

## Development of a software to evaluate road state

**InfraLab** is a civil engineering business-oriented Android application.

InfraLab is conceived to allow technicians to define the pavement condition of a road or of a road network. The product was mandated and is used by InfraLab Inc.

### Goal of the software

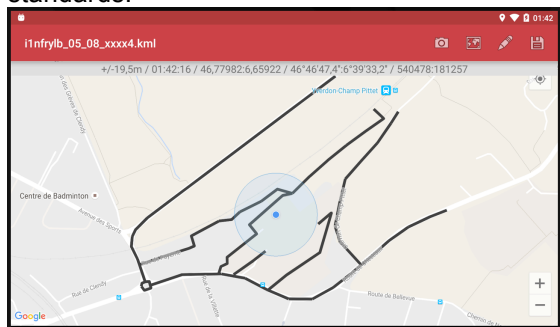
The software allows a technician to define the pavement condition by defining the severity and extent of each distress.



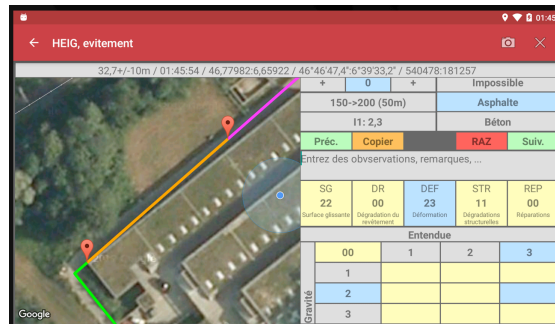
The state of the road section is then expressed in terms of the I1-index, which is based on the Swiss standard (VSS SN640925B, 2003).

### Functionalities

For each section and lane, the operator will have to define the type of road, the distresses together with their extent and severity. After that, the I1-index is calculated for the selected section, in accordance with the Swiss standards.

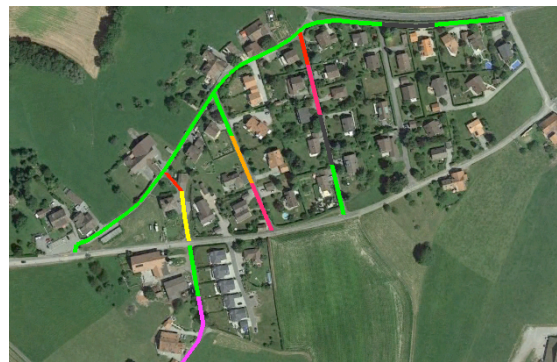


On a map, the pavement condition of a road network, a road, a section or a lane is then displayed.



### Exportation formats

Collected raw data is stored in a specific data model that fits the needs of the user, but data can be exported to KML format as well, in order to be visualised in an existing Geographic Information System, like Google Earth.



### Details

The application was developed in 2016 as a Diploma Work by Valentin Minder (Author), at the University of Applied Sciences Western Switzerland (HEIG-VD/HES-SO). The product is copyrighted to InfraLab and licensed to the Author and University for non-commercial use only.

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