

# The eENVplus Pilot applications

## Window on the Protected Areas - Mobile Conservation Map SK-HU Cross-boarder Pilot application overview

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**Sources:** eENVplus project 2015



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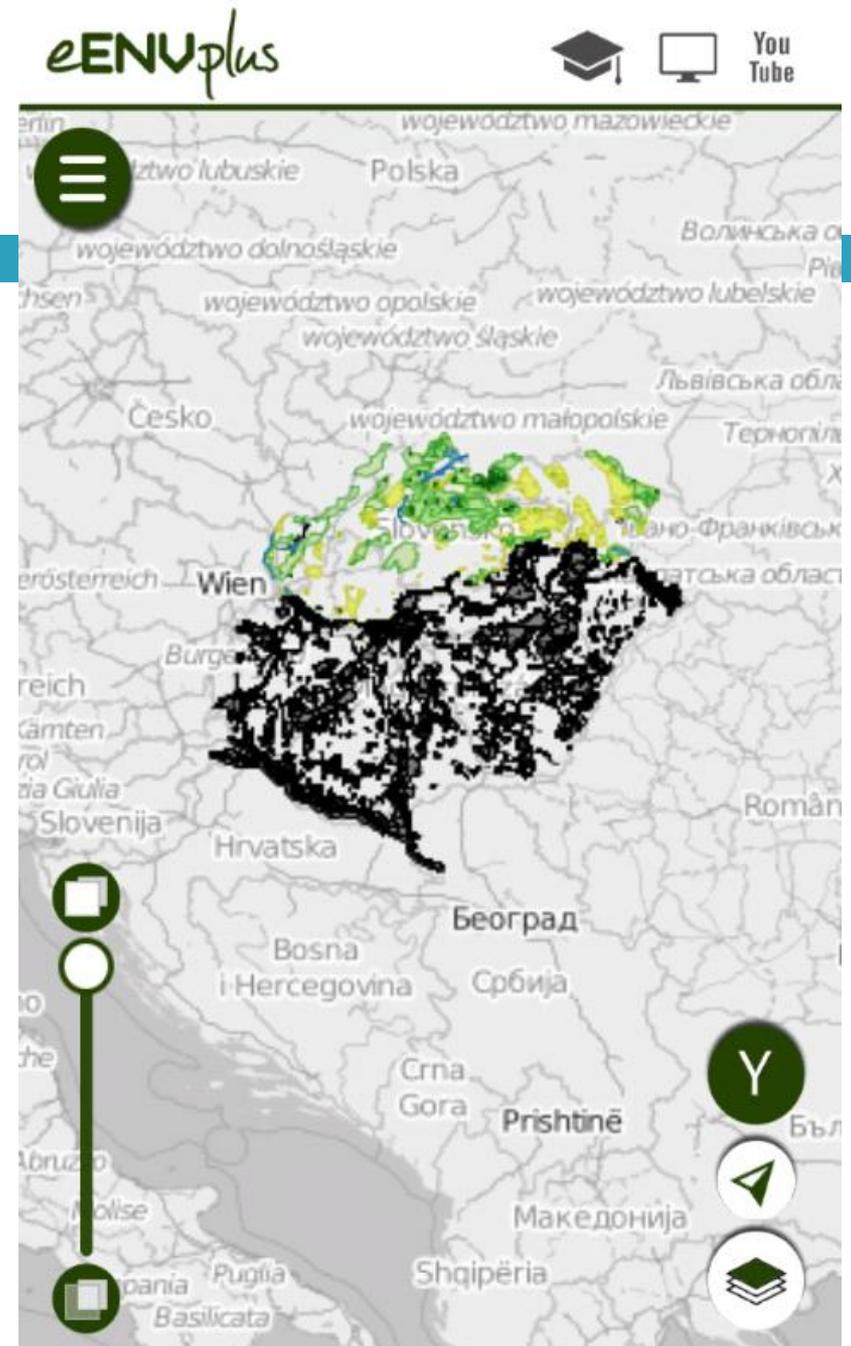
# Partners of the SK-HU cross-boarder pilot application

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- SAZP, Slovakia
  - ▣ **Agency** of Ministry of Environment in Slovakia
  - ▣ **INSPIRE** implementation responsible
  - ▣ National **Geoportal** provider
- MA, Hungary
  - ▣ **Ministry** of Agriculture
  - ▣ Responsible for Nature Conservation register
  - ▣ INSPIRE Annex I.9. data provider

# Cross-border Pilot Slovakia - Hungary

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# General information

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- The objective of this training module is to **learn** about the basic concept of mobile mapping, advanced visualization and crowdsourcing service and **acquire** know-how on how to use Window on the Protected Areas - Mobile Conservation Map.

# General information

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- Duration
  - ▣ To complete this training module one hour is needed.
  
- Requirements
  - ▣ No specific background requirements are needed.
  - ▣ The installation of eENVplus Mobile application is recommended.

# Introduction on mobile mapping

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# Introduction on mobile mapping

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From wikipedia, the free encyclopedia

- **Mobile mapping** is the process of collecting geospatial data from a mobile device using smartphone (android/iOS/windows) sensors (accelerometer/gyro/GPS).



# Introduction on advanced visualisation

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# Introduction on advanced visualisation

From wikipedia, the free encyclopedia

- **Augmented reality (AR)** is a live direct or indirect view of a physical, real-world environment whose elements are augmented by computer-generated sensory input such as sound, video, graphics or GPS data.
- It is related to a more general concept called mediated reality, in which a view of reality is modified by a computer. As a result, the technology functions by enhancing one's current perception of reality. By contrast, virtual reality replaces the real world with a simulated one.
- Augmentation is conventionally in real-time and in semantic context with environmental elements, such as sports scores on TV during a match. With the help of advanced AR technology the information about the surrounding real world of the user becomes interactive and digitally manipulable. Artificial information about the environment and its objects can be overlaid on the real world.

# Advanced visualisation

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- For this purpose the eENVplus infrastructure offers a specific web service to visualize collect data provided by users in Augmented reality mode.



