



Medgefinancierd door het programma COSME van de Europese Unie



ASSOCIATION EUROPÉENNE DES VOIES VERTES
EUROPEAN GREENWAYS ASSOCIATION
ASOCIACIÓN EUROPEA DE VÍAS VERDES



Provincie Antwerpen



UNIVERSITÀ DEGLI STUDI DI MILANO

Dipartimento di Scienze Agrarie e Ambientali



Co-funded by the COSME programme of the European Union



Greenways Heritage and Touristic GIS (Geographical Information System),

Giulio Senes

*Hof van Busleyden, Mechelen
May 21, 2019*



The Greenways Heritage Project

Call Objective. “*Diversifying* and increasing the visibility of *Europe's transnational tourism offer* - supporting the promotion and development of transnational thematic tourism products linked to *Cultural and Creative Industries (CCI)*”

Objective. The **development and diversification** of the **European touristic offer**, through:

- ✓ the creation and dissemination of a **new touristic product** related to **UNESCO sites** and **greenways**, in order to **attract more tourists** and to **generate an economic impact** on territories which have both resources;
- ✓ the **use of innovative technologies** applied to greenways and UNESCO sites to **better inform tourists** and so enhance their experience.

8 partners from 5 countries: Belgium, Spain, Italy, Latvia, and Portugal

Implementation period. May 2018 – October 2019

The Greenways Heritage Project

- ✓ Many greenways cross territories of high historical-cultural value, characterized by the **presence of UNESCO sites.**
- ✓ Currently, **there isn't a specific touristic offer** able to combine greenways and UNESCO sites: the two users typologies are considered as separate.



"Burgos Cathedral" (Spain)



Vía Verde del Ferrocarril Vasco Navarro



"Historic Centre of Riga" (Latvia)

The Greenways Heritage Project

Tourism product

- ✓ Creation of **tourism product package** through **collaboration agreements**.
- ✓ Improving the competitiveness of SMEs:
 - improving skills and raising awareness;
 - strengthening public-private cooperation.

Technologies in Cultural and Creative Industries

- ✓ Creation of a **multiplatform web-application, containing all the information** on Greenways Heritage itineraries.
- ✓ **360° virtual tour**
- ✓ **Best practices guide** - new technologies used on Cultural UNESCO sites and greenways

Promotion & Communication

- ✓ **Declaration** for UNESCO and greenways as common destination
- ✓ **Workshops and conferences;**
- ✓ **Valorisation strategy**
- ✓ **Best practices guide**
- ✓ **Special GWH award**

Activities

1. **Detailed mapping** of all the information related to UNESCO and heritage sites and the connected greenways
2. Creation of a touristic **Geographical Information System** (GIS) containing all the data collected and mapped.
3. Development of a multiplatform **Web-GIS based application** to share “via-Web” the data of the GIS
4. Development of the "**Heritage Greenways**" brand in order to promote this new transnational thematic tourism product
5. Raise "**Heritage Greenways**" brand awareness
6. Produce a **360 VR tour** with 360 movies, 360 tours and 3D imaging in the green outdoor area of Mechelen
7. Better know **Best practices** regarding the use of CCI at cultural sites and on greenways

Activity 1: detailed mapping

This activity consists of **gathering and mapping** (at 1:10.000/1:25.000 scale) all the **information** related to the territories characterized by:

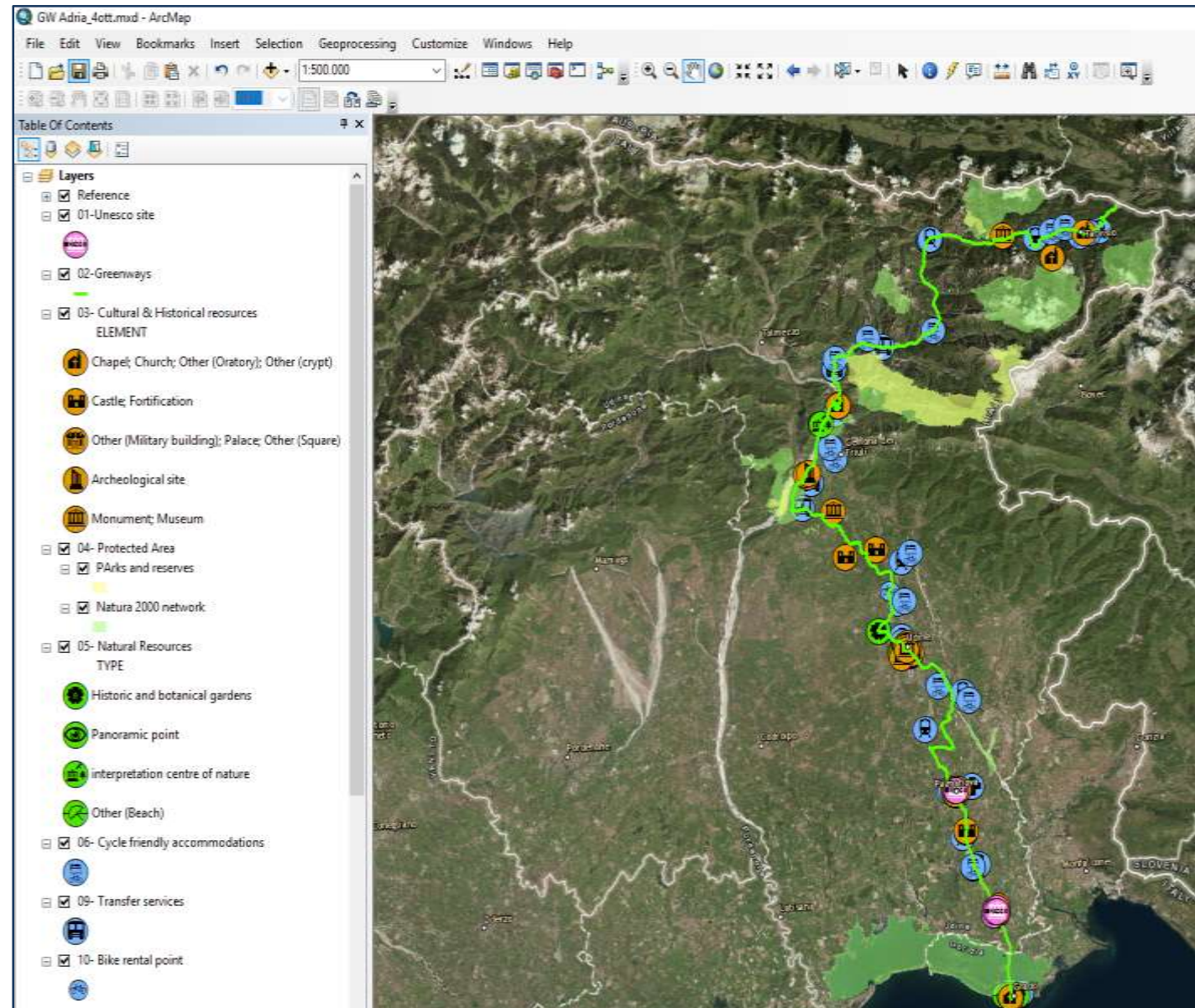
- the presence of a **UNESCO site**
- and the presence of a **greenway**.

