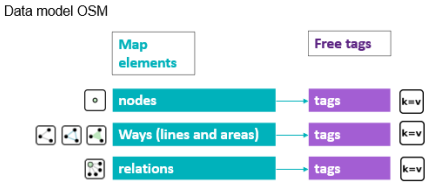
D4A Solution – Existing cycling infrastructure via Open Street Map

Name of your institution and contact	**Traffic <of> data – BE Pilot** **Intercommunale Leiedal – Inge Wydhooge, Aurelie Van Obbergen**
Place of the implemented solution	South-West-Flanders
Implementation level (e.g. internal, municipal, intercommunal, regional)	Intercommunal
Dimension	• Technical
Subdimension	• Data management
Problem	There is no authentic government data source available with existing cycling infrastructure on Flemish level. Hence, municipalities have no overview of length of cycling infrastructure (in terms of maintenance, …), evolution in amount of cycling infrastructure (e.g. for reporting purposes, …) or potential problem areas where policy (e.g. speed zoning) is not correctly aligned with (lack of) infrastructure. Maintaining a dataset with cycling infrastructure is time consuming and prone to mistakes (forgetting to input, gets outdated).
Solution	Usage of Open Street Map to create a new data layer with existing cycling infrastructure, aligned with categories that are relevant for municipal mobility experts and policy makers. Via extensive analysis of the Open Street Map data (and specifically the 'CyclOSM' data, a subset of OSM), a combination of different features and tags was made to substract and rearrange the existing OSM data for specific use in the 'Traffic of data' platform. By combining the OSM data, corresponding 'infrastructural types' were created that are well-known by mobility experts and are used for policy purposes. E.g. 'cycling zone', 'adjacent cycle path', … This is applicable/useful for all mobility experts and policy makers in Flanders, as it uses open data that is available on regional/Flemish level, and translates them into categories that are linked with Flemish mobility policy.
Feedback	Good solution to create a data layer (that was non existent) without having to map the area from scratch. Temporary solution, while waiting on regional (Flemish) initiative to create a standardized governmental dataset.

	Remark: quality of the data set is depending on quality of the Open Street Map data, which is depending on the local community that is feeding Open Street Map. To improve data quality, municipalities can 1) stimulate citizens to contribute to Open Street Map, 2) or mobility experts within the municipality can decide to become a contributor to Open Street Map themselves to add certain data. This has the advantage that other applications using OSM as a source, will also benefit from the efforts done to ameliorate OSM data.
Format (e.g. Open Source)	Source = Open Street Map = open source There are several portal websites for downloading OSM data in different open source formats (shapefile, OSM-format). In terms of output, the OSM format is the most complete, containing all 'tag' information relevant to the project.
Links	Open Street Map (standard): https://www.openstreetmap.org/#map=18/50.824807/3.263530 CyclOSM: https://www.openstreetmap.org/#map=18/50.824807/3.264200&layers=Y Wiki : https://wiki.openstreetmap.org/ Examples of download portals: - Geofabric : **http://download.geofabrik.de/** - BBike : **https://download.bbbike.org/osm/bbbike/** - API - **https://wiki.openstreetmap.org/wiki/Overpass_API** - https://pgosm-flex.com/
Screenshots, visuals, images	The datamodel of Open Street Map consists of elements and associated tags  Based on the tags, we can make a selection of bicycle-related information and translate them into categories used within the Flemish mobility policy.