THE PATHS OF REGINA
Web Mapping to promote slow tourism: the geoportal and the app

XMAS in PoliMi Como Campus,
December 18, 2015

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Via Regina: a European cultural route

- Via Regina defines a **cross-border area** between Italy and Switzerland
- trade and **cultural route** since Roman times
- transalpine system of **soft mobility** links
Via Regina: a European cultural route

✔ Via Regina defines a **cross-border area** between Italy and Switzerland
The project “The Paths of Regina”

✔ “The Paths of Via Regina” INTERREG project (Italy/Switzerland)

➔ purpose: to valorise the cultural heritage of the area and foster tourism

➔ beneficiaries: local communities, administrations, pilgrims, tourists

➔ expertise involved: cultural heritage, land use and design, geomatics

✔ Partners:

➔ universities

➔ local administrations

➔ cultural associations

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Slow tourism at a glance

✔ A special case of **sustainable tourism** focused on:
  ➔ **environmental friendliness**
  ➔ **rediscovery of local traditions and cultural knowledge**

- accommodation (simple)
- movement (no car/plane)
- sustainable cultural
- gastronomy (local)
- leisure (peaceful)
- services (provided in a relaxing atmosphere)
The Via Regina geoportal

- Entry point to the **Web Mapping applications** developed in the project
  - main WebGIS for **planning routes**
- mobile app for **slow tourism**
- 3D **Web viewer**
- mobile app for **surveying paths**
- **virtual tour** application

- Link: [http://viaregina3.como.polimi.it/ViaRegina](http://viaregina3.como.polimi.it/ViaRegina)

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The main WebGIS of Via Regina project

✔ Displays all the **geospatial data surveyed** during the project:
  ➔ **Via Regina** and the related **historical paths**
  ➔ the **points of interest** available along them
The main WebGIS of Via Regina project

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➔ **Via Regina** and the related **historical paths**

➔ **the points of interest** available along them

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**POINT OF INTEREST**

*Group:* elementi storico-culturali  
*Class:* edilizia religiosa  
*Name:* Chiesa di Sant’Agata, Moltrasio  
*Subclass:* chiesa

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The main WebGIS of Via Regina project

✔ Displays the bus routes and bus stops in the project area

➔ kindly provided by ASF Autolinee
➔ each bus stop has the link to its real time schedule

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The main WebGIS of Via Regina project

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The main WebGIS of Via Regina project

✔ Allows to plan **customized routes:**
  ➔ based on the **type of points of interest** chosen by the user

**WHICH POINTS OF INTEREST DO YOU WANT TO SEE?**

- **NAVIGATION PREFERENCES**

- 🕉️ RELIGIOUS
- 🏛️ CIVIL
- 🏰 MUSEUM
- 🏡 RURAL
- 🏥 ARCHAEOLOGICAL
- 🇮🇹 MILITARY
- 🏛️ FACTORY
- 🏞️ PANORAMIC
- 🌌 GEOLOGICAL

~ GO BACK TO MAP ~
The main WebGIS of Via Regina project

✔ Allows to plan customized routes:
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  ➔ based on a start point and an end point

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The main WebGIS of Via Regina project

- Print the information on the computed route:
  - 2D/3D distance, average slope, height increase/decrease
The main WebGIS of Via Regina project

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The main WebGIS of Via Regina project

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Your path

www.viaregina.eu

Altitude profile

Total 2D distance: 7.79 km
Total 3D distance: 7.99 km
Average slope: 18.08%
Up height: 1007 m
Down height: 113 m
Height difference: 894 m
The main WebGIS of Via Regina project

✔ Integration with TripAdvisor database:
  ➔ access to the info/reviews of hotels, restaurants & attractions
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✔ Download of Via Regina **GPS track** (in GPX format):
  ➔ useful for people willing to walk along the path!