The information to gather are related to:

- natural, cultural and historical resources,
- touristic attractions,
- accessibility,
- services.

Activity 2: Greenways Heritage Touristic GIS

The information collected and mapped in activity 1 will be organized in a GIS database, that will contain data related to **attractions, sites, destinations and tourism related services.**



Activity 2: Greenways Heritage Touristic GIS

Information collected

- a) The information collected have been organized in **14 entities or layers**.
- b) The data for each layer have been collected from *official sources*, when possible (e.g: UNESCO organization, national and regional touristic agencies, etc.).
- c) Different **buffer zones** have been defined, in order to identify the resources and touristic services to be mapped (on the base of *the literature related to pedestrian and cycle touristic activities*).

Activity 2: Greenways Heritage Touristic GIS

Layers, criteria and sources of the information

Layer ID	Layer	Geometry type	Source	Criteria for selection
01	UNESCO sites [UNESCO]	Point	UNESCO web site	Max 10 km from a greenway
02	Greenways [GW]	Polyline	Partner knowledge	Max 10 km from a UNESCO sites
03	Cultural-Historical resources [CHR]	Point	Official touristic Information	Max 2,5 km from a greenway
04	Protected Areas [PA]	Polygon	Official list of national protected area	Max 2,5 km from a greenway
05	Natural Resources (NR)	Point	Official touristic Information	Max 2,5 km from a greenway
06	Cycle friendly accommodations (CA)	Point	Official cycle friendly certification; ex. Bed and Bike (DE)	Max 5 km from a greenway
07	Generic Accommodations (GA)	Point	National/regional touristic databases	Max 2,5 km from a greenway
08	Food & Beverage (bar, restaurant, etc.) [F&B]	Point	Partner knowledge	Max 1 km from a greenway
09	Transfer Services [TS]	Point	Partner knowledge	Max 2,5 km from a greenway
10	Bike Rental points [BR]	Point	Official touristic Information; partner knowledge	Max 2,5 km from a greenway
11	Rail Stations [RS]	Point	Railway company	Max 2,5 km from a greenway
12	Public Navigation Services [PNS]	Point	Navigation Company	Max 2,5 km from a greenway
13	Emergencies [EM]	Point	Official Information	Max 2,5 km from a greenway
14	Touristic Information points [TI]	Point	Official touristic Information	Max 1 km from a greenway

Activity 2: Greenways Heritage Touristic GIS

01 - UNESCO sites



02 - Greenways



03 - Cultural & Historical resources:

Religious buildings (chapels, churches, monasteries, etc.)



Castles, towers and fortifications



Archeological sites and ruins



Museums and monuments



Palaces, villas and other civil buildings



04 - Protected areas



05 - Natural Resources:

Historic and botanical gardens



Panoramic points



Interpretation centers of nature



Other natural resources



06 - Cycle friendly accommodations



07 - Generic Accommodations



08 - Food & Beverage



09 - Transfer services



10 - Bike rental points



11 - Rail stations



12 - Public Navigation Services



13 - Emergencies



14 - Touristic Information points



Activity 2: Greenways Heritage Touristic GIS

Resources and services mapped (work in progress)

- ✓ **18** UNESCO sites
- ✓ **10 + 6** greenways connected to the UNESCO sites (**1.147** + **105 km**):
 - *Vía Verde de la Sierra de la Demanda (Spain): 54 Km;*
 - *Vía Verde de los Montes de Hierro (Spain): 43 km;*
 - *Vía Verde del Ferrocarril Vasco Navarro (Spain): 127 Km.*
 - *Vennbahn (Germany, Belgium, Luxembourg): 125 Km;*
 - *Piste Cyclable d'Echternach (Luxembourg): 43 km*
 - *Alpe Adria (Italy, Austria): 410 Km;*
 - *Dampfroß und Drahtesel (Austria): 50 km*
 - *Beghina (Belgium): 40 Km;*
 - *Mechelen – Diest (Belgium) : 76 km*
 - *Rīga - Ērgļi (Latvia): 79 Km*
 - *Greenway Val Brembana (Italy): 20 km*
 - *Two Tunnels Greenway (UK): 20 km*
 - *Bristol Bath Railway Path (UK): 21 km*
 - *Ecopista de Guimarães (Portugal): 14 km*
 - *Ecopista do Ramal de Mora (Portugal): 20 km*
 - *Přibyslav – Sázava Greenway (Czech Republic): 10 km*
- ✓ **267** cultural-historical resources;
- ✓ **90** natural resources;
- ✓ **135** cycle friendly accommodations and + **442** generic accommodations;
- ✓ **+ 2150** Food & Beverage;
- ✓ **46** bike rental points and **25** transfer services;
- ✓ **62** rail stations and **8** public navigation services;
- ✓ **12** emergencies;
- ✓ **35** touristic information points.

