European Standardization for Navigation based Advanced Driver Assistant Systems (ADAS) - The ADASIS Forum

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Abstract. With the development of navigation based ADAS functions the interface to access this so-called Electronic Horizon data is of rising importance. In the automotive industry standard interfaces are appreciated to reduce development cost and risk. In order to specify an industry standard interface for providing Electronic Horizon the ADASIS [1] Forum has been launched. The Forum is hosted and coordinated by ERTICO[2] and constitutes of more than 30 members including car manufacturers, navigation system and ADAS suppliers, as well as digital map vendors. The forum's purpose is to:

- Define an open standardised data model and structure to represent map data in the vicinity of the vehicle position (i.e. the Electronic Horizon), in which map data is delivered by a navigation system or a general map data server.
- Define an open standardised API to enable ADAS applications to access the Electronic Horizon and position-related data of the vehicle.

A first version of the interface specification is already available and has been tested and validated within the PReVENT[3] project. The results from PReVENT demontrated successfully the feasibility and interroperability of ADASIS. Nevertheless also some shortcomings have been identified, which are currently addressed by the various Forum's workng groups. In fact, a next version of the protocol specifications is under development and will be transmitted to ISO for becoming an international industry standard.

[1] ADASIS = Advanced Driver Assistance System Interface Specification
[2] ERTICO = European ITS organisation
[3] PReVENT is a European industry research project, that has been co-funded by European Commission within 6th framework.