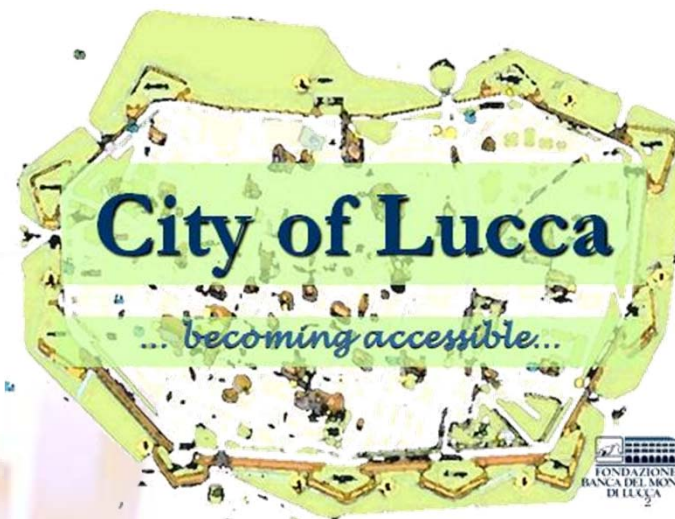


# Lucca



**LEAGUE OF HISTORICAL  
& ACCESSIBLE CITIES**



**WINNER 2014**



# Our Partners and Stakeholders

# League of Historical Accessible Cities



Sozopol (Bulgaria)



Avila (Spagna)



Mulhouse (Francia)



Viborg (Danimarca)



Torino (Italia)



Lucca (Italia)