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The Via Regina app – Purpose

✔ Allows everyone to report georeferenced points of interest:
  ➔ historical and cultural elements
  ➔ morphological elements
  ➔ tourism elements
  ➔ critical elements
The Via Regina app – Reportable categories

✔ Historical and cultural elements

→ museum 🏛
  ✓ ethnographic
  ✓ thematic
  ✓ gallery
  ✓ collection

→ religious building 🏛
  ✓ church
  ✓ oratory
  ✓ sanctuary
  ✓ chapel
  ✓ via crucis
  ✓ fresco
  ✓ abbey

→ civil building 🏛
  ✓ historical building
  ✓ contemporary building
  ✓ traditional building
  ✓ monument

→ rural building 🏛
  ✓ pasture/shed
  ✓ snow deposit
  ✓ graa/metato (chestnuts drier building)
  ✓ roccolo (system designed to catch birds)
  ✓ casello o turbino
  ✓ hydraulic structures
  ✓ masseria (farm)
The Via Regina app – Reportable categories

✔ Historical and cultural elements
  ➔ archaeological element
    ✗ archaeological element
    ✗ archaeological site
    ✗ element inside a building
    ✗ single element
  ➔ military building
    ✗ castle
    ✗ tower
    ✗ defensive wall
    ✗ fort
    ✗ trench
    ✗ redoubt (secondary fort)
    ✗ bunker

➔ factory
  ✗ furnace
  ✗ trip hammer
  ✗ mill
  ✗ sawmill
  ✗ quarry
  ✗ mine
  ✗ rural factory
The Via Regina app – Reportable categories

✔ Morphological elements

➔ surface
  ✔ pavement
  ✔ natural material
  ✔ gravel
  ✔ asphalt
  ✔ steps
  ✔ ford

➔ bounding escarpment
  ✔ rock
  ✔ ground escarpments
  ✔ rock escarpments
  ✔ support walls
  ✔ boundary walls and railings

✗ tree-lined avenues
✗ fence/barrier
✗ vertical plate

➔ traffic support & mfd products
  ✔ kilometric stone
  ✔ border stone
  ✔ stone marker
  ✔ isolated tree
  ✔ panoramic viewpoint
  ✔ fountain
  ✔ ancient laundry
  ✔ rest of bridge
  ✔ tomb
  ✔ underpass
  ✔ tunnel
  ✔ inscription

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The Via Regina app – Reportable categories

✔ Tourism elements
  ➔ accomodation and overnight
    ❌ hotel
    ❌ hostel
    ❌ B&B
    ❌ hut/shelter
    ❌ camping
    ❌ private accomodation
    ❌ free accomodation
    ❌ agritourism
    ❌ apartment

  ➔ services
    ❌ pharmacy
    ❌ parking

✗ school
✗ public safety
✗ spring
✗ city hall
✗ post office
✗ wc
✗ info point
✗ wifi hotspot
✗ bike sharing
✗ bank
✗ park area
✗ ATM

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The Via Regina app – Reportable categories

✔ Tourism elements

- transport
  - bus stop
  - dock ferry
  - train station
  - funicular and ski lift

- products
  - wine shop
  - craft
  - food/typical products
  - clothing shop

- food services
  - restaurants
  - crotto
  - bar
  - food shop

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The Via Regina app – Reportable categories

✔ Critical elements
  ➔ morphological
    ✗ ford
    ✗ lanslide
  ➔ structural
    ✗ crossing with traffic light
    ✗ crossing without crossing stripes
    ✗ crossing with crossing stripes
The Via Regina app – Data collection

✔ Cross-platform app:
  ➔ desktop and mobile browsers
    ✗ http://viaregina3.como.polimi.it/app
  ➔ Android app
    ✗ http://viaregina3.como.polimi.it/app/viaregina.apk
    ✗ on Google Play soon!
  ➔ iOS app
    ✗ on Apple Store soon!

✔ Main features:
  ➔ offline data collection
  ➔ points rating
  ➔ integrated maps showing collected points
The Via Regina app – Data collection

✔ Report a new point, **classify** and **rate** it

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The Via Regina app – Data collection

✔ Report a new point and **take/upload a picture of it**
The Via Regina app – Data collection

✔ Visualize the map of points added by you or by all the users

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The Via Regina app – Data collection

✓ Query the points collected and access the app info

The Paths of Regina is an INTERREG project between Italy and Switzerland. Via Regina Slow Tourism (App and WebGIS) is a project of Politecnico di Milano, developed as an extension of the previous project and funded by Politecnico di Milano, Lombardy Region, Unioncamere Lombardia and Sviluppo Como.
Merry Christmas and Happy 2016 to all of you!