

Apps and Web mapping: innovative tools to promote slow tourism along Via Regina

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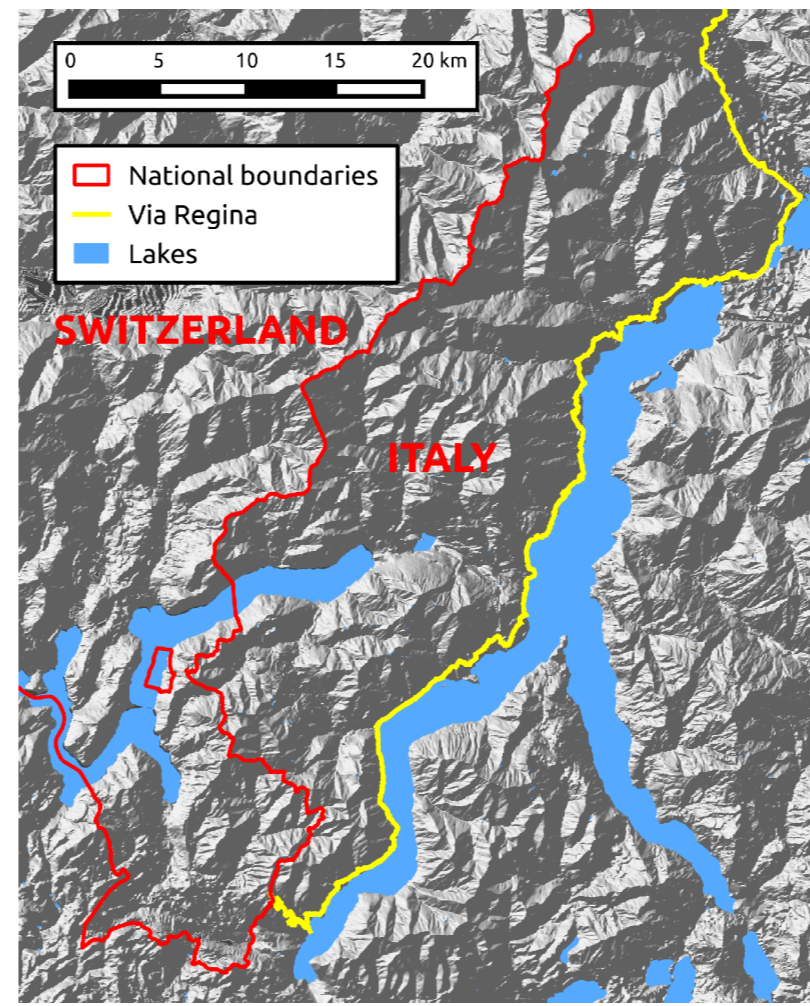
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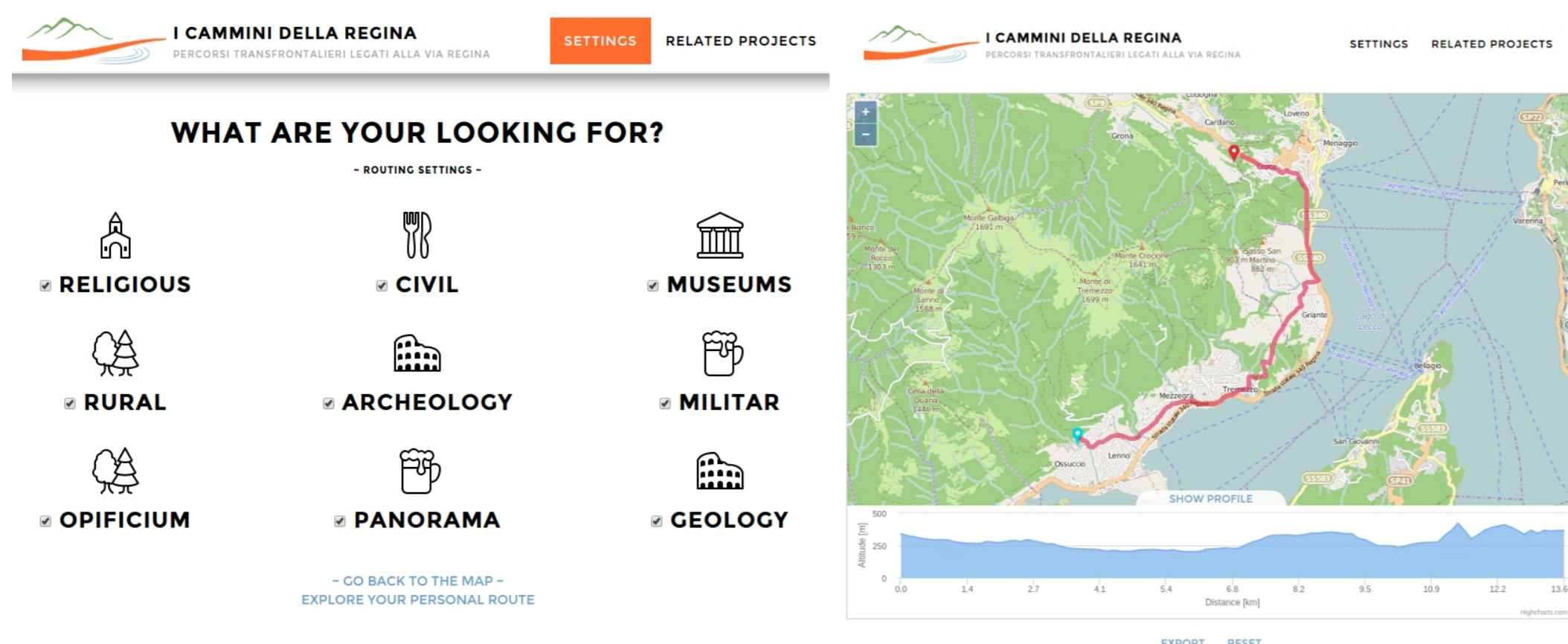
SLOW TOURISM AND VIA REGINA

