## BeLux Mapathon 2023

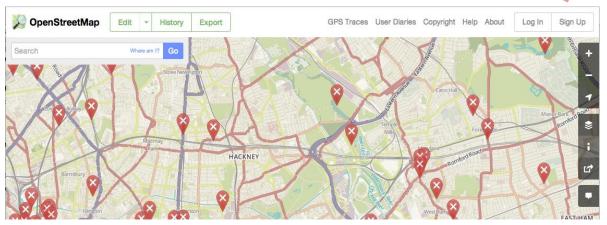
### Overview

- 1. Make an OSM account
- 2. Pick a task in the Tasking Manager
- 3. Map all objects asked for and save (often!)
- 4. When ready: close your mapping window and mark your task as done!

# Getting started

- → Create an OSM account: go to <a href="https://www.openstreetmap.org">www.openstreetmap.org</a>
- → Click on "Sign Up" and fill in the form

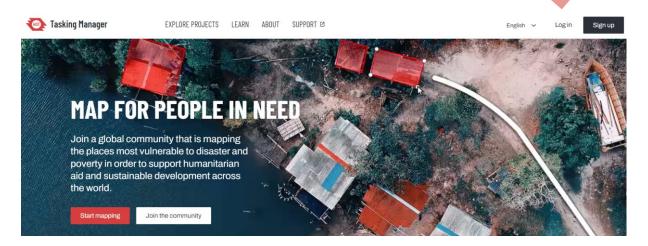




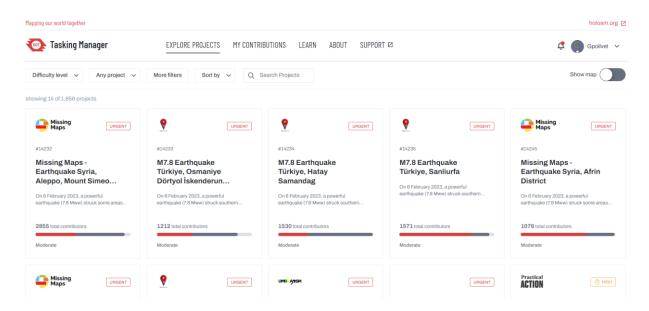
- → Open your e-mail account and open the Welcome message to confirm your account (also check your spam folder!). You will be taken to the OpenStreetMap welcome page.
- → You'll then be able to start mapping.

# Start a Missing Maps task

- → The Humanitarian OpenStreetMap team coordinates all work from the **Tasking Manager**: go to https://tasks.hotosm.org/ and choose English as language.
- → If you are not yet logged in on your OSM account, then do log in.



- → Click on "Start mapping"
- → Navigate to today's task: Use the search function to find the task you will be working on today ("Search projects"). The organizers will tell you the number of the task to search for.



- Click on the selected project to open it. You will see a short description of the project with an indication of the type of objects that need to be mapped (e.g. roads, buildings,...)
- Click on "Contribute" (bottom right).

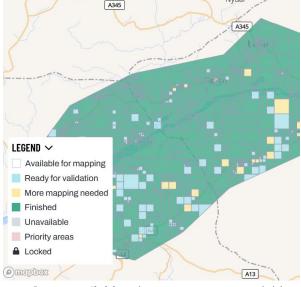
#### **Tasking manager Instructions**

Under "Instructions" you can find information on how to compete the task:

- → Instructions for mapping: e.g. types of objects that need to be mapped, including priorities for mapping (e.g. buildings, roads,...).
- → Imagery: Bing is the default satellite imagery HOT-OSM uses; however, for certain tasks, you may be asked to work with other imagery.
- → Changeset Comment: this is a comment made at the end of a period of editing (changeset) that tags the data with the task. This helps future interpretation of the data you created.

#### What do the squares mean?

- Each task is broken down into little squares.
- You can select a square and this then becomes the area you will start mapping.
- Each square is colour-coded, so you know whether it needs to be mapped or not. Click on the legend to find out the status of each square.



- → Available for mapping: You can pick this square!
- → Ready for validation: The mapping of this square is complete, but it is waiting to be validated (checked) by another user.
- → More mapping needed: Somebody has already worked on this square, but more work is needed. Read the comments to know what needs to be done.
- → Finished: This square has been mapped and validated. No more mapping is needed.
- → Unavailable: This square is not available
- → Priority area: These squares are to be mapped first
- → Locked: This square is currently being mapped by another user

#### Pick a square and start contributing

- → Choose "iD Editor" under "Editor" (bottom of window). If you are mapping for the first time, our advice is to use "iD editor". More experienced user can make use of "JOSM". (if you're unable to see the dropdown menu, you may need to use a different internet browser)
- → Click on a square that is available and then push the red button "Map selected task" (bottom right). This square is yours now to complete!