# Introduction on Crowdsourcing

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# Crowdsourcing

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From wikipedia, the free encyclopedia

**Crowdsourcing** - the process of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, and especially from an online community, rather than from traditional employees or suppliers.

- The term „crowdsourcing“ is a portmanteau of "crowd" and "outsourcing".
- By definition, crowdsourcing combines the efforts of numerous self-identified volunteers or part-time workers, where each contributor, acting on their own initiative, adds a small contribution that combines with those of others to achieve a greater result; hence, it is distinguished from outsourcing in that the work comes from an undefined public, rather than being commissioned from a specific, named group.

# Crowdsourcing

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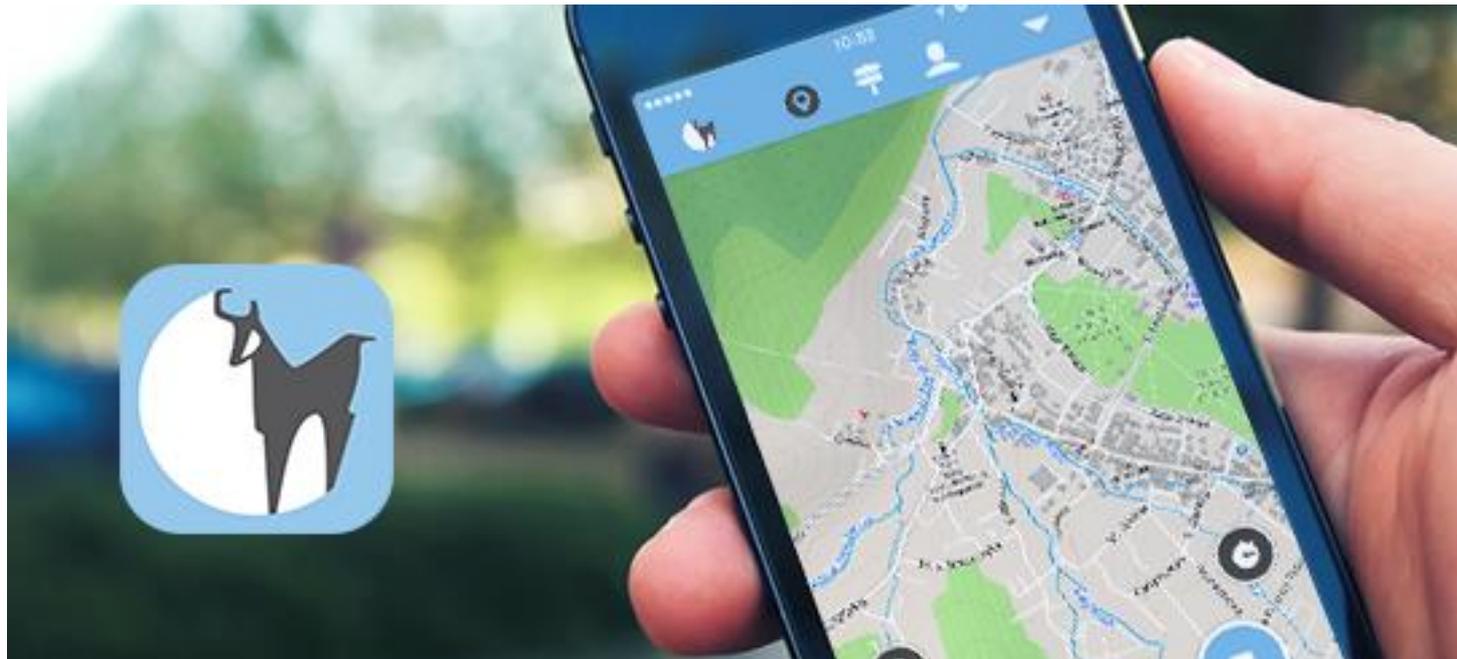
- Crowdsourcing
  - ▣ For this purpose, the eENVplus infrastructure offers a specific web service used to collect data providing by users in according with one of the datamodels provided by the project pilots, explained later in this training module.



# Pilot datamodel

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- Pilot datamodel has been designed to describe a **real-life situation: collecting data** about protected species distribution during the hike/walk in the nature protected area.



# Pilot datamodel

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- Description:
  - **Window on the Protected Areas - Mobile Conservation Map**
  - This Pilot is implemented as a **mobile application** that provides to the users the possibility to query and navigate the national natural heritage of Hungary and the Slovak Republic easily accessing to the protected area network.
  - In addition, the pilot application makes biologist users involved in collecting data about species distribution (via scientific names) within their actual location via easy to use crowdsourcing form. Intended target user group of the pilot application is broad non-professional hiking public with a form of ecotourism. During the online operation the application checks if there is any interesting data uploaded from the users at the eENVplus repository.

# Window on the Protected Areas

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## □ Mobile client

- The App is available for Android and iOS mobile devices and can be downloaded at following URLs:



- <https://play.google.com/store/apps/details?id=it.graphitech.eenvplus>
- <https://itunes.apple.com/us/app/eenvplus-mobile-app-for-crowdsourcing/id1030693450?l=it&ls=1&mt=8>

# Window on the Protected Areas

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- It is strongly recommended to install and execute the App before continue with this training module.



 eENVplus Mobile App  
Fondazione GraphiTech  
Szülői felügyelettel

ELTÁVOLÍTÁS

MEGNYITÁS

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Letöltések



Eszközök



Hasonló

Crowdsourcing és AR gyűjtésére  
vonatkozó környezetvédelmi  
vonatkozású meafelvételek.



# Window on the Protected Areas

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- Pilot selection
  - This screenshot represents the first menu that user will see after the launching the App.
  - This menu allows the user to choose one of three eENVplus Mobile Apps.