Activity 2: Greenways Heritage Touristic GIS

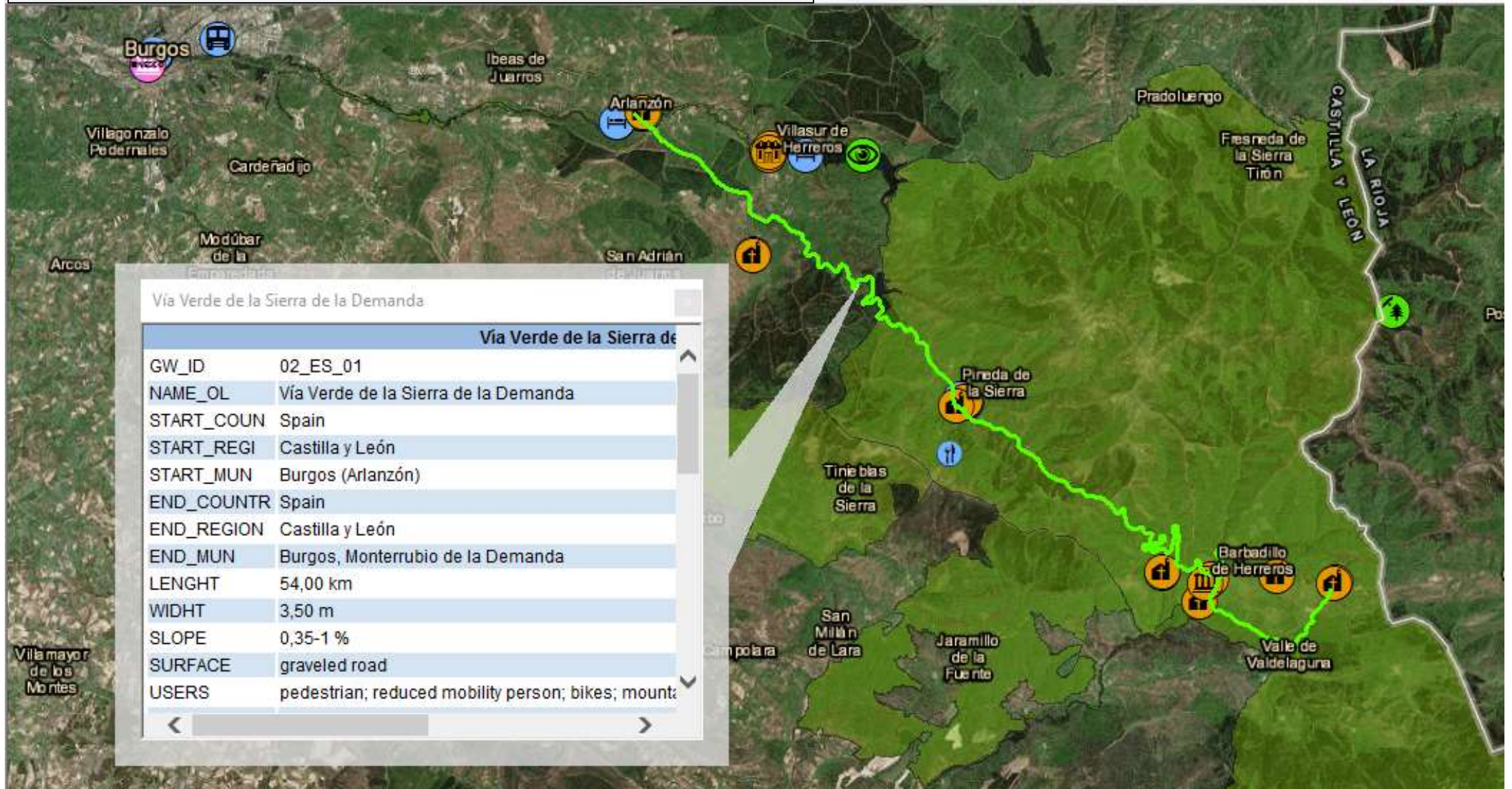
UNESCO site "Palmanova the Fortress City" (Italy)



Opere di difesa veneziane tra XVI e XVII secolo: Stato da Terra-Stato da Mar o...	
Opere di difesa veneziane tra XVI e XVII secolo: Stato da Terra-Stato da Mar occidentale: la città-fortezza di Palmanova	
UNESCO_ID	01_IT_07
NAME_OL	Opere di difesa veneziane tra XVI e XVII secolo: Stato da Terra-Stato da Mar occidentale: la città-fortezza di Palmanova
NAME_EL	Venetian Works of Defence between the 16th and 17th Centuries: Stato da Terra – Western Stato da Mar: City Fortress of Palmanova
COUNTRY	Italy
REGION	Friuli Venezia Giulia
ADDRESS	
MUNICIPALI	Palmanova
POST_CODE	33057
WEB	whc.unesco.org/en/list/1533
DESCRIPTIO	Palmanova represents the strategic centre for neutralising Ottoman attacks from the East and attacks from Austria. From a typological point of view, it is the only new town; an urban nucleus recognised globally, the "ideal fortified city" of Palmanova
PHOTO_1	01_IT_07_01

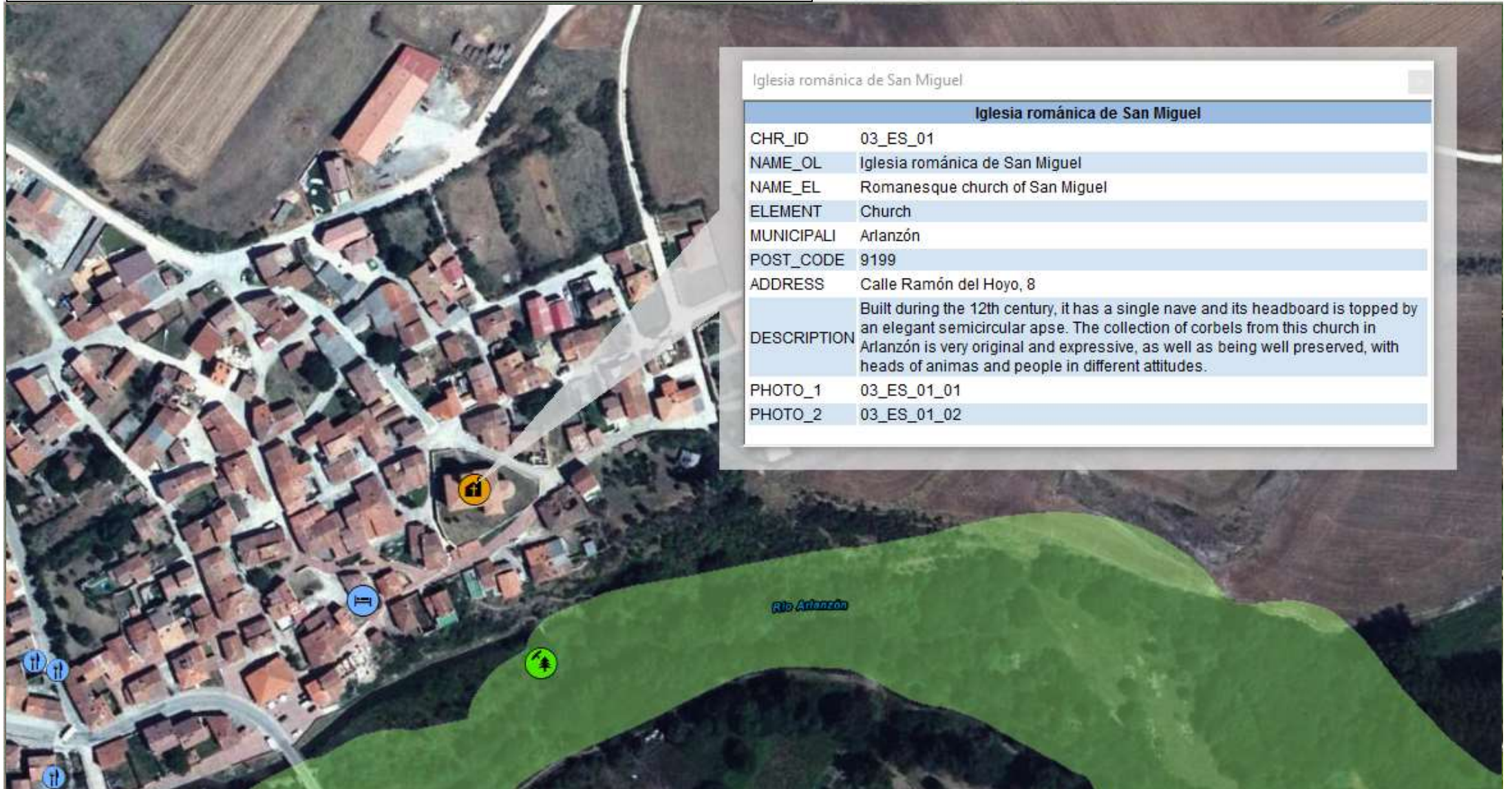
Activity 2: Greenways Heritage Touristic GIS