# Local Authorities and Stakeholders



# Local Association representing people with disabilities





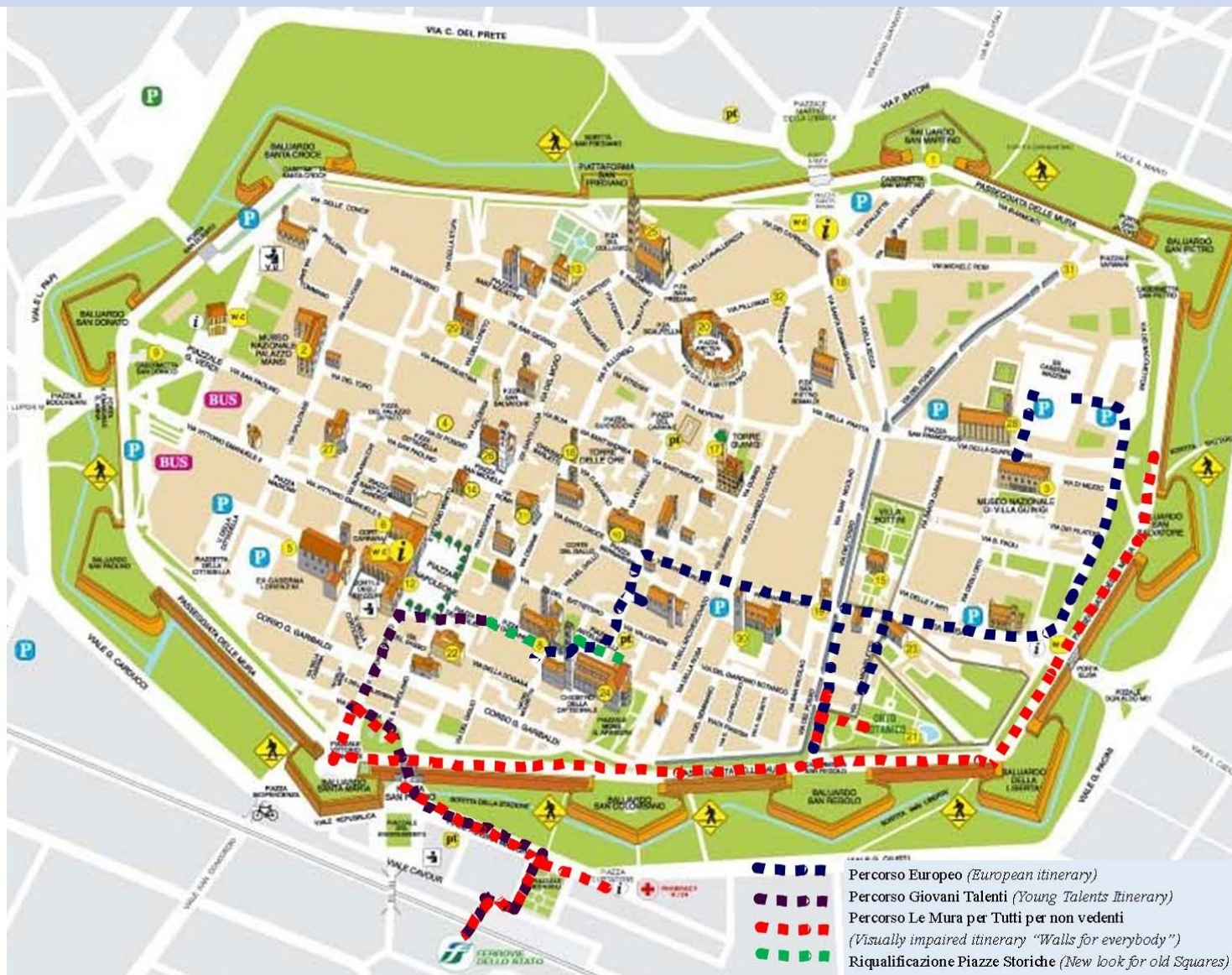


LEAGUE OF HISTORICAL AND ACCESSIBLE CITIES



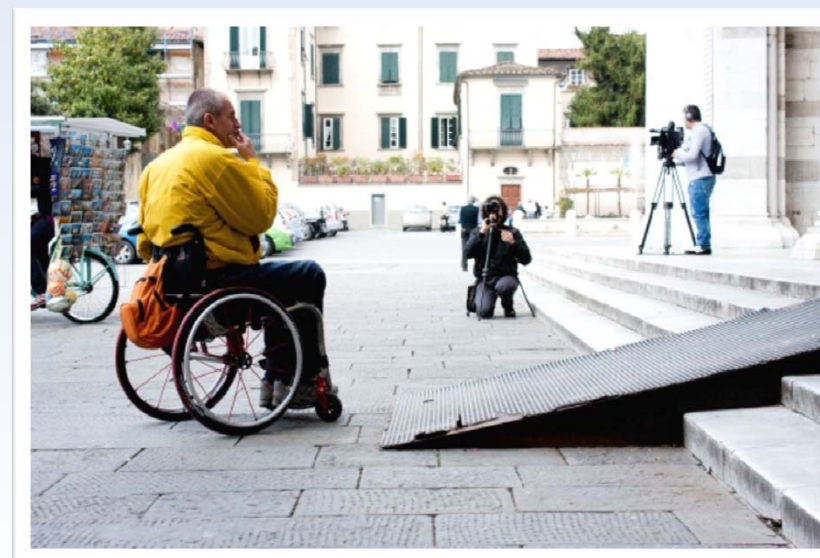
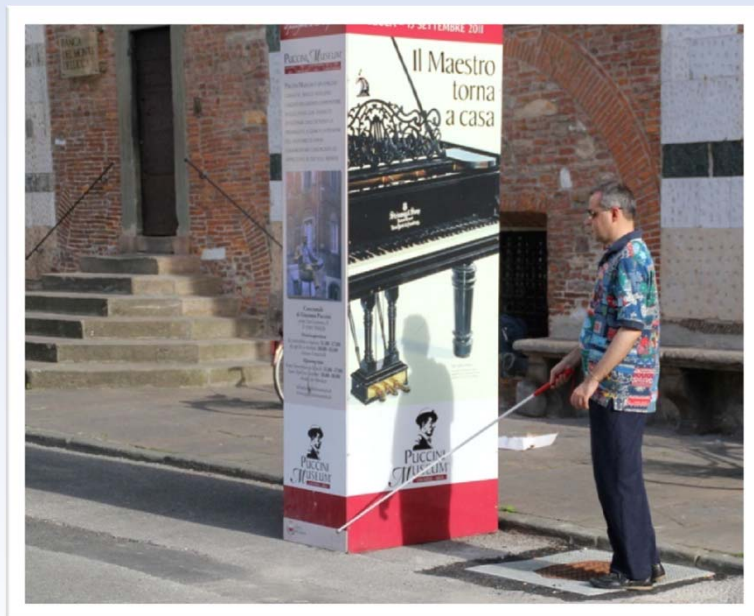
FONDAZIONE BANCA DEL MONTE DI LUCCA