# Window on the Protected Areas

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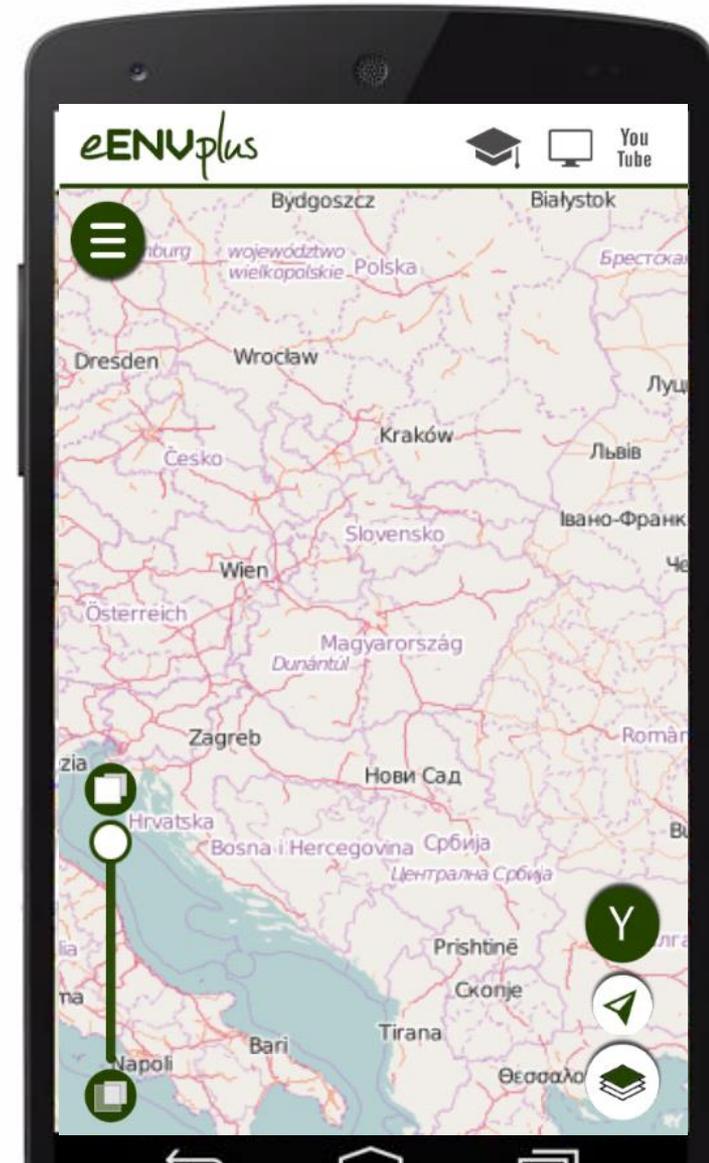
- Please choose SK-HU icon in the middle, to choose Slovak-Hungarian App.



# Window on the Protected Areas

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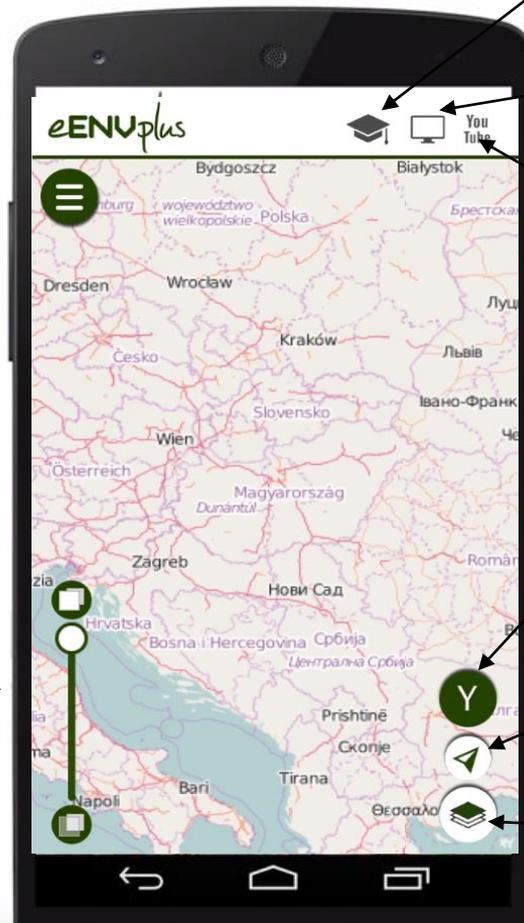
- After the pilot selection it is possible to start the interaction with the map viewer, with the classical gestures of „Pan“ and „Zoom“.