Greenway "Via Verde de la Sierra de la Demanda" (Spain)



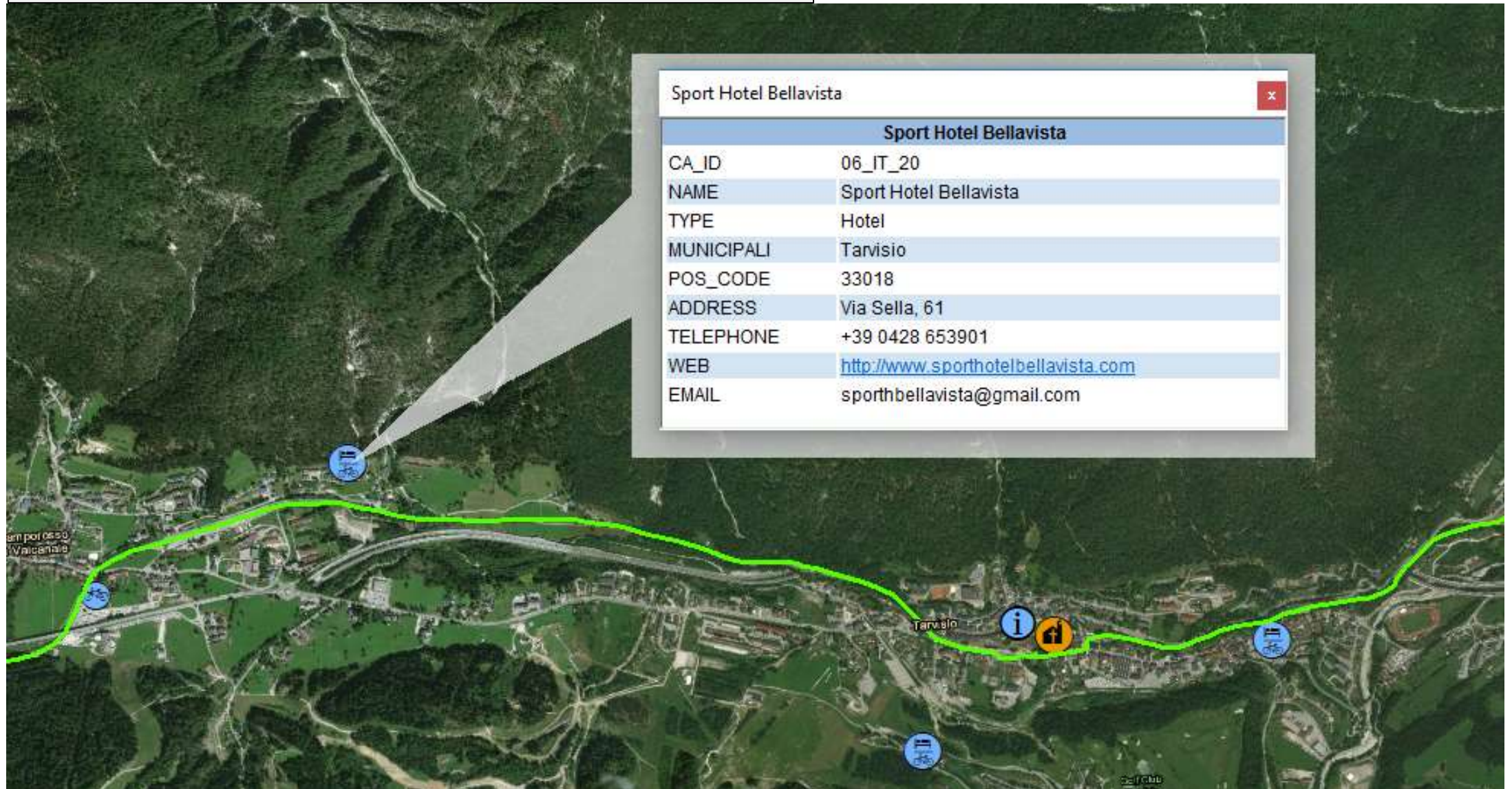
Activity 2: Greenways Heritage Touristic GIS

Cultural-historical resource (Spain)



Activity 2: Greenways Heritage Touristic GIS

Cycle friendly accommodation (Italy)