The itineraries



WINNER 2014

... inspecting the  
itineraries ...

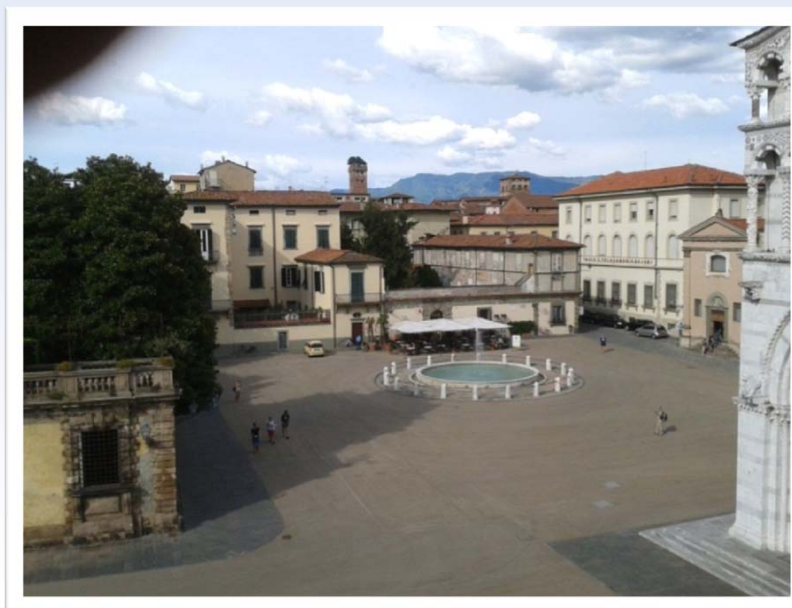




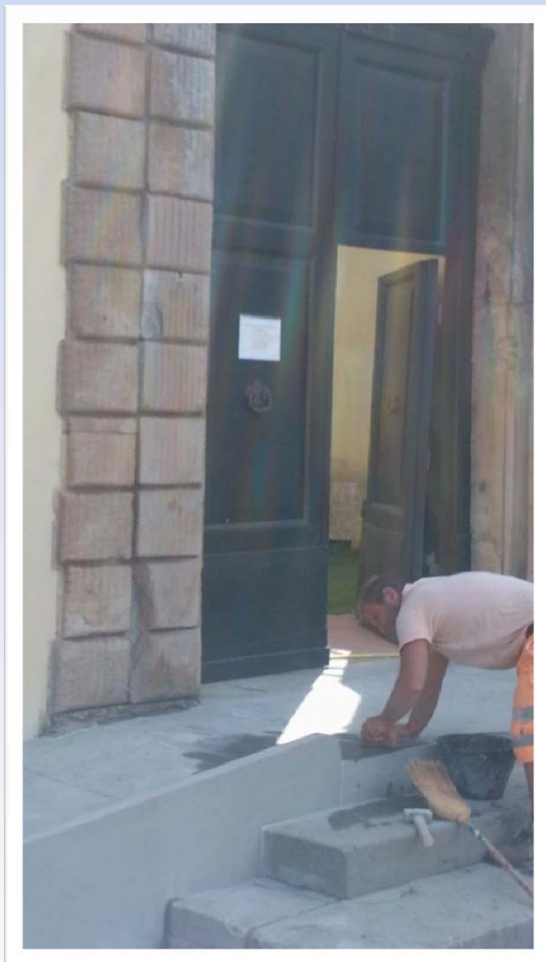
before



