

## Digiroad Data Publication 5/2019

The Digiroad Publication 5/2019 includes road link geometry obtained from the National Land Survey Topographic Database in November 28<sup>th</sup> 2019.

- **The road address network data:** parallels the situation in the Road Register data as it was in June 2019.
- **Concerning data objects of the road network:** the data parallels the situation as it was in the end of October 2019, excluding lane data.
- **Street network data objects:** included based on the situation in November 2019.
- **New asset added to Digiroad, road work**

### Road work

Road has been added to Digiroad as a new data object. It allows users to add targets to network where road works are being carried out. Data object will be further developed, allowing classification based on the type of the road work. The data object requires an estimate of the starting and finishing date.

There are relatively few road work objects and they are mainly located on the street network.

### Maximum height allowed for a vehicle

Maximum allowed height-restrictions have been developed. The new publication includes all of the maximum allowed height-restrictions. The information has been obtained from Väylä's Road registry (height restriction data object).

### Road affected by thawing

Digiroad now has weight restrictions and time period estimates for roads affected by thawing (start and end date, does thawing occur every year).

### Maximum weight per axle allowed for a vehicle

Maximum allowed weight per axle allowed for vehicle now allows maintaining axle weight for 2 and 3 axle vehicles. Descriptions can be found from Description of data objects.

## Published data objects

The Digiroad publication 5/2019 includes the following data objects (road work as the new data object):

- Road link
- Manoeuvre
- Public transport stop
- Traffic light
- Pedestrian crossing
- Traffic Sign
- Directional traffic sign
- Railway level crossing
- Barrier
- Speed limit
- Maximum allowed -restrictions
- Road work
- Lit road
- Paved road
- Traffic volume
- Road affected by thawing
- Width
- Vehicle specific restriction
- Vehicle with hazardous load (VAK)
- Bus lane
- E-road number
- Exit number
- Speed limit during winter
- Forest road turnaround point (pilot phase)
- Service
  - Customs
  - Frontier crossing
  - Rest area
  - Airport
  - Ferry terminal
  - Taxi stand
  - Bus station
  - Railway station
  - Parking area
  - Car shipping terminal
  - Coach or lorry parking
  - Parking building

## Data Structure

The datasets are delivered in zip-files including:

1. All data, excluding public transport bus stops, are divided according to the extraction areas in Esri shape files.
2. Public transport bus stops, covering the whole area of Finland in a single Esri shape file.
3. Data in GeoPackage format.

The coordinate system is ETRS-TM35FIN (EPSG: 3067).

All the directions of digitizing in the road links have been unified according to the cardinal directions. The starting point of a road link is always the southern end point of the link. However, the starting point of a link in the fully East-West direction is the western endpoint. Due to the unification of the directions of digitizing, the first house number on the right and left side may be larger than the final house number on the right and left side.

Furthermore, changes in speed limits and maximum allowed restrictions are available via TN-ITS API. More information on TN-ITS is available at the [Digiroad website](#).

This publication does not include separate quality reports.

## Road Link Data

The geometry is obtained from the National Land Survey of Finland with a time stamp of November 28<sup>th</sup> 2019.

The link ID (LINK\_ID) by the Finnish Transport Agency will be used as a unique road link ID. The MML-ID will continue to be published as part of the attribute data of the road links but will not be used for connecting the road link and data object.

The Road link is the linear reference for dynamic segmentation. Reference chains are no longer used.

The road links include the following attribute data:

- Functional class
- Direction of traffic flow
- Road link type
- Administrative class
- Bridge, Underpass or Tunnel
- Location and elevation precision
- Start/End M value
- Road name in Finnish
- Road name in Swedish
- Road name in Sami
- First and last house number on right and left
- Municipal number
- Road number and a number of the part of a road (based on road address network by FTA)
- Road classification from the Topographic database (slightly different from Digiroad's own classification in which some of the Topographic database classes have been combined).
- Carriageway number (based on road address network by FTA)
- Start and end distance from the beginning of the road part (based on road address network by FTA)
- Link ID
- MML-ID
- Last modified timestamp
- Direction of digitization in relation to the data provided by the National Land Survey
- Link status
- Data source

Tracks (by the National Land Survey) is included in the new geometry. The functional class of the track and the road link type are both marked as "track" (= "polku" in Finnish).

## Digiroad R and K

The differences between various data types are described in the *Description of Data Objects* document chapter 3.5. *Description of Data Objects* document is attached in the data publication.

## Next publication

The estimated timetable for the next Digiroad publication is in the winter of 2020.

## Questions? We are happy to help!

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