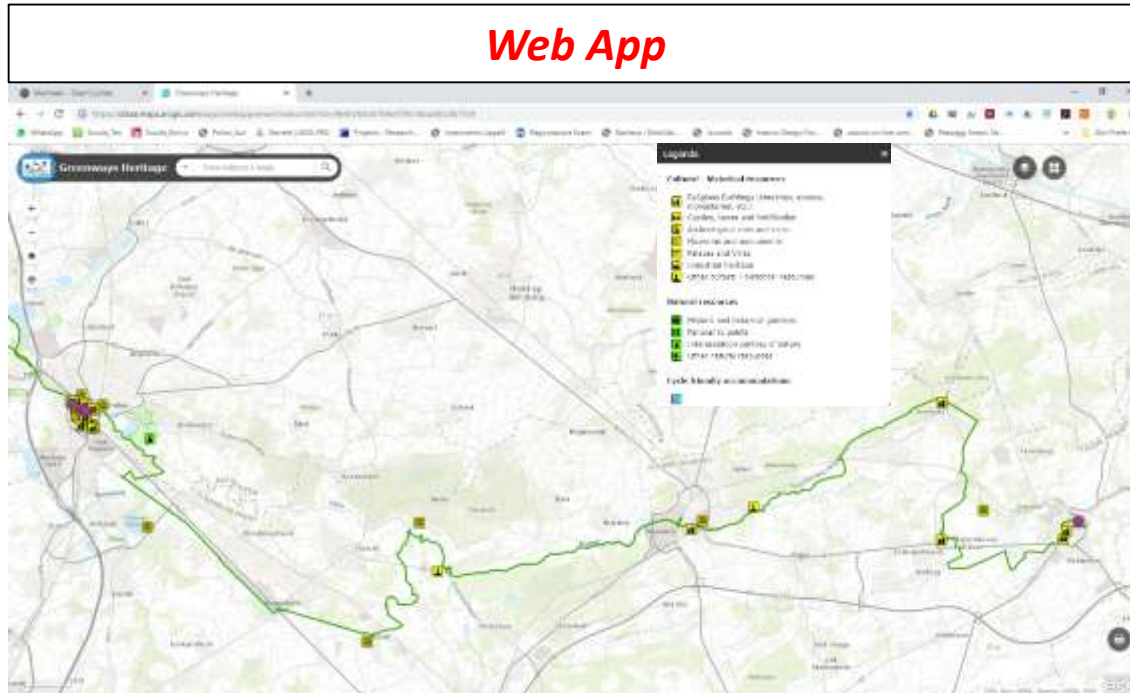


Activity 3: Web-GIS based Multiplatform application

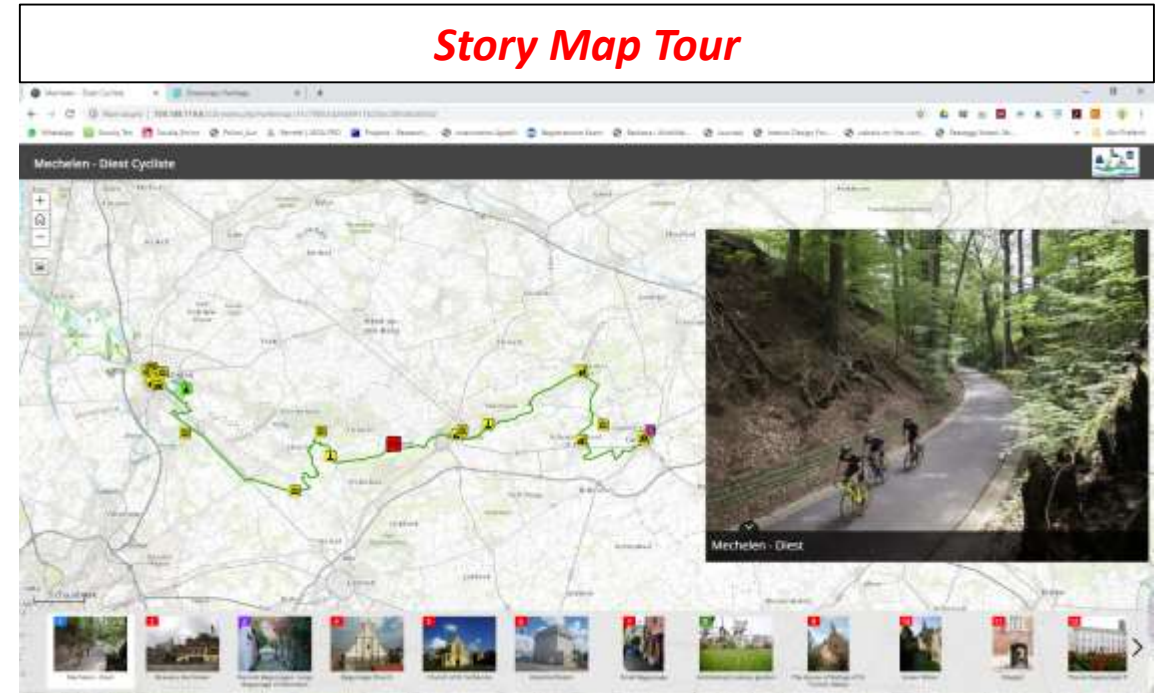
The Database will be shared with tourists and stakeholders through the development of a multiplatform Web-GIS based application that will run on any device and Operation System.

The application will be based on the integration of **two tools**:

