



OBU NeoGLS V2 technical specification sheet



NeoGLS

Intelligent Transport

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NeoGLS



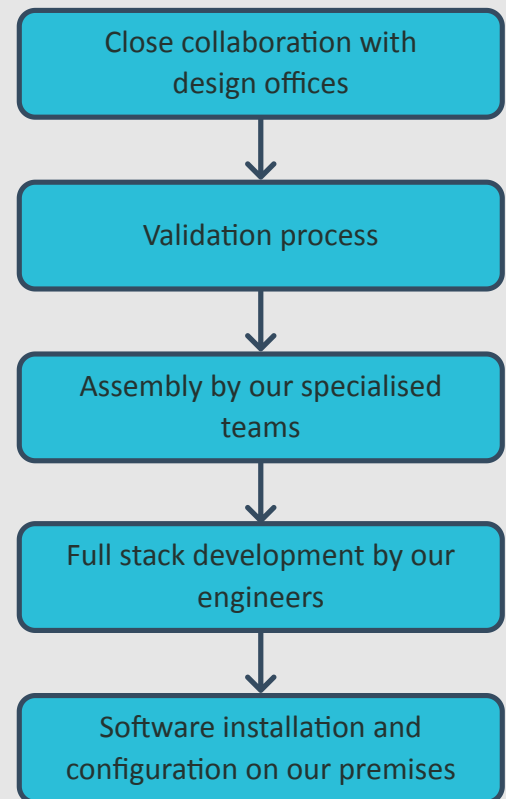
Our benefits

A complete solution, designed and developed internally

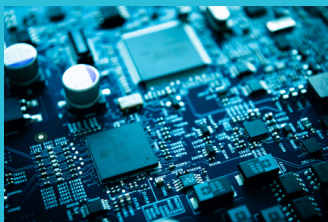
At NeoGLS, we offer you much more than a product : a comprehensive solution, designed and managed **from A to Z**.

From the design of our equipment (RSU and OBU) to the customised integration tailored to your specific needs, every step is handled internally. This gives us in-depth knowledge of our products, optimal responsiveness, and a unique ability to adapt to meet **your challenges**.

Key steps



Our expertise allows us to offer you multiple services :



Physical adaptation of the equipment to meet your requirements in the field



Support for the implementation



Users training



Technical assistance



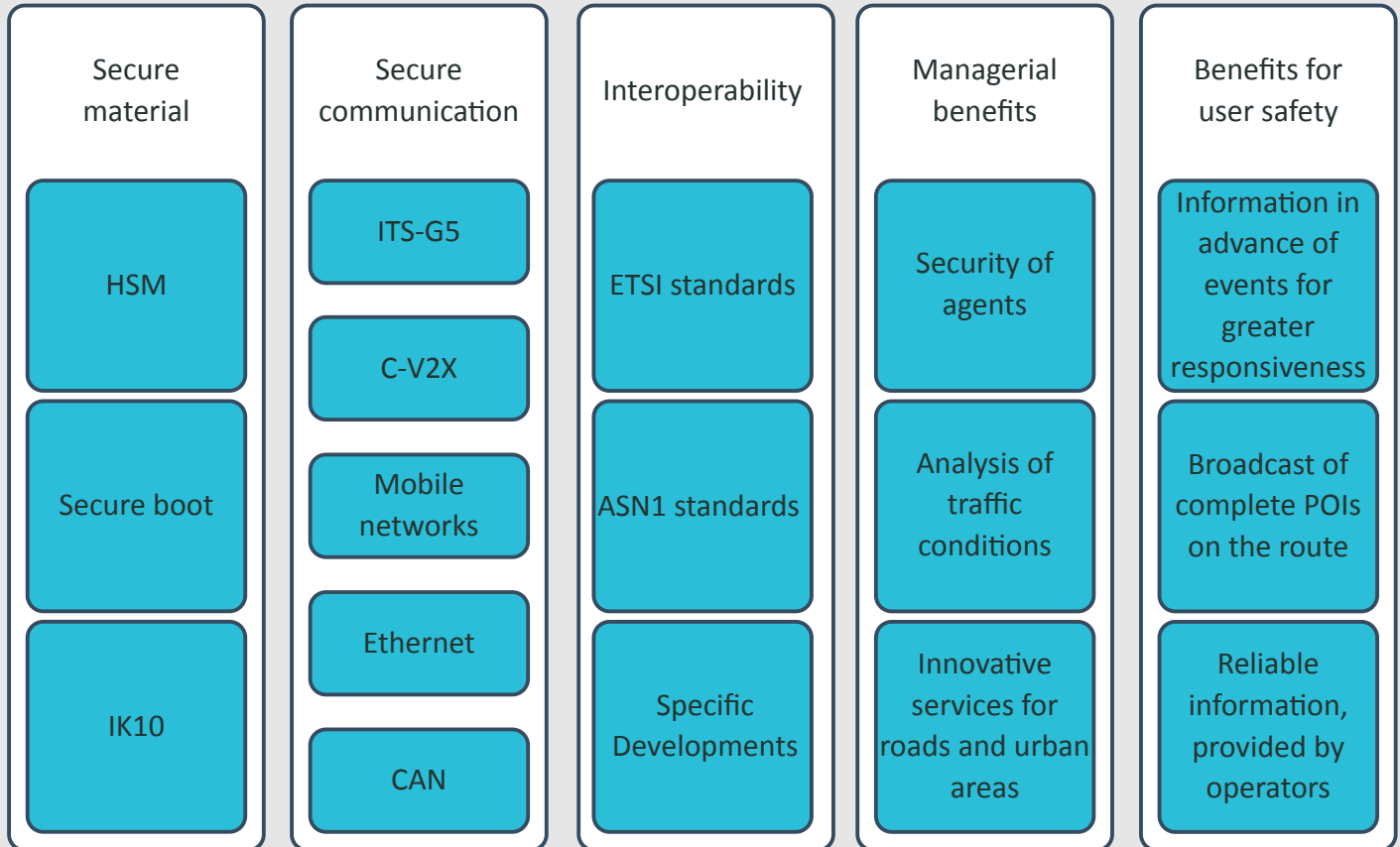
Specific development according to your needs