#### Task too big? Split it up!

- It's better to map a lot of little squares than get stuck on a large one. It's easy to split a square into four smaller ones.
- To do this, first pick the square you would like to map. Then click the "Split task" link as seen below.



SPLIT TASK



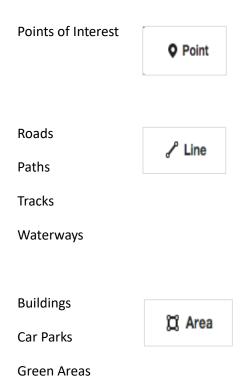
# Your first mapping session

- iD Editor allows you to edit OpenStreetMap within an internet browser.
- Easy and simple to use for general OSM purposes or for HOT co-ordinated mapping.
- Follow the 'Walkthrough' best introduction to the iD Editor and editing process, or click on the help button at the bottom right of the iD map window!



Read more: http://learnosm.org/en/beginner/id-editor/

#### Choose what to map in ID



# An example: mapping roads

- To start digitising, click on the type of data you'll be creating. For roads, select "Line".
- Then click on different positions along the line you want to map.

#### **End drawing**

 You can complete the line by either double-clicking when making your final point or click again over your final point (a light red circle should appear when you hover over the point).



When adding roads, make sure your new road shares points with the roads it crosses or joins.
 One of the main uses of mapping roads is to allow routing, this will not work if you don't share points between roads.
 While you're mapping your road, simply click on the road you need to join.

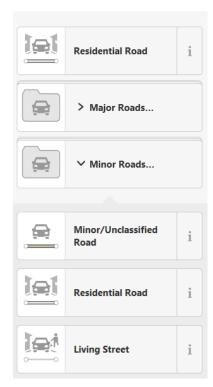
#### Adding tags

- You'll then be asked to 'tag' the feature by selecting its type.
- You may be asked to specify the type of feature in more detail.
   For roads, for example, you can specify different types of roads.

Click the information button for a description of the feature if you're unsure.

#### Add more tags!

 You then can add further detail about the feature, such as a road name, ... but this of course only if you know it. Also road characteristics such as speed limit, number of lanes, etc. can be added.



#### Save regularly!

If you have digitized a feature that enters another square (e.g. a road) please save this straight away to avoid duplicates with other users mapping adjacent squares.

#### Completing and saving a square within iD

- Once you've finished mapping (either you've completed the square or run out of time), you'll
  need to save your changes to OpenStreetMap <u>and</u> your work to the Tasking Manager.
- To save your changes in OSM, click on the 'Save' button at the top of the map.
- You'll then be shown your changes in a list and notified of any features that have not been tagged.
- Add the Changeset Comment (found back in the Task Instructions on the Tasking Manager). Include some info about what you mapped, e.g.: "added houses and roads".
- Click 'Upload' to upload your changes.

#### Completing and saving a square: in the Tasking Manager

- You also need to save your work in the Tasking Manager, so other HOT contributors know what you've done!
- Navigate back to the Tasking Manager window open on your browser, indicate if you have mapped the square completely or not and add a comment about what you could or couldn't do.
- Click on "Submit task".

# Mapping buildings

Add parks, buildings, lakes or other areas to the map.

Shortcut: 3

- Choose the "Area" button
- Click on the corner of the building you want to map.
- Finish the outline of the building by double clicking on the last corner (you can also finish the building by clicking on the first corner you added).





- You can move each of the corners to improve its location.
- Select the building and click on the little triangle in the middle of a line to add an extra point to the building.
- Now click on the outline of the polygon to mark it as a building.

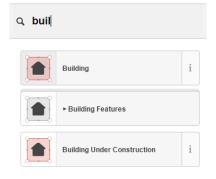
We are trying to map the building footprint. So don't leave gaps for trees growing over houses. Roofs and high buildings might make it a bit harder to guess the footprint.





#### A building without information is useless!

- You have to add at least one meaningful tag before moving on.
- With your polygon selected, you can search for "building" or select the general building type within the building category.
   Don't be tempted to add a specific building category, as this is very hard to make out based on the images.



#### **Quicker mapping**

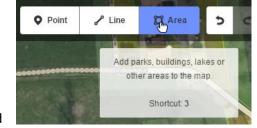
- It's possible to copy-paste buildings once they are ready. Simply select a nice building and use ctrl+c and ctrl+v.
- Use this option if there are many identical buildings. Or you could make a simple building outline, move it on top of a building in the image and shift the corners into the right place.
   Do not use this approach to map buildings that are only partly correct! This will cause a lot of effort to others later on.