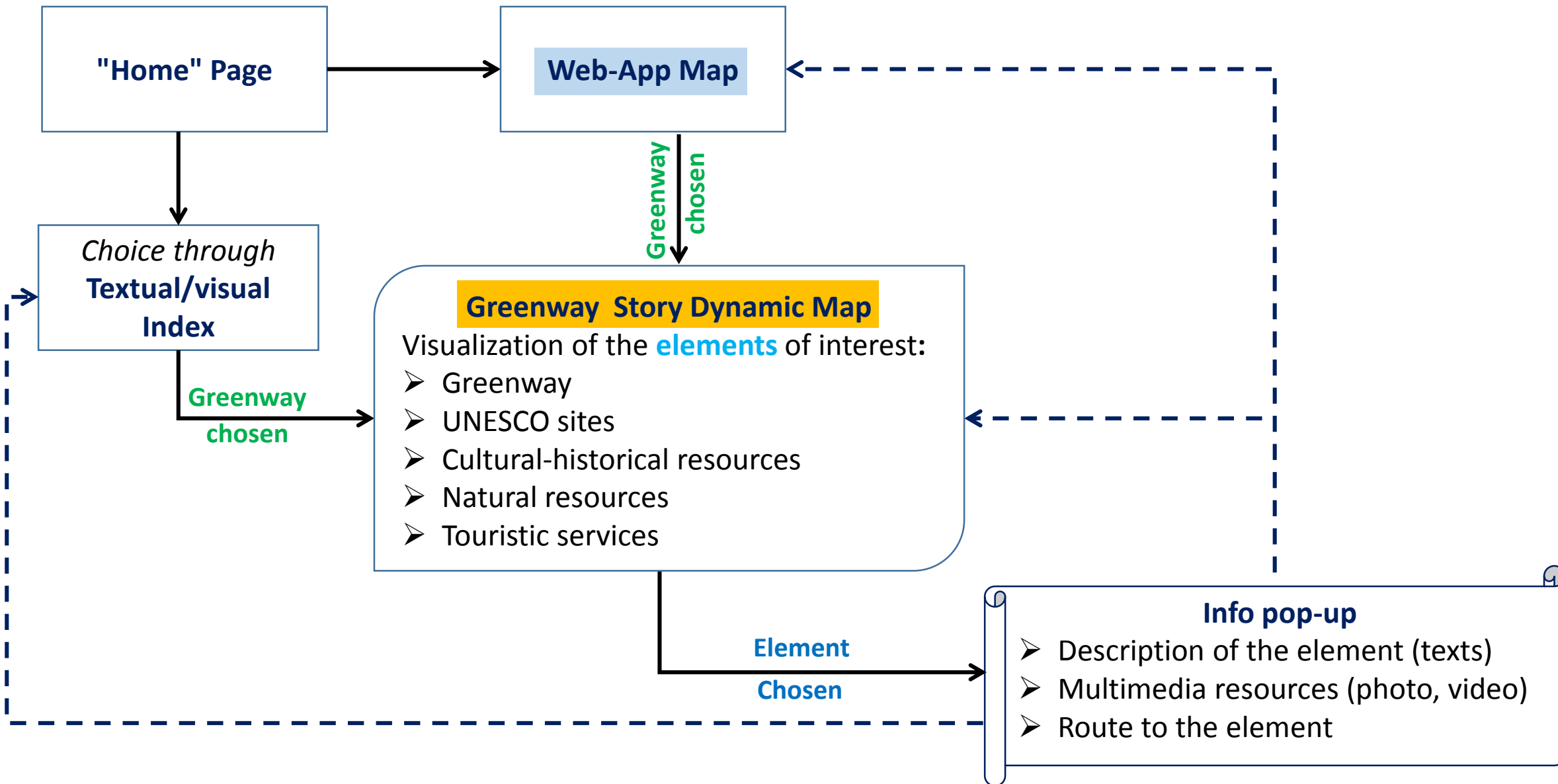
Web App



Story Map Tour



Activity 3: Web-GIS based Multiplatform application

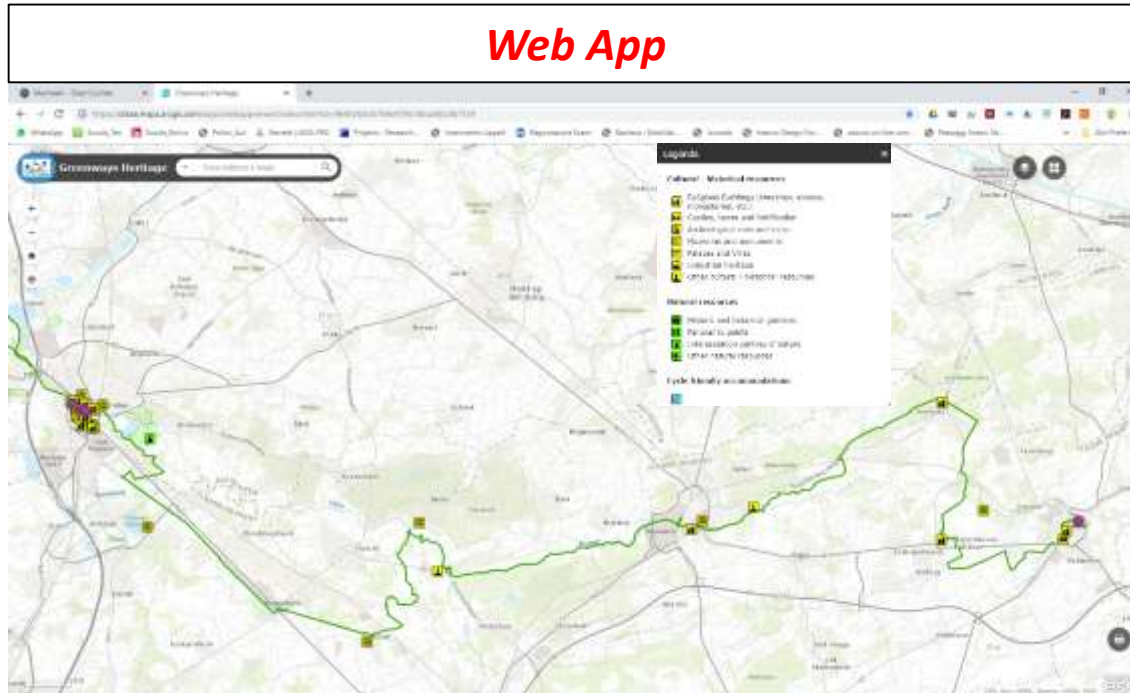


Activity 3: Web-GIS based Multiplatform application

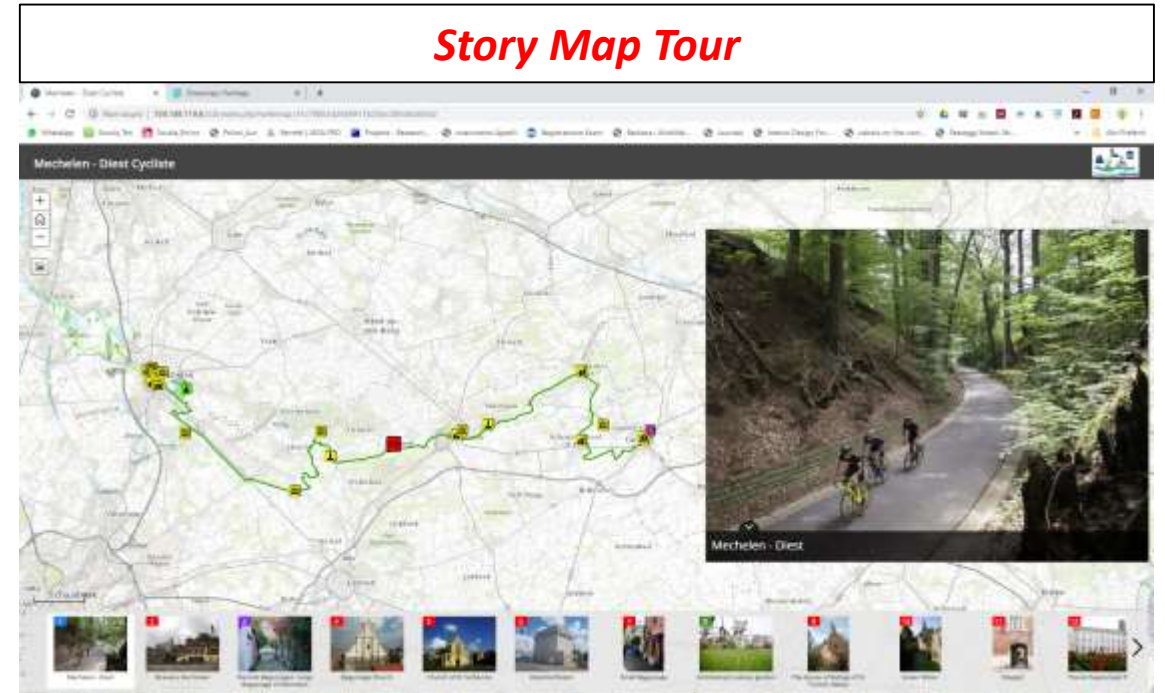
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Web App