# Window on the Protected Areas

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The main Application screen



„The top left menu button“

„Transparency of map layers“

Training modul link

App. Developers

Video link on the use of crowdsourcing

Crowdsourced data display year/month/day

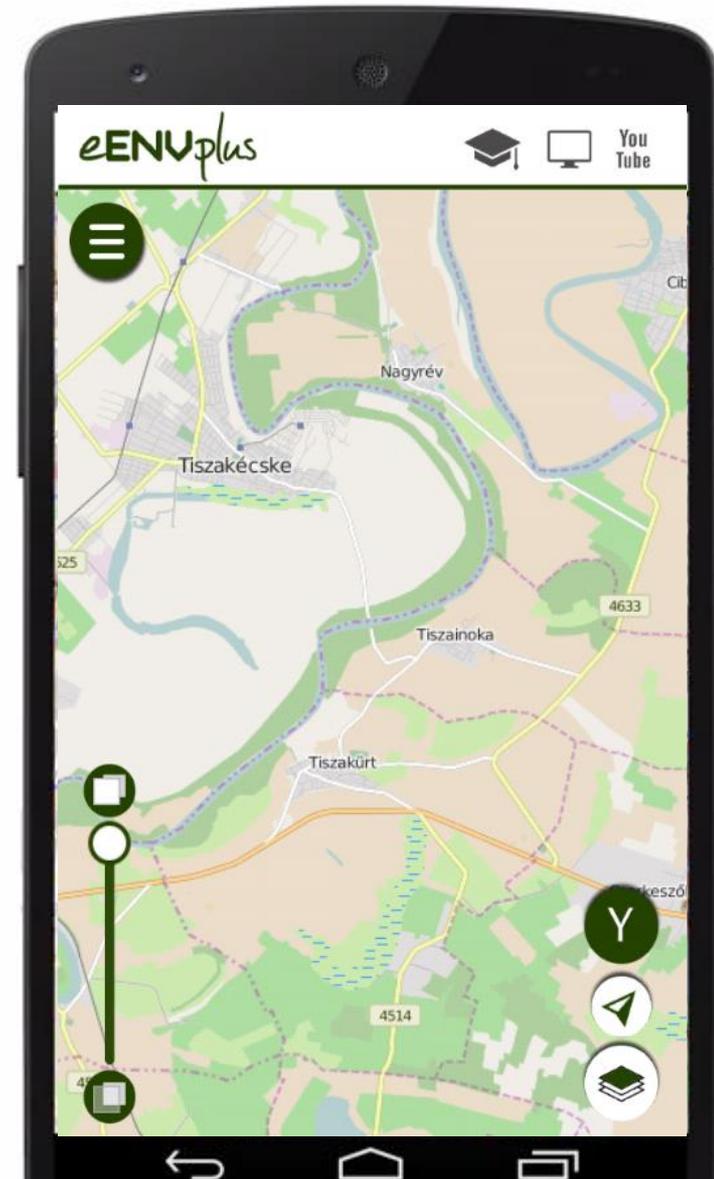
„User location“

„Map Layers“

# Window on the Protected Areas

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- The top left menu allows user to visualize the entire set of functionalities provided by the App.



# Window on the Protected Areas

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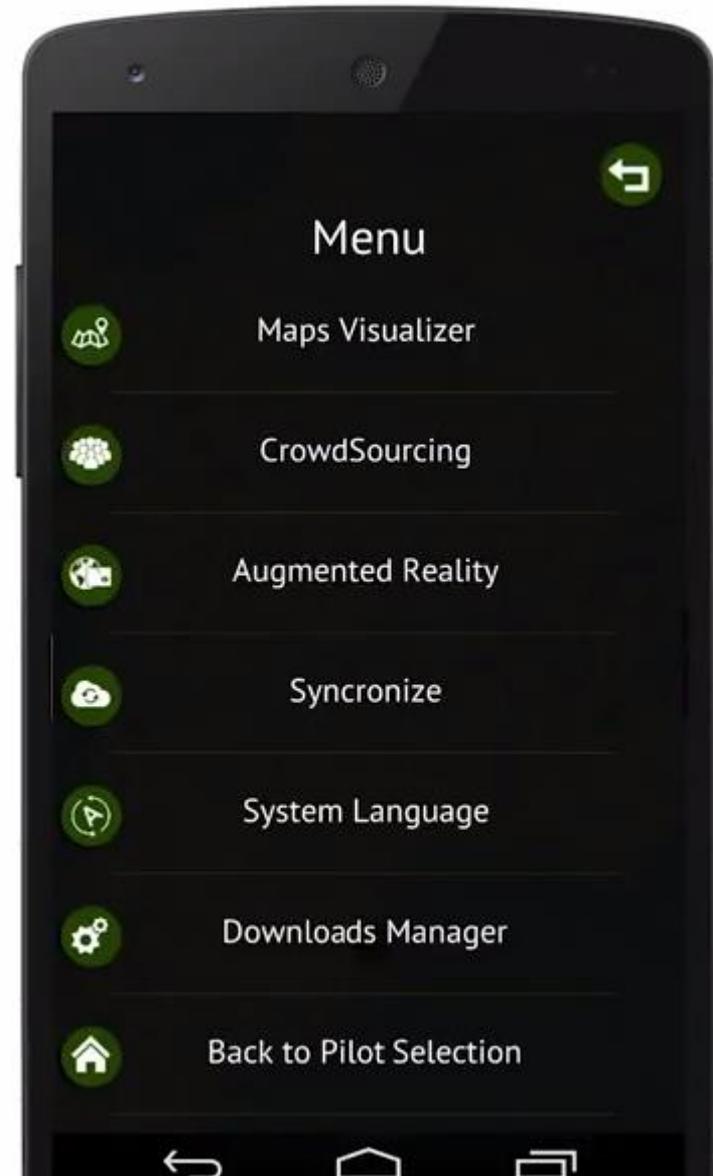
- ❑ **Map Layers list**
  - ❑ From this screen user can choose **various map layers** from the Map Layers list.



# Window on the Protected Areas

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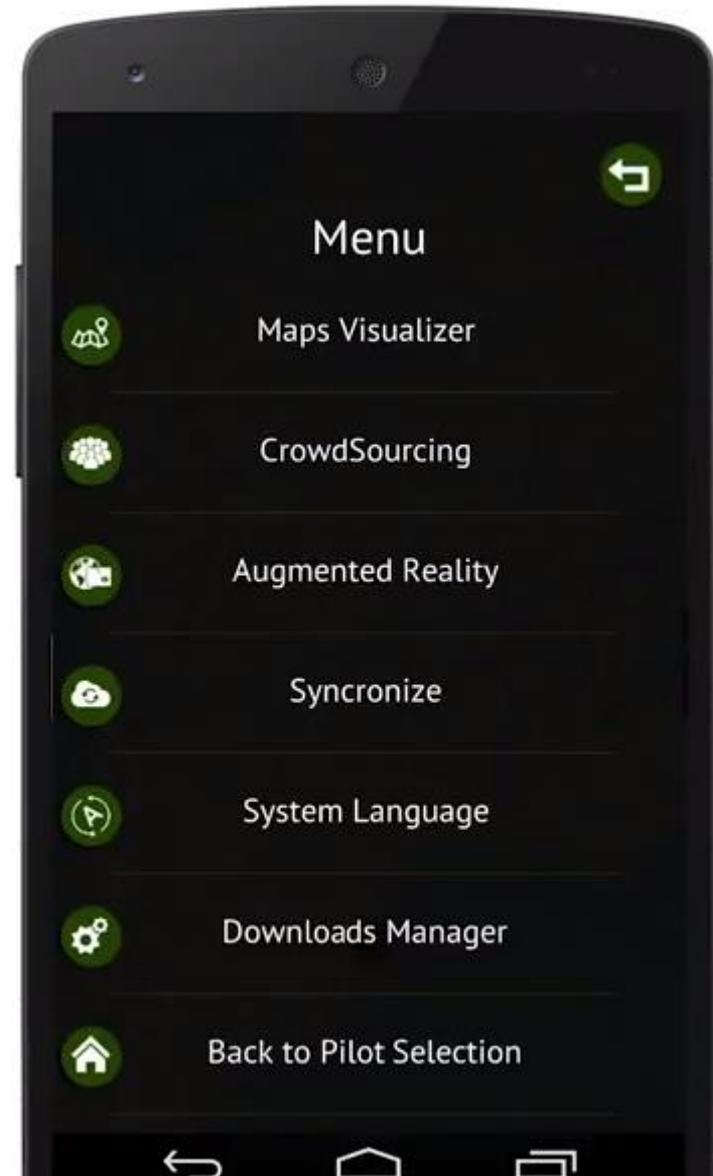
- The top left menu allows user to visualize the entire set of functionalities provided by the App.



