Erasmus+ "virtual mobility/activity" with UN - Mapper - Romania
Host 2021-02-22 until 2021-02-24

Global peace needs global contribution. The contribution of everybody is important for peace. Therefore, we decided to conduct two virtual mobilities with UN Mappers. [1]

United Nations helps countries torn by conflict create conditions for lasting peace. Peacekeeping, peacebuilding and conflict prevention activities are the main objectives of our mapping activities. There is enormous potential for new technologies to improve the effectiveness of UN peacekeeping missions, as they respond to an ever-growing list of tasks in increasingly complex field environments.

On 15th February we met with two Italian UN Mappers (Michael Montani and Rachele Amerini) to prepare the next Erasmus "virtual" activity, which should happen 22nd until 24th February. We decided that we'll be mapping an area in Central African Republic to help humanitarian teams in the field.
Watch [2] a 10 minute video of the UN Mappers explaining their work to the steering committee of our project.

All the students we had worked with so far were no longer students of the respective schools. Therefore, new students had to be introduced to humanitarian mapping with new training materials. In doing so, we tried to take local conditions into account.

- The students first had to familiarise themselves with the term "mapathon" and the important tools JOSM and Tasking Manager. They had to record their findings, which they worked out with the help of the OpenStreetMap Wiki, in a worksheet.
The empty worksheet
[3] you can find in our wiki and in the appendix.

Questions: What is JOSM? - Powerful or not? Where is its homepage?

| JOSM (Java OpenStreetMap Editor) is a desktop application for editing OpenStreetMap. |
| It is the most powerful out of available editors. |
| Its homepage is located at josm.openstreetmap.de. |

Questions: What is a Tasking manager? Why volunteers use it? What’s the purpose of this tool?

| The Tasking Manager is the tool for coordination of volunteers and organization of groups to map on OpenStreetMap. |
| The purpose of the tool is to divide up a mapping job into smaller tasks that can be completed rapidly. |
| This approach facilitates the distribution of tasks to the various mappers. |

Questions: What is a mapathon?

| A Mapathon is a coordinated mapping event. |
The next step for the students was to sharpen their eye for the meaning of symbols in OpenStreetMap. They had to discover eight different markings on the map (as they are not directly visible in the OSM legend) and name them.

1. Road outside the village
2. Road inside the village
3. Buildings
4. Village border
5. Cemetery
6. Hospital
7. School
8. Place name

In a second step, the students could then use JOSM to discover the "tags" that cause the corresponding marking on the map.

The complete template and solution can be found in the appendix of this brochure and on our wiki page.
This cheat sheet was filled by the students before the mapathon.

The complete template and solution can be found in the appendix of this brochure and on our wiki page as usual.

### Useful tags for our mapathon

<table>
<thead>
<tr>
<th>Solution</th>
<th>OSM Wiki</th>
</tr>
</thead>
<tbody>
<tr>
<td>mapathon Erasmus+ euYouH OSM and UN mappers</td>
<td><a href="https://wiki.openstreetmap.org/">OSM Wiki</a></td>
</tr>
</tbody>
</table>

**Examples**

we found in "our JOSM-Task" in Santa Barbara, Terceira

OSM-Wiki is your friend

### Examples Table

<table>
<thead>
<tr>
<th>Object</th>
<th>Key</th>
<th>Value</th>
<th>Link to our OSM Wiki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of residence</td>
<td>landuse</td>
<td>residential</td>
<td><a href="https://wiki.openstreetmap.org/wiki/Tag:landuse%3DResidential">https://wiki.openstreetmap.org/wiki/Tag:landuse%3DResidential</a></td>
</tr>
<tr>
<td></td>
<td>place</td>
<td>village</td>
<td><a href="https://wiki.openstreetmap.org/wiki/Key:place#Populated_settlements:2C_urban_and_rural">https://wiki.openstreetmap.org/wiki/Key:place#Populated_settlements:2C_urban_and_rural</a></td>
</tr>
<tr>
<td>building</td>
<td>building</td>
<td>yes</td>
<td><a href="https://wiki.openstreetmap.org/wiki/Key:building#Values">https://wiki.openstreetmap.org/wiki/Key:building#Values</a></td>
</tr>
<tr>
<td>waterway</td>
<td>waterway</td>
<td>stream</td>
<td><a href="https://wiki.openstreetmap.org/wiki/Key:waterway">https://wiki.openstreetmap.org/wiki/Key:waterway</a></td>
</tr>
<tr>
<td>road</td>
<td>highway</td>
<td>residential</td>
<td><a href="https://wiki.openstreetmap.org/wiki/Highways#Classification">https://wiki.openstreetmap.org/wiki/Highways#Classification</a></td>
</tr>
<tr>
<td>powerline</td>
<td>power</td>
<td>line</td>
<td><a href="https://wiki.openstreetmap.org/wiki/Power_lines#keys_and_values">https://wiki.openstreetmap.org/wiki/Power_lines#keys_and_values</a></td>
</tr>
</tbody>
</table>
We "draw" our first building.

Step by step:

We check the region where we have in mind to map

We will map our first building in Santa Barbara, Terceira

1. We open the following link:
   https://www.openstreetmap.org/?map=16/38.6949/-27.3336

   The map shows a lot more as we saw until now.
   Therefore - as every map - OSM offers a "Legend". For end users they call it "Map key".
   You find the "Legend", clicking on the "I". When you click on it it changes the colour to green.

   You know meanwhile, - OSM-wiki is our friend - therefore some links to map features:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>all features</td>
<td><a href="https://wiki.openstreetmap.org/wiki/Map_features">https://wiki.openstreetmap.org/wiki/Map_features</a></td>
</tr>
<tr>
<td>landuse</td>
<td><a href="https://wiki.openstreetmap.org/wiki/Map_features#Landuse">https://wiki.openstreetmap.org/wiki/Map_features#Landuse</a></td>
</tr>
</tbody>
</table>
   | rural - agricultural landuse | https://wiki.openstreetmap.org/wiki/Map_features#Common_Landuse_Key_Values - Rural_and_agricultural_land }
All explanatory materials - forms and completed solutions were offered to the students on our wiki page.

Very helpful were also the direct links to the tasks to be performed in the Tasking Manager, so that the students were guided to the mapping tasks by a simple click.

This helps to avoid error-prone communication.

In any case, difficulties are always to be expected with beginners if
1. already mapped objects in JOSM are not congruent with the satellite images and
2. the very first upload to JOSM requires the authentication with OAuth.

For this reason, we have uploaded two step-by-step solutions as worksheets in the wiki, which can be used by students in case they have never dealt with the topic before.

These files are also in the appendix and on the wiki page.
Links:
[2] https://youtu.be/0z1tsd1MzSM

Appendix
- Tools to know for mapping OSM - JOSM - Tasking Manager
- Solution Tools_to_know_for_mapping_OSM - JOSM - Tasking Manager
- What we see on the map? - How objects are saved in the OSM Database?
- Solution What we see on the map? - How objects are saved in the OSM Database?
- Useful tags for our mapathon
- Useful tags for our mapathon - Solution
- Mapping - JOSM/Tasking Manager - we map in Terceira
- Adjust imagery offset
- JOSM - First Upload Authentication