

MSD Additional Data Concept a hidden gem

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eCall data

Exchange of Minimal Set of Data (MSD), containing “emergency relevant” information:

- Vehicle type, VIN number, propulsion type
- Location of incident, previous locations, heading
- eCall type (manual/automatic), timestamp of activation
- Number of passengers

Need and availability of additional data envisaged:

MSD can be extended with optional set of (well defined) data, not exceeding the available number of bytes

EN15722: MSD structure

eCall MSD definition:

MSD				
msdVersion	INTEGER (1..255)	-	M	
msd				
msdStructure				
optionalAdditionalData			O	
oid	RELATIVE-OID			
data	OCTET STRING			

Optional part consists of two elements:

- The OID, referencing contents and definition of the data
- The data itself

Additional Data Registry

- The OID is used to determine meaning and encoding of the optional data.
- A (public) register is being set up, that lists the OID together with definition of data
- A registration procedure is being set up, to ensure additional data is both functional and correctly defined
- PSAPs can choose to implement registered definitions in order to ameliorate the emergency process

Optional Additional Data

Anything can go into the Additional Data block

- Information about the load of the vehicle
- Information about the owner of the vehicle
- Information about the health of the passengers
- Information about the incident itself
- ...

Information can both be static or dynamic (depends on implementation in car)

To overcome limited available bytes:

External Additional Data

External Additional Data

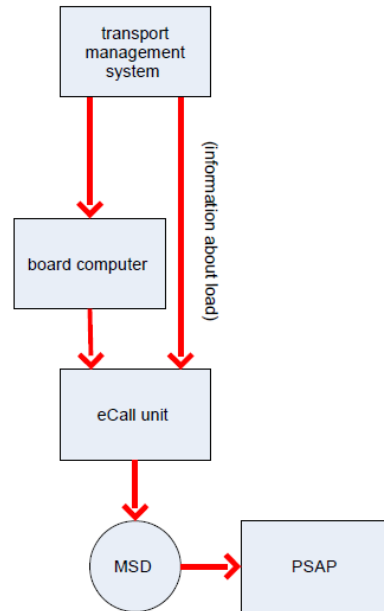
- The available number of bytes for additional data is limited (total MSD can not exceed 140 bytes)
- Although limited, it suffices a whole range of applications:
 - Sensoric information
 - Limited load information
 - ...
- Other data must be obtained via an external source, e.g. a webservice; MSD can contain (reference to) information about type, specification, URI and keys:

External Additional Data

Additional Data: external or not

- Example: additional data concept for HGV (TS 16405), has two schemes: A (MSD only) and B (external additional data)

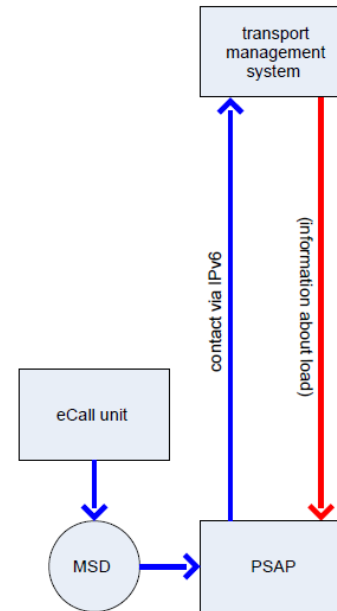
- Additional data available in vehicle



- MSD contains all information

- PSAP uses MSD to get additional data

Additional data not available in vehicle



MSD contains 'link' to additional data

PSAP uses link to get additional data from external source

Envisaged use

- Making information of load of vehicle available to emergency services (in progress, TS 16405, TC278 WG15)
- GLONASS extension as requested by Russia (in progress, TC278 WG15)
- Encoding of TPS data (several initiatives: EeIP, EN16102, etc.)

Work to be done

- Set up proper registry for additional data concepts (in progress, TC 278, WG15)
- Set up proper procedure to get additional data concepts registered, including some sort of certifications (in progress, TC 278, WG15)
- Define standard or 'common practice' for referring to external additional data in the MSD (perhaps extended to the encoding, retrieval and procedures of the data itself)
- Advocate the use of additional data (with or without external data) to optimize emergency process
- Keep it flexible...

Thank you

Questions? Information?

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