# Functionalities

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- **Map Visualizer** – enables return back to the map Visualizer.



# Functionalities

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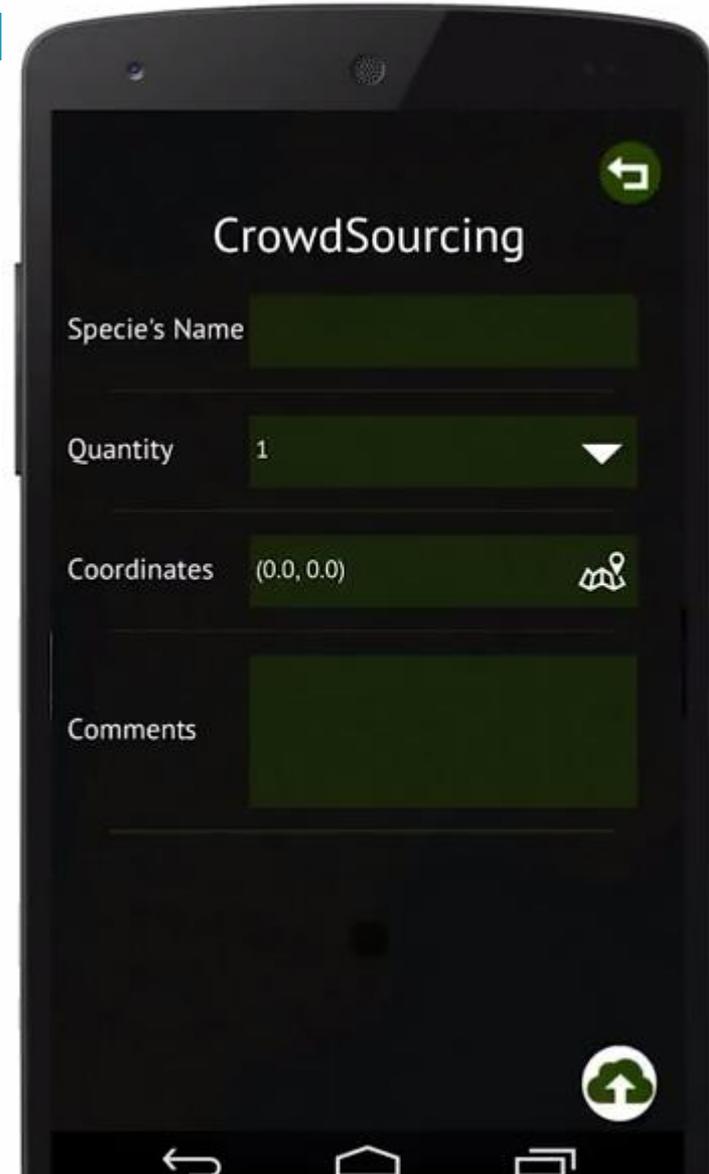
- **Crowdsourcing** – enables collecting data about protected species distribution during the hike/walk in the nature protected area.



# Functionalities

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- ❑ **Crowdsourcing** – Adding the POI by editing of Specie's Name, Quantity, Comments.
- ❑ By the use of „Coordinates“ button, it is possible to specify the **position** (LAT/LON) of Species on the map in which the new POI have to be **Geolocated**.