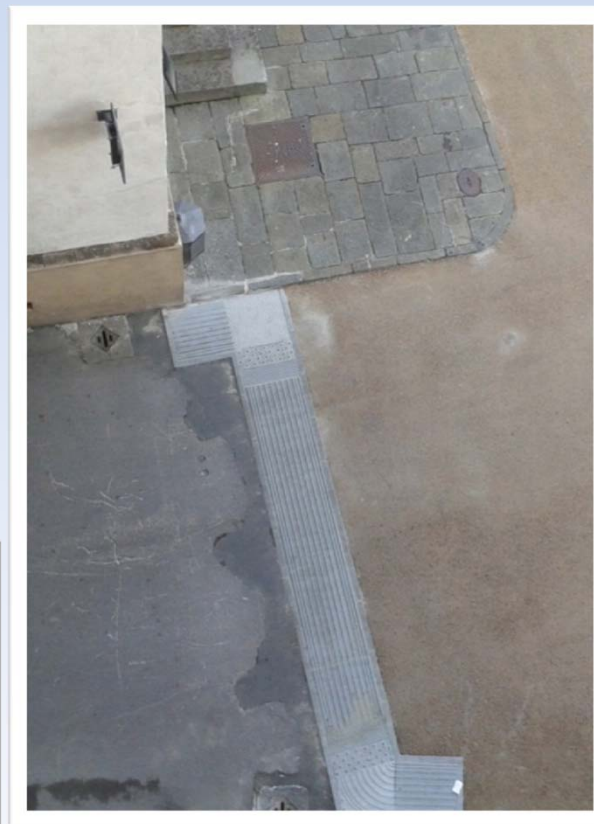
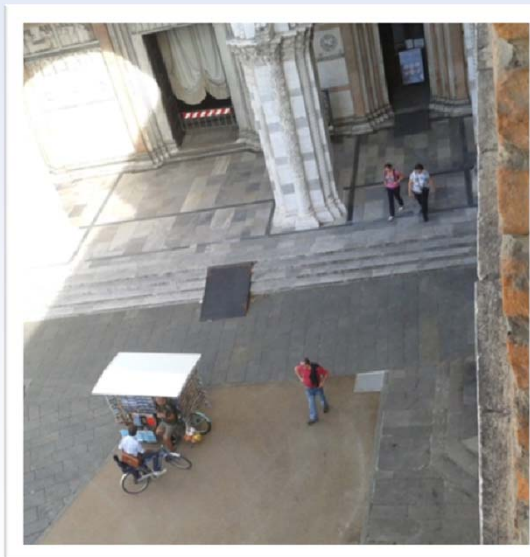
during



after



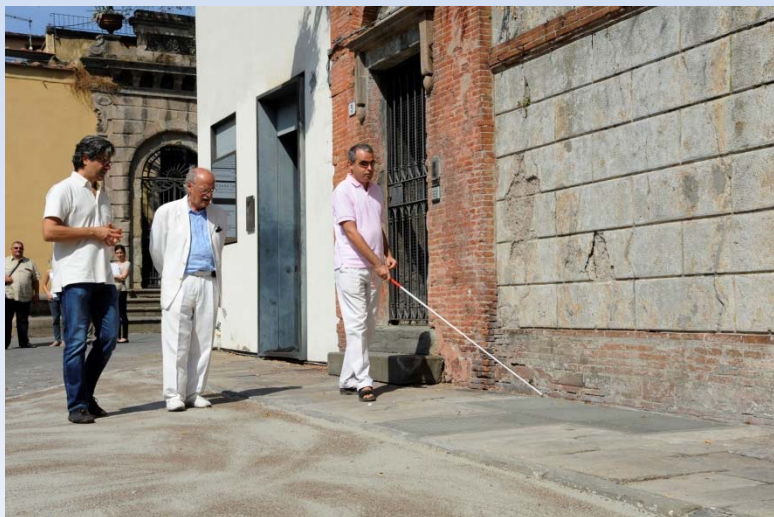
**a new ramp in  
front of the  
Museum**