### Mapping residential areas

Residential areas are bits of land which are largely used for housing. In OpenStreetMap, we generally start with a rough outline: one big polygon marking an entire village. Then later, maybe someone will split the polygon, often along main roads. They may then exclude the business part of town, or the parks. But it is entirely acceptable to draw features on top of residential areas too.

There are no hard rules as to what exactly the extent is of a residential area. Don't draw residential areas consisting of just one house. Don't draw the outline on top of houses, but around them.

- Choose the Area button.
- Click on the location where you want to start the outline and digitise the outline point by point.



- Finish the outline of the area by double clicking where you want to add the last point (you can also finish by clicking on the first point you added).
- Click on one of the points and shift it to improve its location if needed.
- Click on the little triangle between two points to add more points if needed.

#### Adding tags

- Click on the outline of the area to mark it as a residential area (=tagging). If the area is flashing red, you're ready to tag.
- You have to add at least one meaningful tag before moving on.
- With your polygon selected, you can search for "residential" or select the Residential category within the "Landuse" type.
- The next area you draw, the editor will already suggest residential area as a tag.

### Classification of roads

OpenStreetMap classifies roads according to their local importance and function. A main road in Africa might not look like a main road does in Belgium, but it may have the same function. So it will be part of the same class. It is hard to identify the type of road from images alone. In case of doubt, the fall-back option is to use 'unclassified' for connecting roads, and 'residential road' for roads within towns and villages.

Definition of roads in general: <a href="https://wiki.openstreetmap.org/wiki/Key:highway">https://wiki.openstreetmap.org/wiki/Key:highway</a>

Proposal for African road tagging: <a href="http://wiki.openstreetmap.org/wiki/Highway">http://wiki.openstreetmap.org/wiki/Highway</a> Tag Africa

West African roads:

https://wiki.openstreetmap.org/wiki/User:Bgirardot/West African HOT Mapping Tips

East African roads:

https://wiki.openstreetmap.org/wiki/East Africa Tagging Guidelines

Tag	Description
Motorway	A motorway just like in Belgium, dual carriageway with separation, no roundabouts and red lights etc.
Trunk road	A main road with separated lanes but with traffic lights and the like.
Primary road	Main roads connecting large cities. In Belgium they generally have an N number. In Africa these can be large paved roads, but often they are dirt roads.  Big avenues in cities.
Secondary road	Main roads connecting smaller towns and cities, and/or roads with less traffic. Large roads in cities.
Tertiary road	Main roads connecting smaller towns or villages to a larger city. Important neighbourhood roads in cities.
Residential road	Smaller roads within cities, towns and villages, generally surrounded by houses.
Unclassified road	Small public road outside the cities. Generally the connection between hamlets or individual houses to a larger road or place.
Track	Agricultural or forestry road. In Belgium generally only unpaved roads get this classification. In Africa, only used for access roads to fields and the like.
Path	A path generally accessible for cyclists or pedestrians only. In Africa, only used if the road can't reasonably be used by a good 4x4 car.
Steps	Use steps for parts of paths that consist of steps.

### Options when selecting *Lines*

Button	Function
<b>(3)</b>	Change the direction of a line (use it to make sure water goes downhill or the one-way of a road is correct)
•	Make straight angles where possible
<b>⊕</b>	Move the entire object
<b>①</b>	Make the line into a circle
	Delete the object from the database

### Options when selecting a *Point*

Button	Function	
You can move any point by selecting it and keeping the left mouse button activated.		
*	Cut the line into two parts at this point.	
•	Separate two lines or polygons that share this point (for example two buildings that are joined but shouldn't be)	
•	Continue this line (if you want to enlarge an existing road)	
	Delete the object from the database	

### Options when you select an Area

Button	Function
0	Turn the area around
<b>(1)</b>	Make straight corners
<b>(+)</b>	Move the entire area
<b>③</b>	Make the area circular
	Delete from the database

### More options

#### **Background layers**

You can often choose between several background layers. To see what's available, click on the Map Layer icon on the right-hand side of the screen.

iD will select the best available imagery itself. Sometimes, the Tasking Manager will provide you with "Custom" imagery. Click on the magnifying glass to see where it gets the images from.

It makes sense to look through all the available imagery. Sometimes one is more recent than the other, or you might find a less cloudy image.

An extra layer is the "OpenStreetMap GPS traces". These are GPS tracks made by OSM volunteers. Though GPS have a margin of error, they can help you find paths underneath trees, or analyse if the image is correct. Unfortunately, there are few GPS traces available in our areas of interest.

When the imagery is badly aligned to reality, you can adjust it with the last button. You'll see this is the case if all the roads are positioned next to their location in the image. But ask for help before experimenting with this!