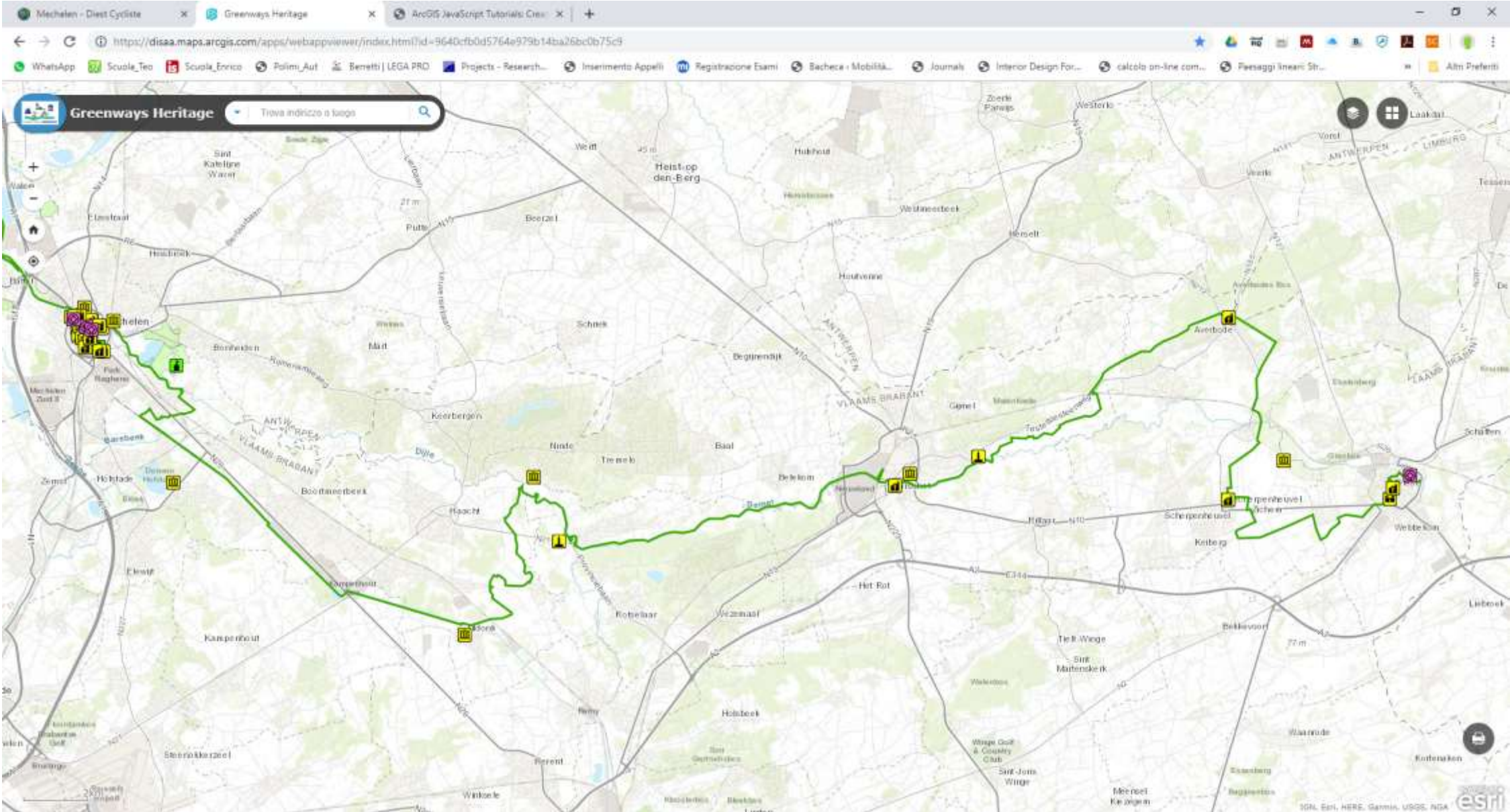
Story Map Tour



Activity 3: Web-APP

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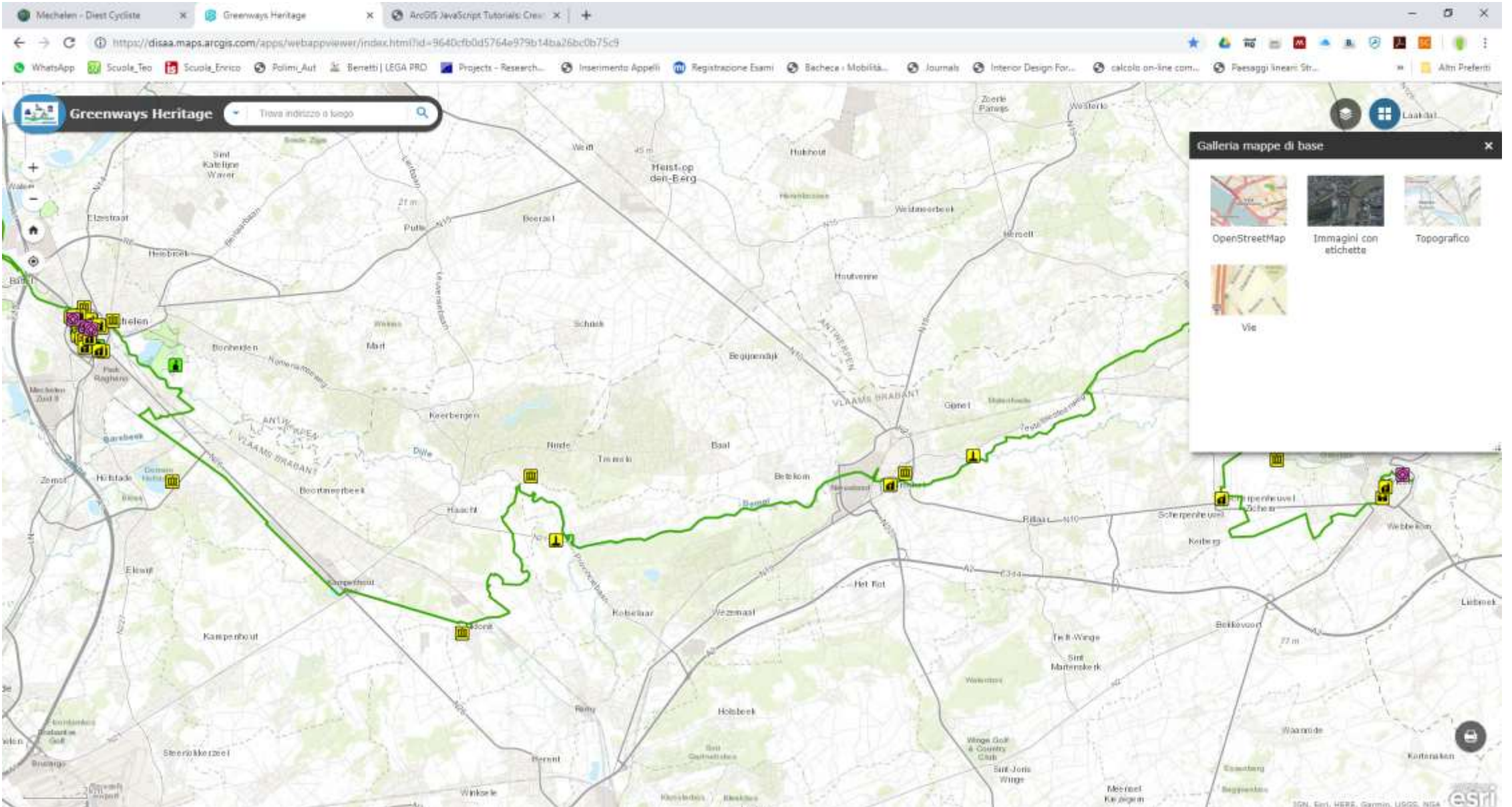
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Activity 3: Web-APP

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Activity 3: Web-APP



The screenshot displays a web browser window with the URL <https://disaa.maps.arcgis.com/apps/webappviewer/index.html?id=964dcfb0d5764e979b14ba26bcd0b75c9>. The browser tabs include 'Mechelen - Diest Cycliste', 'Greenways Heritage', and 'ArcGIS JavaScript Tutorial: Cre...'. The browser's address bar shows the URL, and the top navigation bar contains various utility icons like WhatsApp, ScuoLe_Teo, and ScuoLe_Enrico.

The main content area features a map titled 'Greenways Heritage' with a search bar containing the text 'Trova indirizzo o luogo'. The map shows a green highlighted route through the Mechelen region in Belgium, with various heritage sites marked by icons. The map interface includes standard navigation controls (zoom in, zoom out, home, location) and a 'Laatdit' button.