**pavements and  
loges**



## Testing part of the itineraries and finding problems ...





# Le Mura per Tutti (Walls for All)

A mobility aid system  
for people with visual impairments



# The research project

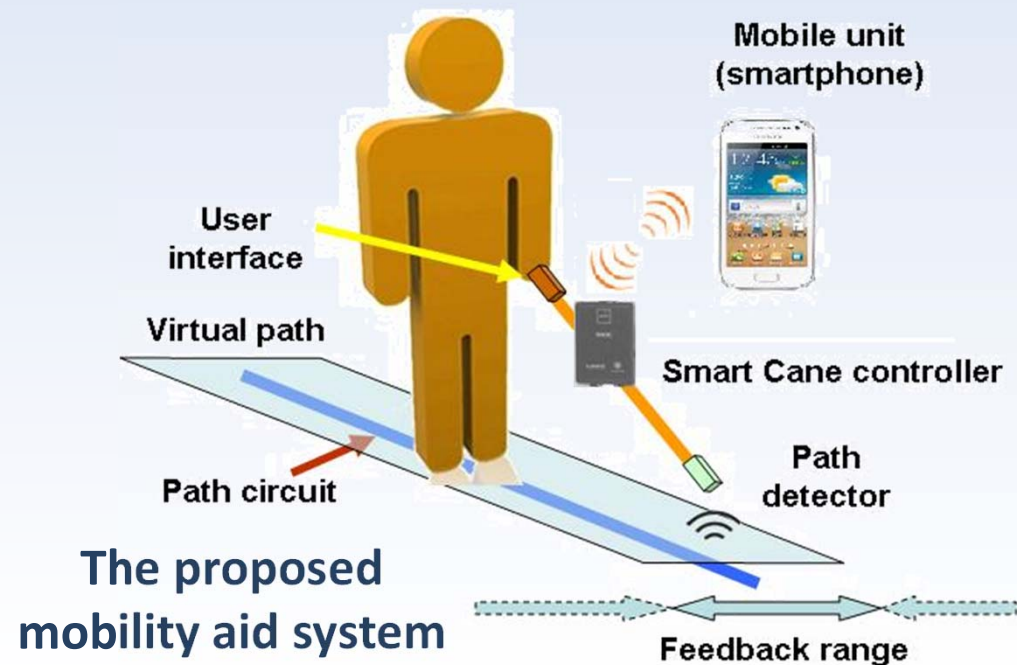
- “Le Mura per Tutti” (Walls for All): design, prototyping and demonstration of a mobility aid system for visually impaired people in outdoor urban and cultural/free time scenarios
- User involvement: Italian Union of the Blind and Visually Impaired, Section of Lucca
- Fundamental role of end users in defining functional specifications

# The application

- Guidance before and during the route to allow moving in autonomy and safety, providing additional information (cultural, etc.), access to the possibility of easy SMS/call for safety
- Other system requirements
  - relatively easy system installation
  - low maintenance cost

# From the white cane: a chance for autonomous mobility...

- ... to the basic idea of a Smart Cane, able to provide tactile vibration feedback and allowing the user to follow a predefined path, together with a mobile unit providing help and location information



# The developed system

- A custom-made fiber-glass cane, an electronic path detector, an electronic controller and a user interface