After-sales service at our site in Martillac

Our solution

Our solution is made up of On Board Units (OBUs) and Road Side Units (RSUs) which can communicate with each other but also with the OBUs and RSUs of other suppliers, thanks to compliance with ETSI standards.



Our solution allows us to offer you numerous use cases meeting various functions, including :

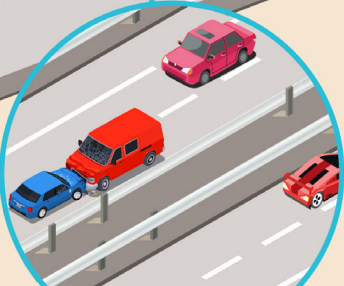


Other solutions :

- Insertion
- Road event alerts
- VMS
- On-demand use cases...



Toll



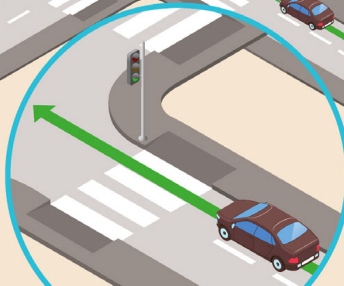
Accident



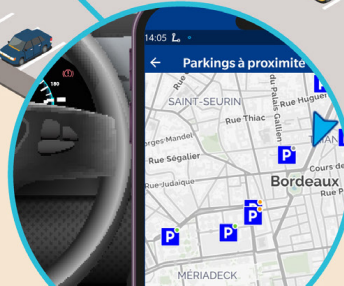
V2X priority



Roadworks



GLOSA



Parking

Technical specifications

On Board Unit (OBU)



Hardware

Storage

- 16GB Flash
- Micro SD

CPU NXP i.MX8

- 4 CORTEX A35
- 1 CORTEX M4

Operating system

Linux Debian 12

Weight and size

- 950 g
- L x w x h : 20,5 x 17,5 x 4,3 cm

Resistance

- Impact : IK10
- -40°C to +70°C

RAM

2 GB

Consumption

< 30W

Power supply

8-36V direct current

- Battery connector + contact to allow a clean and delayed cut-off
- Powered supply available on request

Communication

E/S connector

- 4 isolated digital outputs
- CAN
- 4 digital inputs
- 3 analog inputs

GPS

EGNOS
GALILEO
GLONASS

Cellular modem⁽¹⁾
2G/3G/4G/5G

μSD player

USB

Ethernet (RJ45)
10/100/1000
Mbps

ITS-G5⁽²⁾/CV2X⁽¹⁾⁽²⁾

Antennas and accessories

GPS

Wifi/Bluetooth 5.0

ITS-G5/CV2X

LTE-A / LTE-B

- MobileMark 4G or 5G screw-in or magnetic antenna
- Wifi antenna
- Power supply connector
- Punch button⁽¹⁾

⁽¹⁾ Optional.

⁽²⁾ Possibility of using ITS-G5 and C-V2X simultaneously.

Built-in features

The NeoGLS ITS Stack enables communication with your infrastructure and other manufacturers' OBUs or RSUs, thanks to the integration of the standards listed below. Similarly, the common use cases available are detailed above.

However, other use cases are specifically developed for specific contexts. Since we develop the entire on-board software, we can adapt our solution to your needs by adapting the exchanges described below, both at the message and communication levels.

Each user is different, and we are aware of this. That's why, depending on your situation, we can provide you with remote access to V2X equipment tailored to your internal skills. It is therefore possible to provide access to a configuration GUI with specific rights for each user, as well as to the Linux console for example, as well as access to ITS messages via the API. The box below shows a list of available accesses.

Remote access

- SSH v2
- SNMP
- OpenVPN
- Specific API to retrieve the LDM, in JSON
- SMS API
- MQTT and AMQP (optional)
- On board GUI
- GUI centralizing all of your OBU and RSU



Compliance with standards

Security

- Assisted by an integrated hardware module (HSM) : ETSI TS 103 097
- PKI : ETSI TS 102 941

Communication

- Geonet : ETSI EN 302 636-4-1 et TS 102 636-7-1
 - v1.2.1
 - v1.3.1
- uppertester : ETSI TR 103 099
- GSM : TS 127 007

Messages

- CAM : ETSI EN 302 637-2
- CPM : ETSI TS 103 324 v2.1.1
- DENM : ETSI EN 302 637-3
- IVIM : ETSI TS 103 301
- POIM-PA : ETSI TS 103 916
- SPATEM/MAPEM : ETSI TS 103 301 / SAE J2735
- SSEM/SREM : ETSI TS 103 301 / SAE J2735

These standards also include other standards, such as :

- CDD ETSI TS 102 894
- ITS-AID from l'ETSI TS 102 965
- ITS station communication architecture described in ETSI EN 302 665





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