Overlooking the West coast of Lake Como in Northern Italy, *Via Regina* has represented a fundamental European trade and pilgrim route since the ancient Roman times. The dense system of paths departing from it and spanning the beautiful mountainous region at the border between Italy and Switzerland makes this area an awesome destination for *slow tourism* activities, which consist of sustainable forms of transportation, appreciation of nature and (re)discovery of the local history and culture. In the frame of the *Interreg project* "The Paths of Regina – Crossborder paths linked to Via Regina", which involves Italian and Swiss universities, cultural associations, local agencies and administrations, this work aims at valorizing slow tourism in the Via Regina region through the creation of open source *Web Mapping* applications leveraging also the modern fields of crowdsourcing and virtual globes.



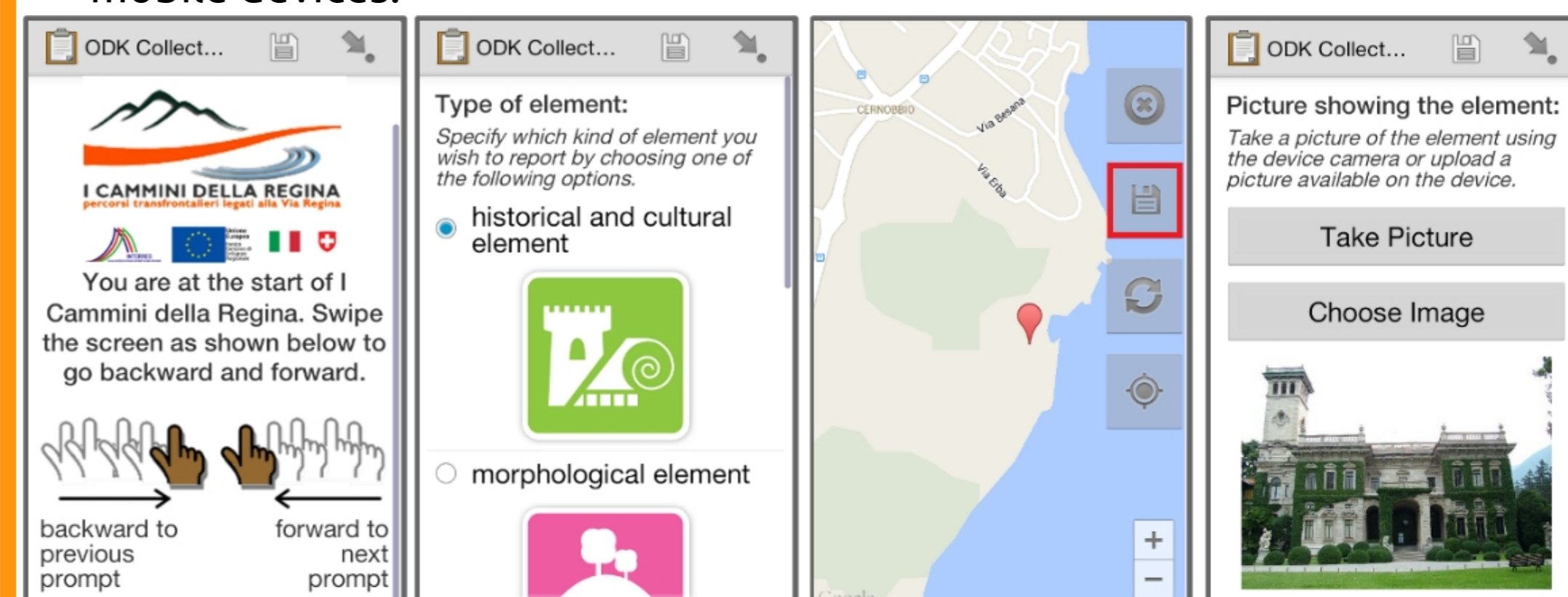
2D WEB VIEWER

× Main 2D viewer of the project with advanced functionalities: computation of *customized routes* according to the user's preferred points of interest (using *pgRouting*) and *terrain profile* (using *ZOO WPS*); *print* of the user's computed route with ad hoc statistics (travel time, average slope, height difference, etc.); *geocoding*; exploitation of *TripAdvisor* API to visualize accommodations, restaurants and attractions sites.