# Functionalities

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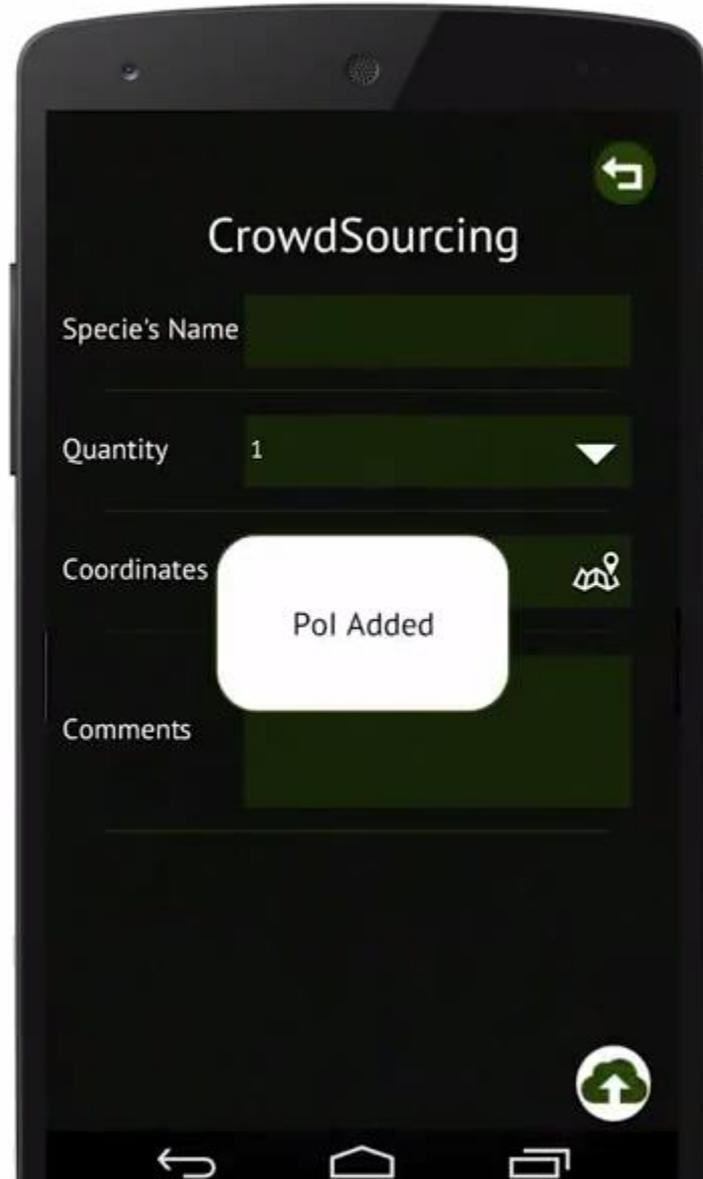
- The App offers the possibility to attach the picture on the collected data, by clicking on the „camera“ button.



# Functionalities

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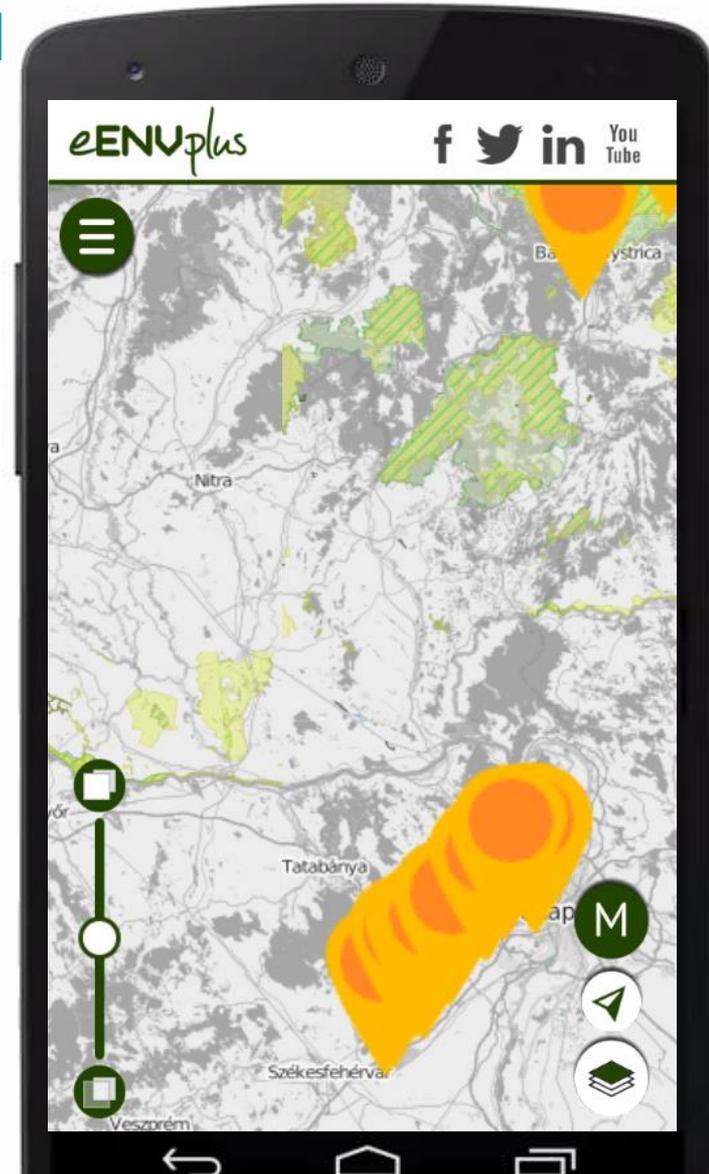
- A confirmation message will inform the user if all mandatory data are correctly inserted, to store the POI in the database.



# Functionalities

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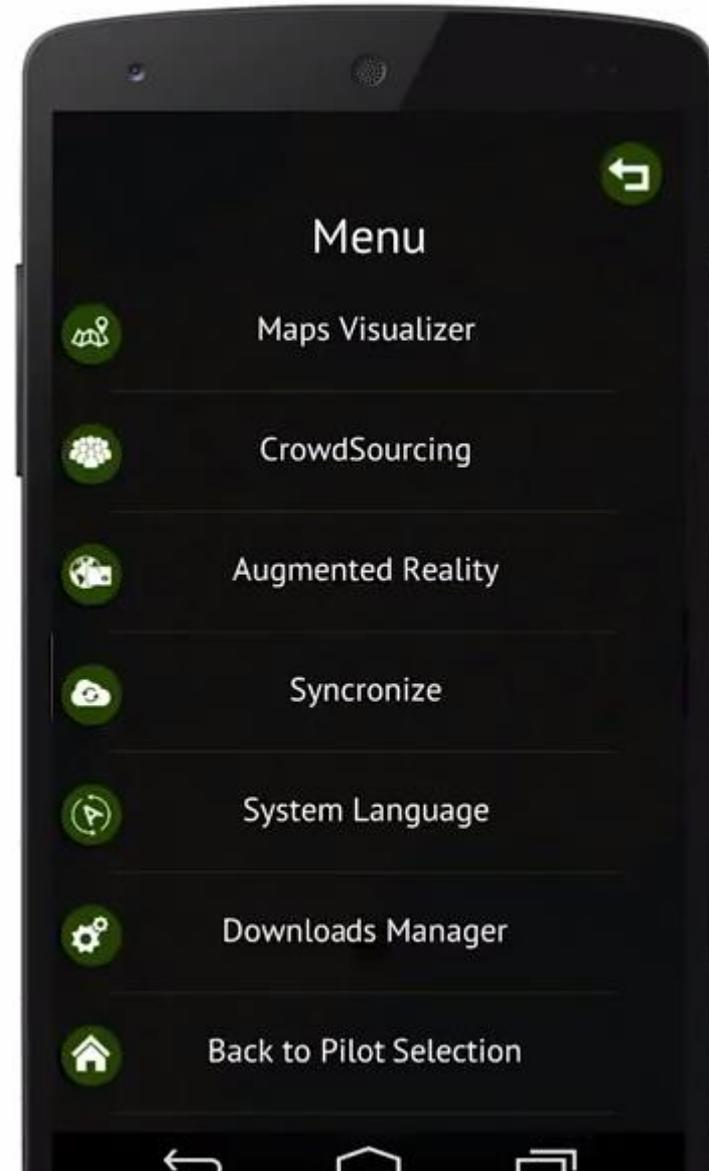
- At this stage, the user is already able to **visualize** the POI on the map, without any synchronization with the main server.



