. **devices for mobility and comprehension**
  4. **GPS smart device with dedicated software (e.g., NADIA GPS navigation system)**



## Itineraries in the historical town

Symbols:

I = Infopoint

MD = Means Deliveries

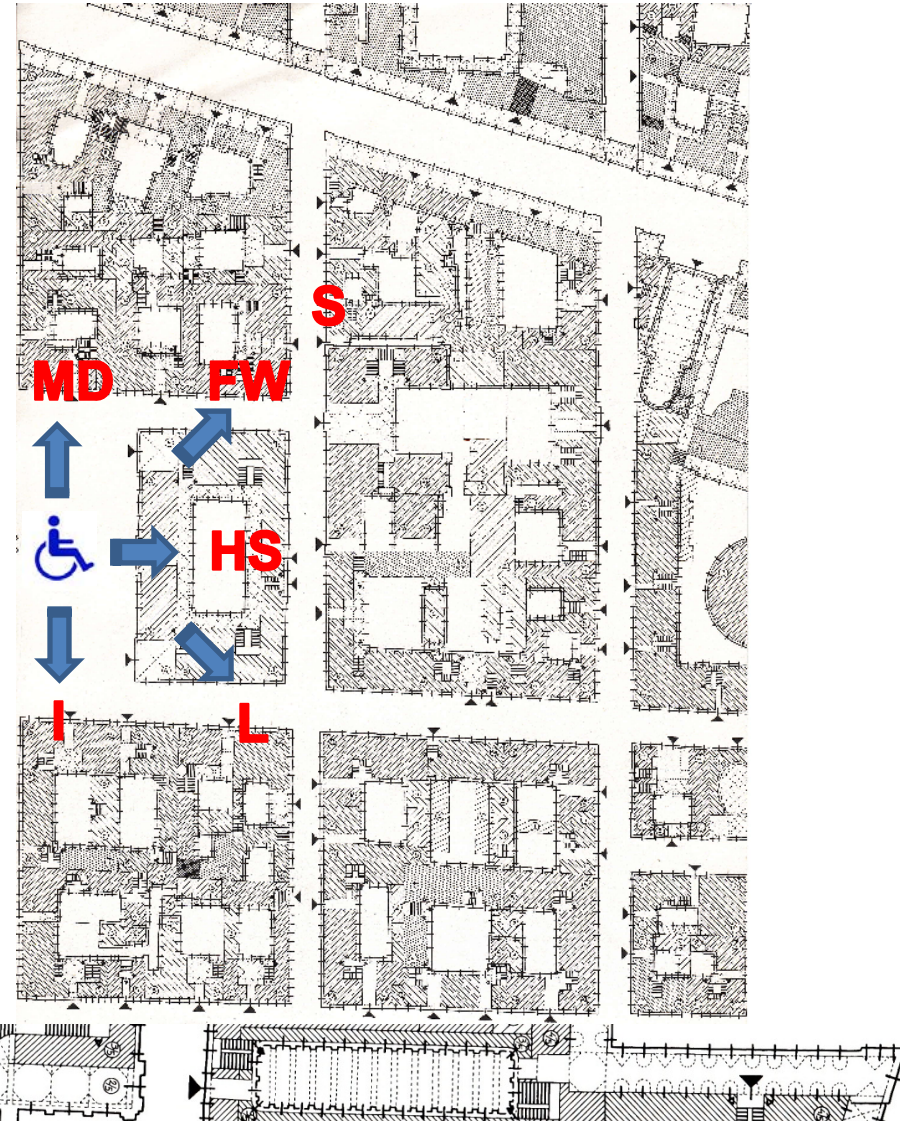
HS = Historical Sites

FW= Food & Wine

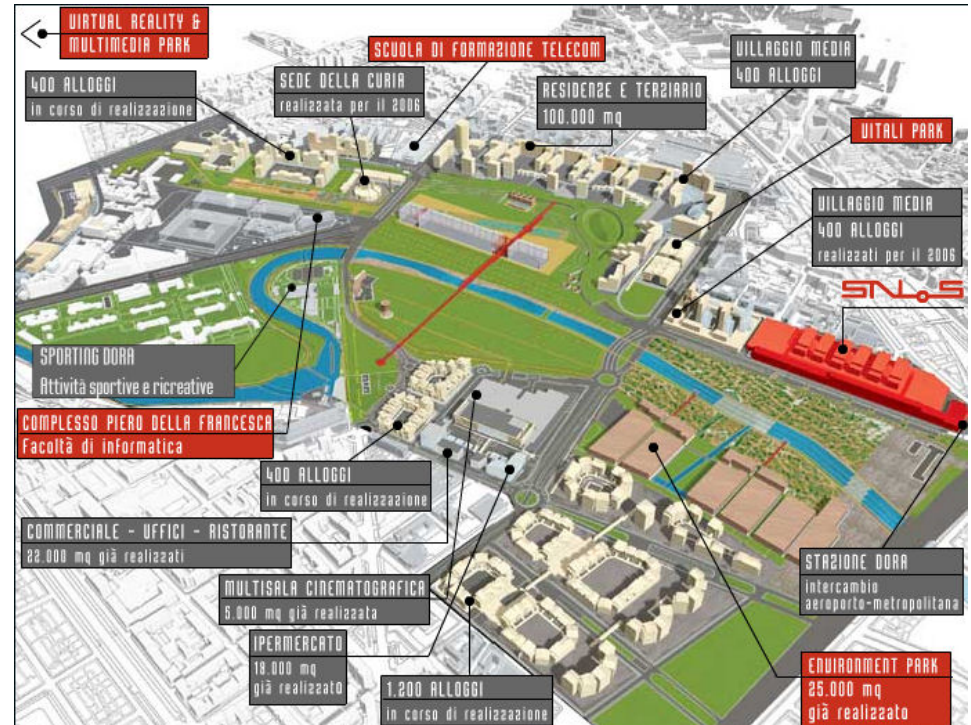
S= Shops

L= Leisures

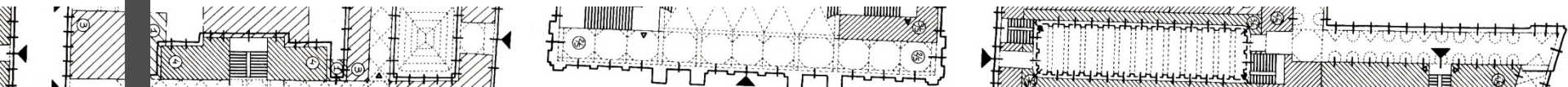
In each itinerary you will be connected to a GPS navigation system, who will provide, by means of a dedicated software, the specific informations you need.



The GPS navigation system can fit also the itineraries of the XX and XXI centuries new town.



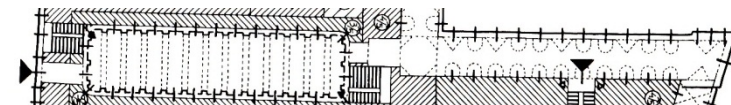
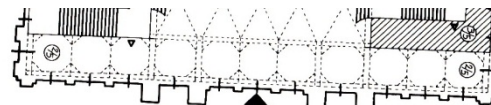
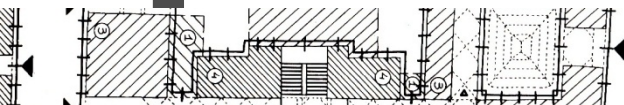