On the right side, there is a 'Elenco layer' (Layer List) panel with a search icon and a list of layers. The layers are as follows:

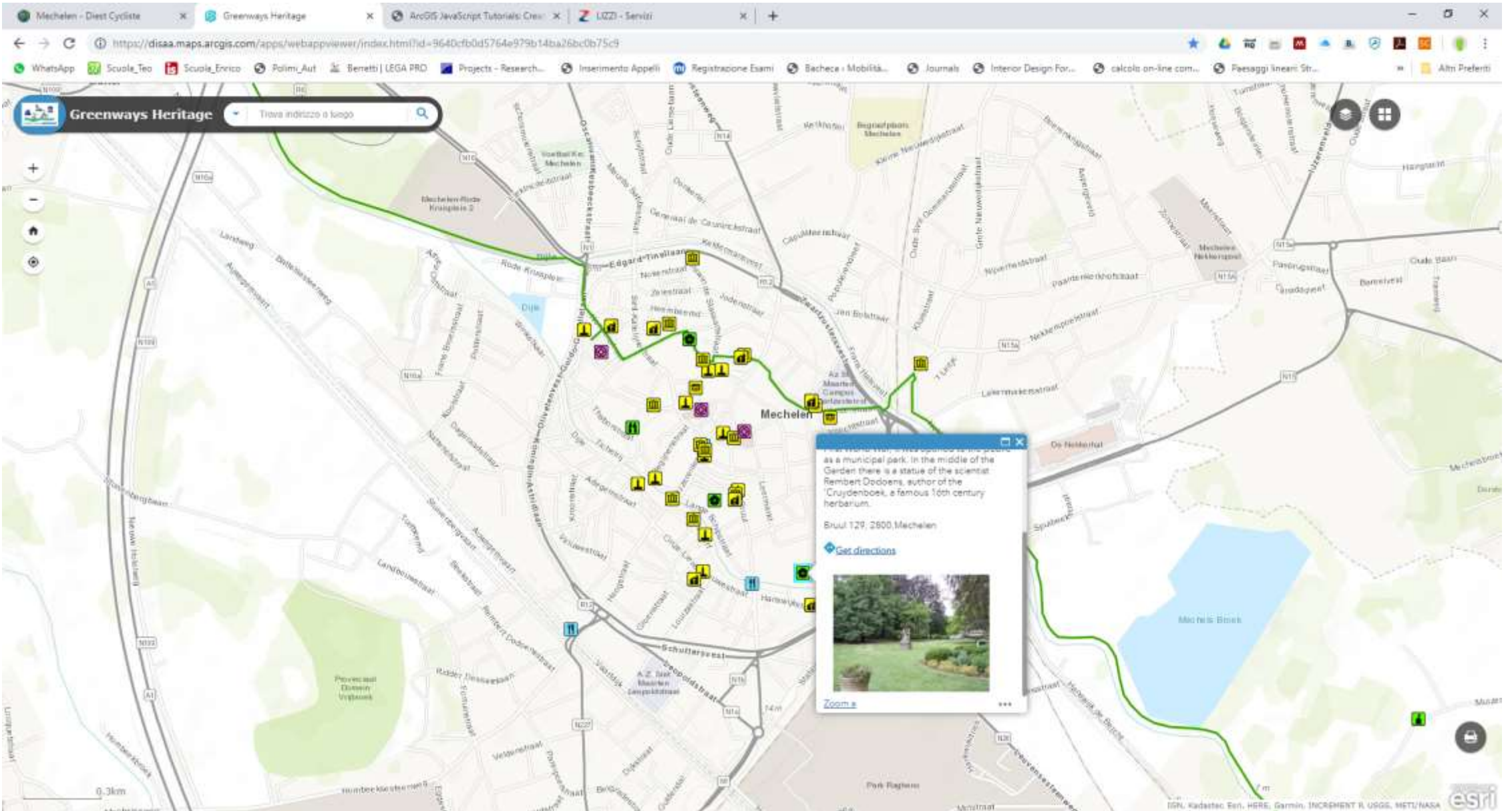
- UNESCO sites - Visualizzazione
- UNESCO sites
- Religious Buildings (churches, abbeys, monasteries, etc.)
- Castles, towers and fortifications
- Museums and monuments
- Archaeological sites and ruins
- Palaces and villas
- Industrial heritage
- Other cultural - historical resources
- Historic and botanical gardens
- Panoramic points
- Interpretation centre of nature
- Other natural resources

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Activity 3: Web-APP

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Activity 3: Story Map Tour

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Mechelen - Diest Cycliste

12 stops on the route:

- Mechelen - Diest
- Brewery Het Anker
- Flamish Beguinage: Large Beguinage of Mechelen
- Beguinage Church
- Church of St Catherine
- Kuoms Dossin
- Small Beguinage
- Archbishop's palace garden
- The House of Refuge of St Trond's Abbey
- Green Water
- Klappet
- The Archaeological P



Activity 3: Story Map Tour

Mechelen - Diest Cycliste

Non sicuro | 159.149.119.6/3.0/index.php?wvmap=F1c79853d2444911b25bc208d4c60c62

Mechelen - Diest Cycliste

Belfries of Belgium and France: Tour de Saint-Rombaut

St Rumbold's Cathedral was built in the 13th century. From the outset, it was larger and more impressive than all the other parish churches and later on it became 'the church of the archbishops'. The inside of the cathedral is breathtaking. You can admire Anthony van Dyck's painting 'Christ on the Cross', along with works by (among others) Michel Coxie, Gaspard de Crayer, and Abraham Janssens. The real showpiece, however, has to be the high altar by Lucas Faydherbe which dates from 1665.

[Get direction](#)

14 Belfries of Belgium and France: Tour de Saint-Rombaut

15 The Cells, art studio

16 Grote Markt

17 Belfries of Belgium and France: Old Cloth Hall with

18 Melaan

19 Our Margaret

20 The Schepenhuis, or Aldermen's House

21 Sjerentien

22 Vismarkt (Fish Market)

23 Havenwerf/Dyck Path

24 Grooting

25 Sima Mattaun



Activity 3: Story Map Tour

Mechelen - Diest Cycliste

Church of Our Lady & Peace Carillon, Aarschot

Aarschot is one of the seven martyr cities that suffered a great deal during the invasion of Belgium at the beginning of the Great War. In November 2018 The Church of Our Lady has installed a new Peace Carillon, high up in the church tower. The Carillon consists of 51 bronze bells, symbolizing the number of countries that had troops in Flanders during the First World War. Parts of old artillery shells from World War I have been melted down to forge the bronze bells, as the symbol for peace and reconciliation.

[Get direction](#)

45 Damsen Museum

46 Rock Wyndlar

47 Church of Our Lady & Peace Carillon, Aarschot

48 Culture Center Het Gasthuis, Aarschot

49 Langdorp on the River Demer

50 Averbode The Moment

51 Abdij van Averbode

52 Zchem Mariën Tower

53 Scherpenheuvel Basilica

54 De Crautel

55 Grand Place and Saint-Sulpitius Church

56 Flemish Bagging Baggage of Die





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