# Functionalities

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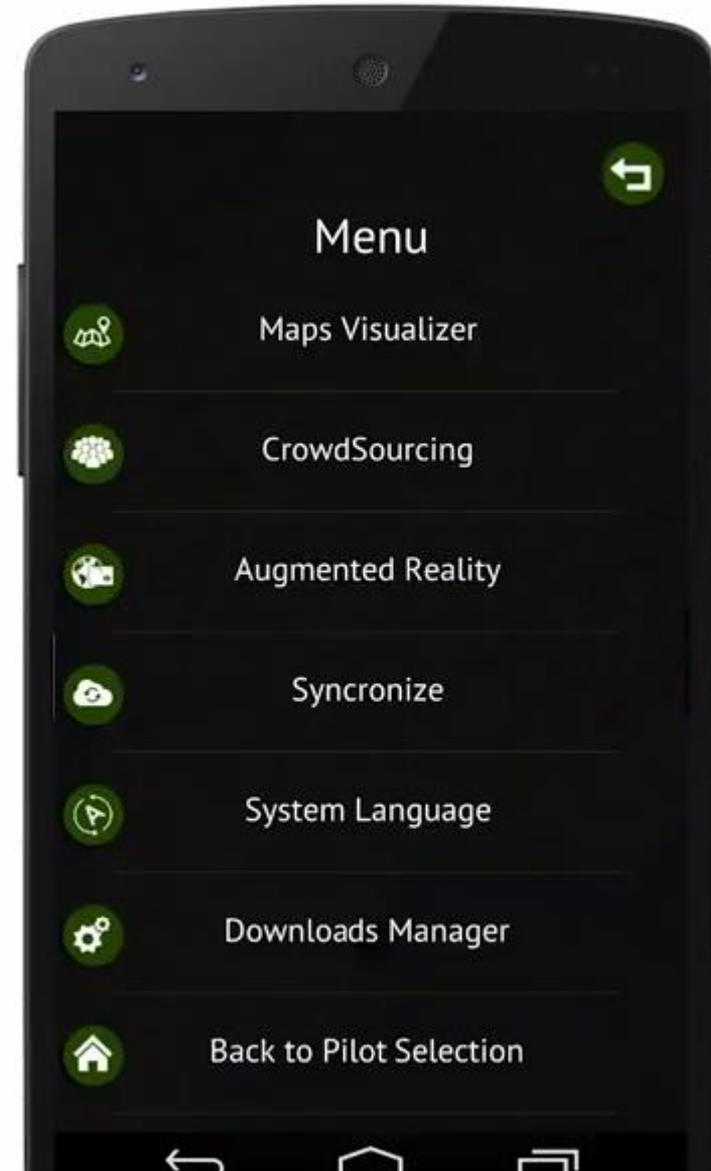
- **„Synchronize Button“** – to send the collected information, and/or download other verified POIs from the main server, it is required to press on the „Synchronize button“.



# Functionalities

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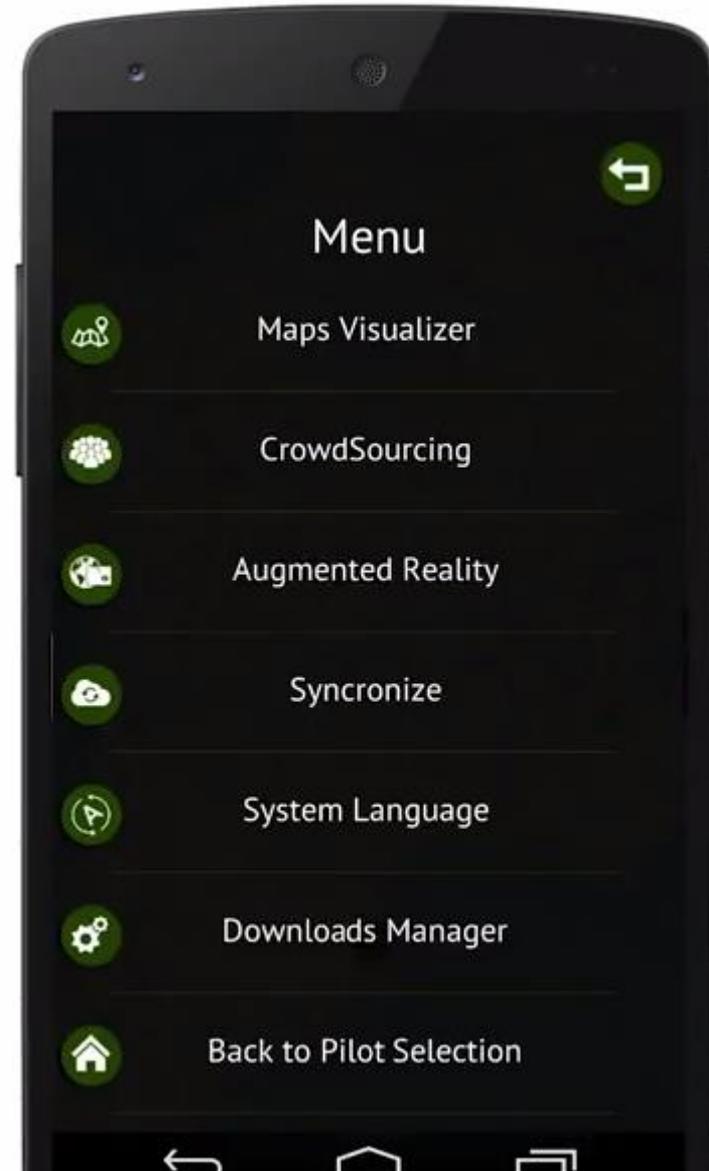
- ❑ **Augmented Reality** – enables user to visualize collected data provided by user in Augmented reality mode.
- ❑ To work correctly, the App requires the calibration the set of sensors that equip the mobile device.



