

SENSORIS members can be found on the SENSORIS website and are organised in the following sectors:

- ⊙ Vehicle Manufacturers
- ⊙ Navigation System Suppliers
- ⊙ Sensor & Component Manufacturers
- ⊙ ADAS manufacturers
- ⊙ Location content & Service providers
- ⊙ Telecom & Cloud Infrastructure Providers
- ⊙ Others

SENSORIS

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SENSORIS

SENSOR INTERFACE SPECIFICATION

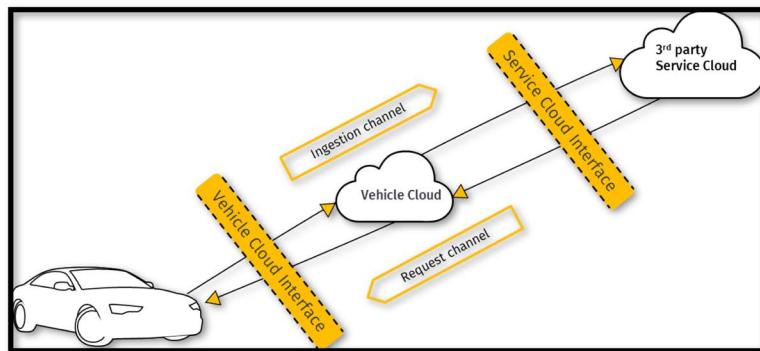
ENABLING CLOUD SERVICES
BASED ON VEHICLE SENSOR DATA

The Vision

SENSORIS - SENSOR Interface Specification - is an open group of actors from the global vehicle industry, including vehicle manufacturers, map and data providers, sensors manufacturers and telecom operators who joined forces to align on a common exchange format of sensor data between the in-vehicle sensors and a dedicated cloud as well as between clouds.

The Solution

Our aim is to address the needs for sensor data transport without the focus on individual use cases. SENSORIS encompasses the description of measurable attributes of the world with the focus on the vehicle and what is visible from the road. On a high focus, this includes transportation related categories, as e.g. road infrastructure (e.g. traffic signs, road surface markings) or traffic information (e.g. hazards, traffic conditions) but also unrelated information as e.g. weather information or roadside cultivation.



Data Message Channel

Data Economy

With the magnitude of sensor data collected within a vehicle and the costs estimate of transportation via cell phone technology the reduction of transmitted sensor data to the absolute necessary is a critical point. Using state of the art data encoding technology allows for a balance between developer friendly usage in a variety of programming languages and a small data size to minimize costs.

Flexibility

Being Data efficient, SENSORIS still keeps a focus on flexibility allowing transportation of data using individual resolution (higher or lower) and adding individual proprietary data points to allow SENSORIS to be also used for proof of concepts, research and testing scenarios.

Request Channel

A vehicle understanding SENSORIS requests is capable of evaluating the Cloud's need on sensor data to collect and send data only when valuable and necessary.

A Request Message contains all the information, that a vehicle needs to know to understand WHEN, WHERE, under WHICH conditions and HOW MUCH of WHAT set of sensor data to collect and HOW FAST to submit. This allows for a wide usage of existing use cases from Near Real-Time hazard information to long term statistical analyzes to be requested by the cloud and responded by the vehicle.

Membership benefit

- Contribute to future versions of the SENSORIS de facto standard
- Accelerate time-to-market
- Reduce dramatically development costs and complexity
- Broaden options for main stakeholders cooperation

History and achievements

- 2016** Foundation - ERTICO Partnership initiates the SENSORIS Innovation Platform
- 2016 – 2018** Engineering - development of first version of SENSORIS specification
- 2018** Release of SENSORIS v1.0
- 2019 –** Implementation - first SENSORIS based services reaching market