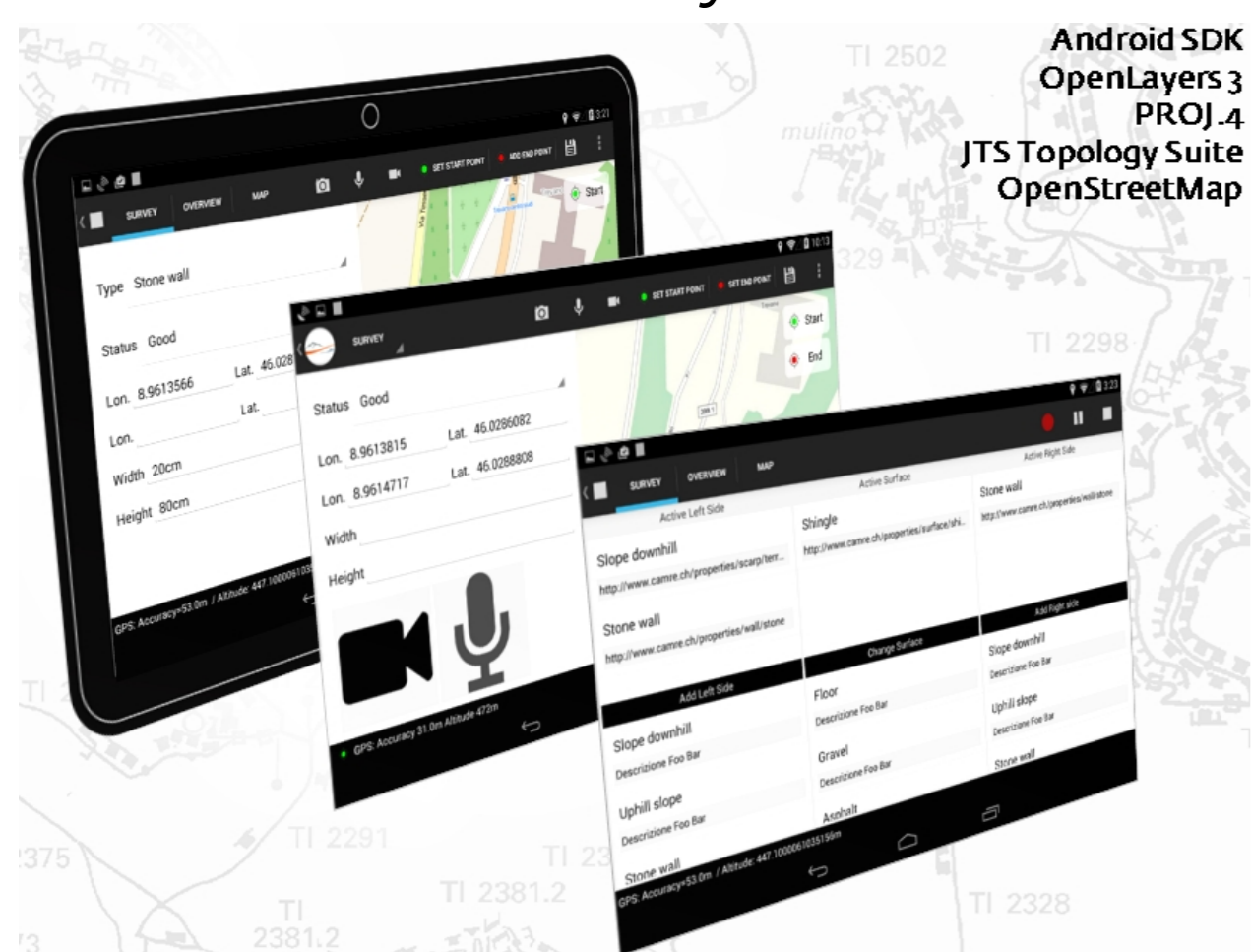
MOBILE APP FOR SLOW TOURISTS

× Data crowdsourced by the *general public* using an *Android* app based on the *Open Data Kit* suite, which is mainly composed of a server module (ODK Aggregate), running under *Apache Tomcat* and synchronized to a *PostgreSQL* database to store the data; and an *Android* app (ODK Collect) allowing users to *report POIs* (ranging from historical/cultural points of interest to tourism services and morphological elements) through their mobile devices.



MOBILE APP FOR PROFESSIONALS

× An application named *GeoIVS* to map historical routes of Switzerland, where users can *register elements* around them. *Textual & vocal notes* as well as *pictures* and *videos* can be also associated to each surveyed element.



INFO	RILIEVO	PANORAMICA	CARTA
Lato Sinistro	Superficie	Lato Destro	
Scarpata in salita http://www.camre.ch/properties/scarp/terr...	Sterrato http://www.camre.ch/properties/surface/gra...	Scarpata in discesa http://www.camre.ch/properties/scarp/terr...	
	Start bridge		
Aggiungi Lato Sinistro	Cambia Superficie	Aggiungi Lato Destro	
Scarpata in discesa Descrizione Foo Bar	Pavimento Descrizione Foo Bar	Scarpata in discesa Descrizione Foo Bar	
Scarpata in salita Descrizione Foo Bar	Sterrato Descrizione Foo Bar	Scarpata in salita Descrizione Foo Bar	
Muro in pietra	Asfalto	Muro in pietra	