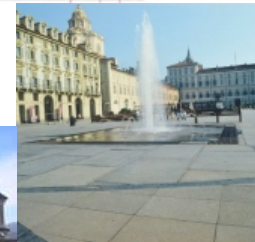
The Parco Dora urban renovation plan



# TURIN, AN AVANT-GARDE CITY

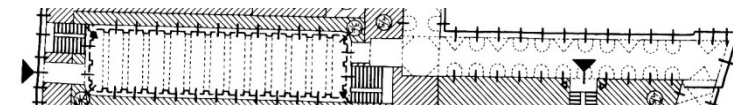
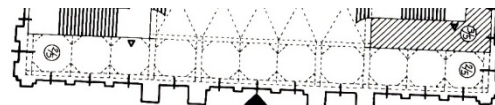
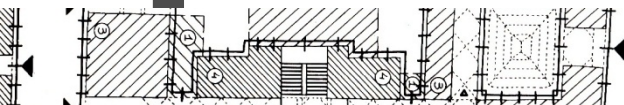
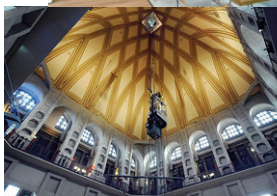
Main database on urban planning elements about accessibility:

- Street furniture
- Parking Bays
- Marking and lightings
- Problems due to non-compliance pavement
- Public areas



Main database on building elements  
about accessibility:

- Zone surrounding the buildings
- Access to the buildings
- Comfort and independent usability
- Horizontal mobility and evacuation
- Vertical mobility and evacuation routes
- Toilets
- Info, communication and others
- Ticket sale boots

