

NDW Location Services

NLS means NDW Location Services, the name that NDW uses for the expertise integrated in a separate team: at this team all geo-based files are collected, updates are processed and distributed to other applications.

Next to this NLS also offers facilities to other applications in- and outside NDW to retrieve routes via a so-called API (an Application Programming Interface).

The activities of NLS might not always be visible in the foreground, but they are applied broadly: often, when matching measurement data on maps a service provided by NLS is being used invisibly.

Typical activities that fall within this expertise are developing and maintaining map matching algorithms and routing algorithms, but also the maintenance of applications for managing VILD location data and CBM.

Map Matching

Map matching is a term used for dealing with the problem how to relate measured location reference data (e.g. GPS data) to an existing model of a network of roads.

The data can then be projected on a map.

Complex problems might occur while doing this. Therefore, to perform map matching often complex algorithms are used. This is the reason these activities are bundled in an expertise team.



Routing algorithms

Routing algorithms are used to determine what is a possible and/or best route from a starting point to a specific end point in (a model of) a network of roads.

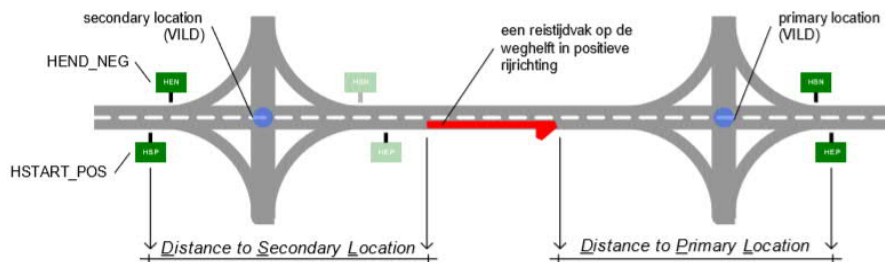
A lot of parameters have a role here, like e.g. one-way traffic. But at NLS also versions and history of the data are stored, in order to make historical analysis possible, whether a specific route existed in the past (was there e.g. a road block at a specific moment?).

VILD (VerkeersInformatie Locatie Database)

VILD is a base file with detailed location reference data on the Dutch A- and N-roads and contains line-, point- and area data.

This file also contains landmarks for drivers on the road like bridge names, parking lots etcetera.

The maintenance of VILD is done by NDW as of 2022 and NLS is building and maintaining an application to manage this data.



CBM

CBM's main goal is to manage measurement sites

- Sites for AVG (Actual traffic data)
- Sites for travel time calculation based on Floating Car Data (FCD)

It is also used to create supportive files for service providers and other NDW systems by creating shapefiles with corrected geometries of all sites.

In order to do this, several maps are used:

- Open Street Map (OSM)
- Bemobile Basemap (for the floating car data)
- Nationaal WegenBestand (NWB, the national road file)
- VerkeersInformatie LocatieDatabase (VILD, see above)

Contract	
ID	1
Prefix	NDW01
Name	NDW01
Descrip...	
MST ID	NDW01
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Downloads

- ⊕ MST
- ⊕ Export NCIS
- ⊕ CSV
- ⊕ GeoJSON linears
- ⊕ GeoJSON points
- ⊕ VILD changes
- ⊕ Validations