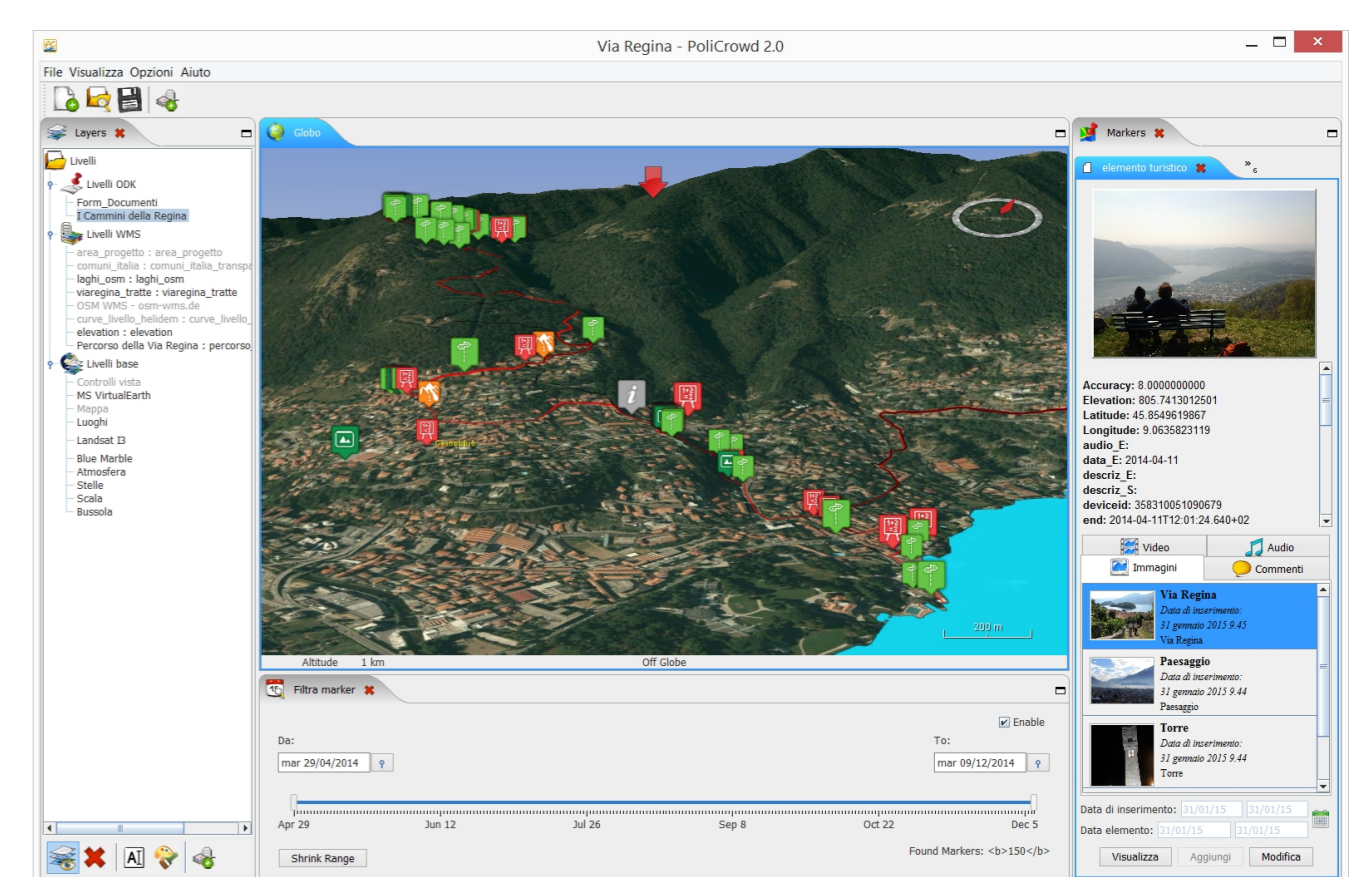
VIRTUAL TOUR APPLICATION

× The integrated framework combines geospatial technologies, the concept of *virtual tour*, the use of *multimedia* (images, slideshows, videos and photospheres) and the *location-based* approach. The application relies on *OpenLayers*, *Bootstrap*, *JQuery*, *D3.js*, *Less.js*, *GeoJSON*, and *OpenStreetMap*.



3D WEB VIEWER

× A fully realistic *3D data visualization* is finally achieved through a customization of the *PoliCrowd 2.0* platform based on *NASA World Wind* virtual globe. In addition to the servers specifically deployed within the project, the application can transparently connect to any *WMS-compliant* server and also to *ODK servers*. Users can interact with the *POIs* reported through the app by adding *multimedia contents* and *time-filtering* their visualization.



<http://www.viaregina.eu>



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