The Smart Cane



The smartphone  
running the  
developed  
Android  
application



The path detector  
fitting inside an ad-hoc  
developed fiberglass case

Vibration motor  
enclosed in the  
handle

5-switch mini  
joystick

- Thumb finger

3-switch slide  
- Index finger

Smart Cane  
Controller



The User Interface  
and the Smart  
Cane Controller

# Path implementation

External side  
of the Walls



The buried  
cables

Internal side  
of the Walls

Asphalt

# The walking routes on the Walls



Baluardo San Salvatore  
Baluardo della Libertà  
Baluardo Santa Maria  
Baluardo San Colombano  
Baluardo San Regolo

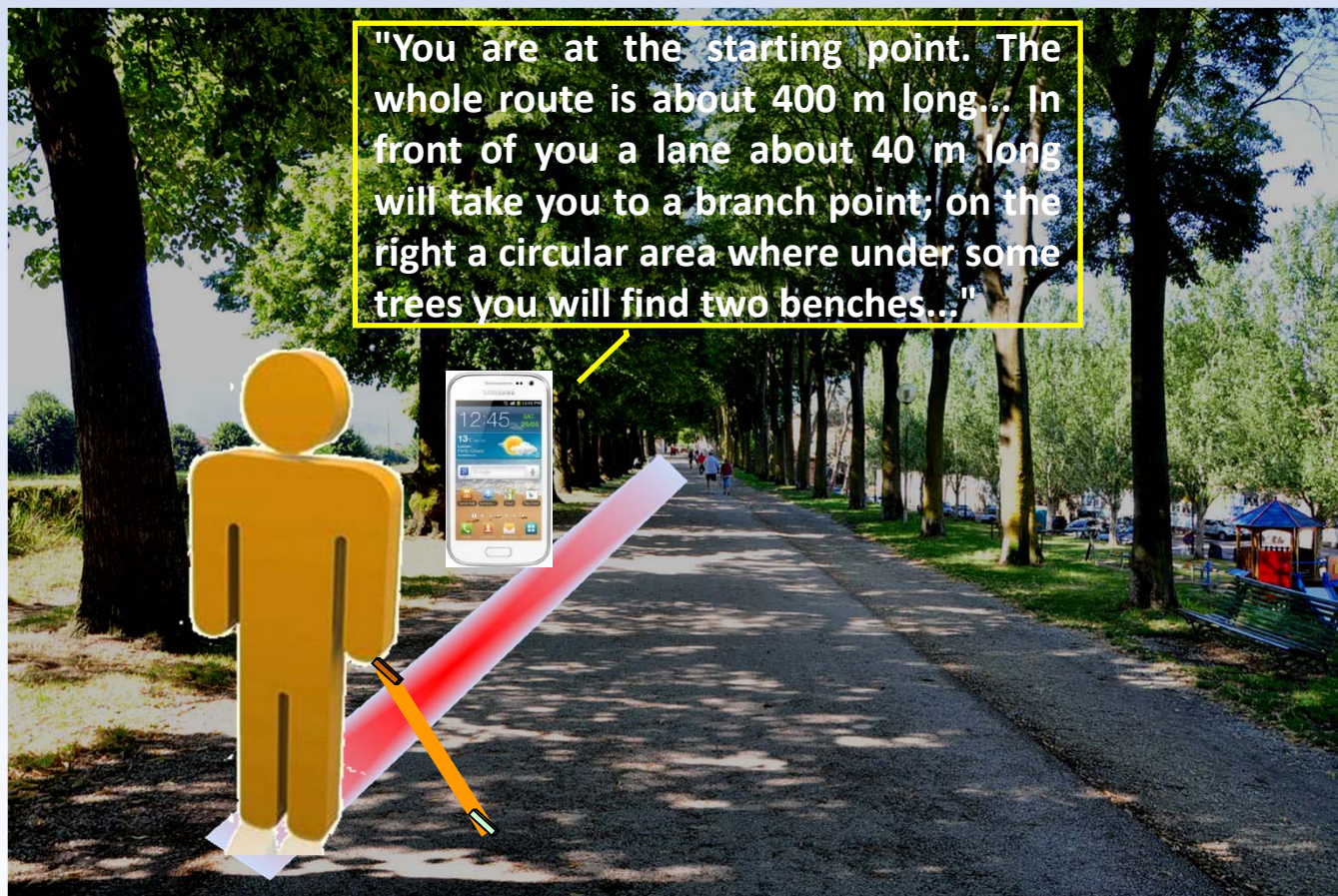


Inside "Baluardi"