# Functionalities

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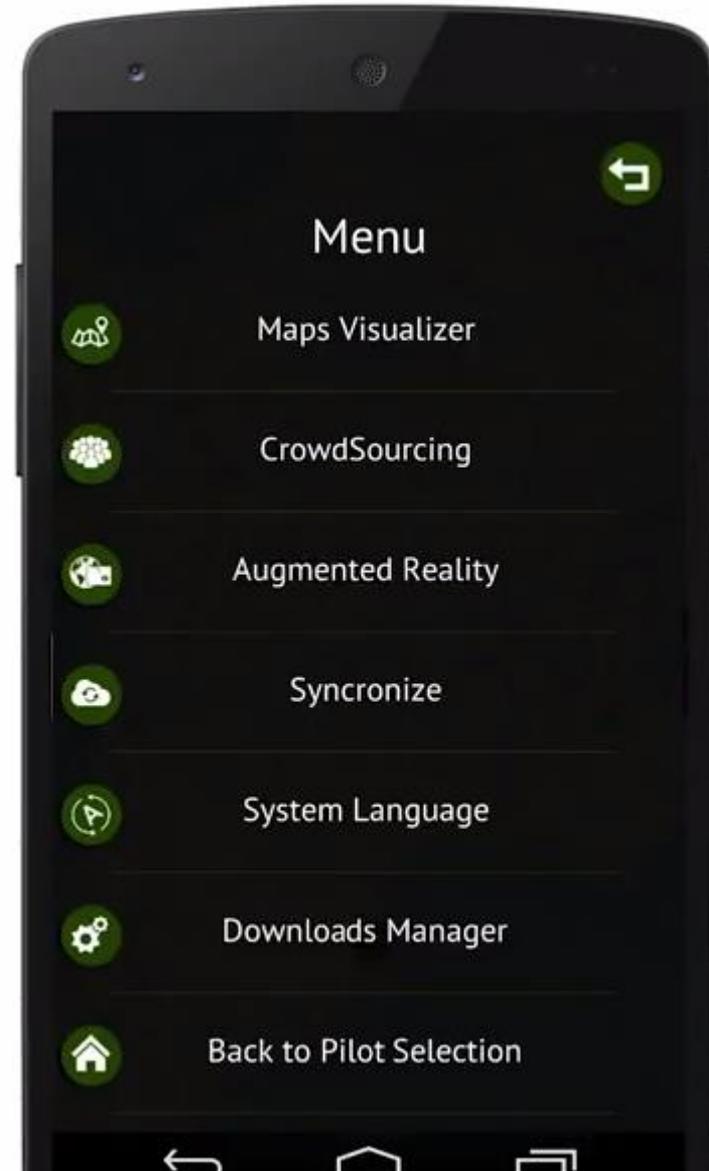
- **System language** – enables the user to set the system language: English, Italian, French, Icelandic, Hungarian, Slovak.



# Functionalities

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- ❑ **Downloads Manager** – by clicking the Download Manager button, user is able to manage/download Basic Layers, Specific layers, Layer of species and Elevation data.



# Functionalities

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- **New Registration** – this button allows **new user** to be registered into the system, and to upload their collected data. “Register” button will forward the user to following webpage:

- <http://eenvplus.graphitech-projects.com/register.html>

## New Registration

Please fill in the registration form in order to access to the functionalities offered by the eENVplus crowdsourcing service.

READ CAREFULLY THE FOLLOWING LICENCE AGREEMENT! IT CONTAINS VERY IMPORTANT INFORMATION ABOUT YOUR RIGHTS AND OBLIGATIONS, AS WELL AS LIMITATIONS AND EXCLUSIONS THAT MAY APPLY TO YOU. BY CLICKING ON THE “ACCEPT” BUTTON, OR BY DOWNLOADING, INSTALLING OR OTHERWISE USING THE SOFTWARE AND SERVICES, YOU AGREE TO BE BOUND BY AND BECOME SUBJECT TO THIS AGREEMENT. IF YOU DO NOT AGREE TO ALL OF THE TERMS OF THIS AGREEMENT, CLICK THE “DO NOT ACCEPT” BUTTON OR LEAVE THE WEBSITE, DO NOT DOWNLOAD, INSTALL OR USE THE SOFTWARE AND SERVICES.

Accept terms and conditions

Register

# Window on the Protected Areas

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## □ Mobile client

- The App is available for Android and iOS mobile devices and can be downloaded at following URLs:



- <https://play.google.com/store/apps/details?id=it.graphitech.eenvplus>
- <https://itunes.apple.com/us/app/eenvplus-mobile-app-for-crowdsourcing/id1030693450?l=it&ls=1&mt=8>

# Conclusion

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- This training module has provide the **basic concept** of mobile mapping, advanced visualization and crowdsourcing service and know-how on **how to use** Window on the Protected Areas - Mobile Conservation Map.

# Window on the Protected Areas - Mobile Conservation Map

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**Source:**

eENVplus project 2015

eENVplus