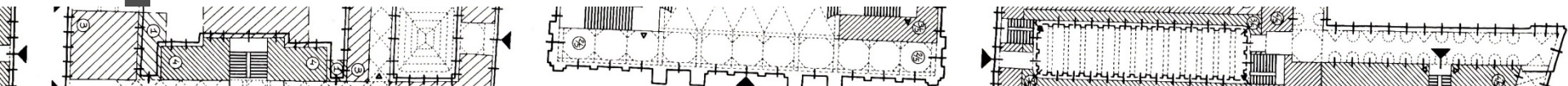


# NADIA GPS navigation system

The NADIA GPS navigation system is a highly innovative system, promoted by ASI and developed by Thales Alenia Spazio with the coordination of the British Maritime Technology, that combines satellite signals from specific information service centers. Then, in the NADIA GPS navigation system the normal satellite maps have been integrated with detailed city maps that indicate, e.g., whether there are sidewalks too high along the way, steps without ramps, potholes and general architectural barriers that can make the path bumpy for those who moves in a wheelchair or in the dark.



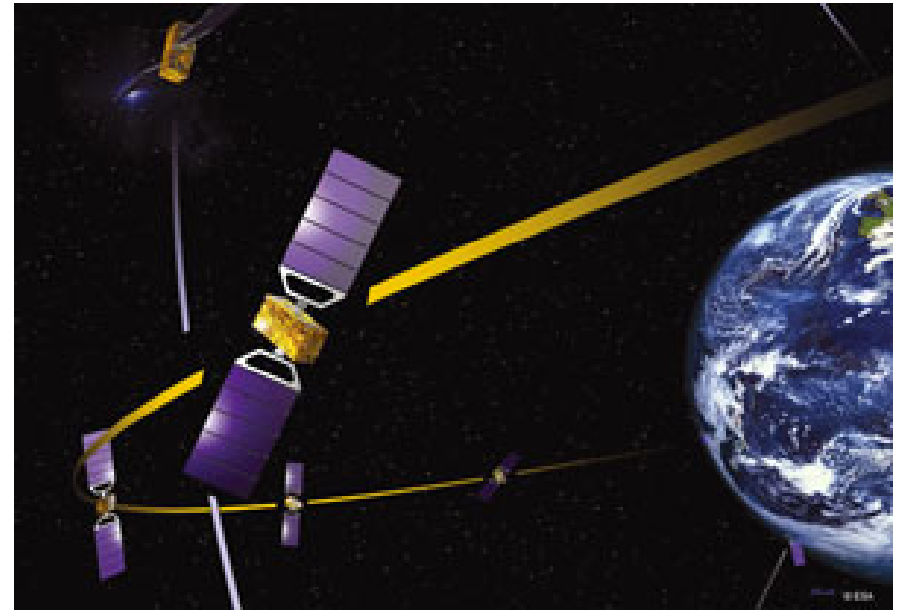
The NADIA interface



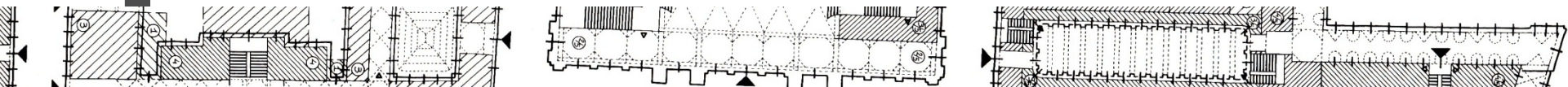


# NADIA GPS navigation system

NADIA is designed to exploit the new generation of satellites that ensure accuracy and reliability in the spatial location not guaranteed by the normal GPS system. This performance is achievable, however, with EGNOS (the system of geostationary satellites for the improvement of GPS) and especially with the Galileo constellation of 30 satellites which, when completed, will represent the flagship of European space policy in terms of navigation and telecommunications.



The Galileo satellite constellation system





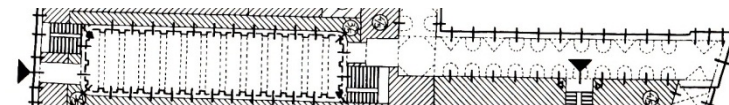
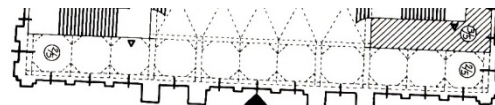
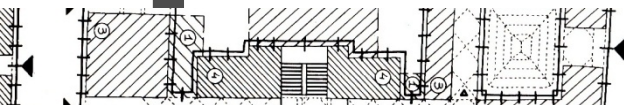
# NADIA GPS navigation system

NADIA has another unique aspect: users are not only receivers but also active parts, since they can report to the central system incidental barriers or obstacles not foreseen on the way, updating maps at the same time. This is a method of reviewing contents that follows the concepts of Web 2.0.

The ability of users to communicate with the NADIA system, also allows them to send requests for assistance, if necessary.



The Palazzo Madama staircase





## POLYTECHNIC OF TURIN

### DISET

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