Route inside Baluardo  
San Regolo

# Application overview on the Walls



Example of audio messages provided by the system

# Training courses

*1. in partnership with CESVOT, Regional Center of Volunteering*

24 local associations have participated to a training course to create or improve the accessibility of their websites

*2. Projecting ... Without Barriers*

Course addressed to designers: 100 hours dedicated to the analysis of the regulatory and legal aspects, the design of furniture, the use of public space into a high attendance also to accessible tourism and 60 hours of project work



## Public Presentations

*Lucca, October 12, 2009* LHAC was launched with the original idea of the construction of a demonstration route 1 km

*Lucca, June 10, 2011* presentation of the local project *City of Lucca ... becoming accessible*, in the presence of authorities , representatives of associations

*Turin 16 / June 17, 2011* the FCRTorino has organized an international conference on accessibility for all, where was presented the European project LHAC

*Lucca, October 19, 2012* international workshop to present the *Guidelines for accessibility to cultural heritage* and the project of Lucca during Lu.Bec. (Lucca Beni Culturali)



*Rome, October 31, 2012* DIPSA Department of Design and Architecture studies at the University of Roma TRE, presentation at the conference on *Training Tools for Accessible Towns*, a research project funded by the European Commission under the Lifelong Learning Program, which involves five member countries

*Bari, September 19, 2013* the LHAC was presented during the Fiera del Levante as best practice

*Lucca, October 19, 2013* the representatives of ECD and LHAC participated to Lu.Bec. at the workshop *The city for all: live, learn and accessible to move*

*Various European cities* representatives of LHAC have promoted the work done at European level in different forums and conferences including, to name one, the Annual international conference held in Vienna on the Zero Report

## In the meantime in Lucca...

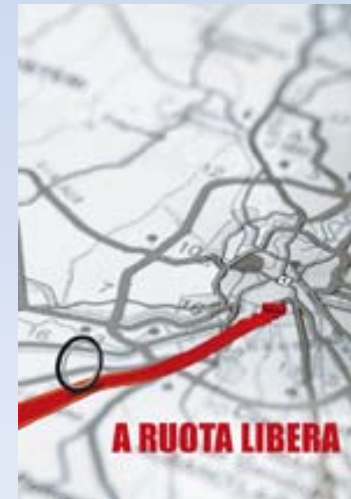
**New accessible museum:** the Province of Lucca and Promo P.A. Foundation restored the Risorgimento Museum, artifacts of the period between 1821 and the First World War.



**Botanical Garden:** two multisensory paths  
Path "free" equipped with stops at the monumental trees or of special interest and a localized sensory journey where they are exposed different species (with the name in Braille, seeds, etc. ...), chosen in relation to rarity, use, shape, flavor, adaptation



Publication of a new guide on accessibility in Lucca: Fondazione Serono of Rome has published a new serie of accessible guides on some Italian cities including Lucca



New working group: thanks to our good experience the Public Administration of Lucca has established a working table together with disabled people associations, foundations, universities, associations of traders to define the future of accessibility and tourism in our town





# International Awards



## Brussels October 2012

LHAC is chosen as a best practice in the EU campaign



## Brussels 3 December 2010

Avila wins the first edition

ACCESS • CITY  
THE EUROPEAN AWARD  
FOR ACCESSIBLE CITIES

MAKING EUROPE'S URBAN ENVIRONMENT ACCESSIBLE FOR ALL



## Paris 12 February 2014

LHAC wins the International Design for All Foundation Awards 2014, as best practice among 40 candidates

# The future

*... let's make sure that accessibility  
becomes part of  
everyone's everyday life ...*

Elizabeth Maria Franchini, Project Manager

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