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Use of telematics for the European transport of dangerous goods

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- The current situation:

  - For the transport of dangerous goods, an extensive exchange of information is necessary. This exchange is either performed by providing such information on the containments or by accompanying paper documents.
  - For all those involved in the carriage this information is necessary but also for the authorities and emergency services.
  - Today, an increasing number of companies are already using electronic procedures.
  - Moreover, electronic systems are being used extensively which enable the carriers to manage their fleet.

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- The aim:

  - In a first step, a binding provision in the international regulations for the carriage of dangerous goods to make it possible to generally use electronic information concerning the carriage.
  - The permanent availability of electronic transport information in connection with the technical means of positioning and the electronic transmission of these data would enable a more targeted and quicker electronic alerting of public agencies in a second step.
  - Other applications may be added later in a demand-oriented way, for example with regard to safety and security requirements (geofencing) or the use of special infrastructure such as tunnels.

- The way:

  - On the basis of the architecture adopted by the ADR/RID/ADN Joint Meeting, a central component for managing information flows has to be established which provides the necessary administrative data, to ensure the flow of information between the carriers and the government agencies.
  - To ensure an exchange of information, a supplement to ADR/RID/ADN and the CEN standards has to define the technical system on which the flow of information is based. It is necessary to lay down a definite electronic format in a standard and this requires to give a relevant mandate to the CEN.

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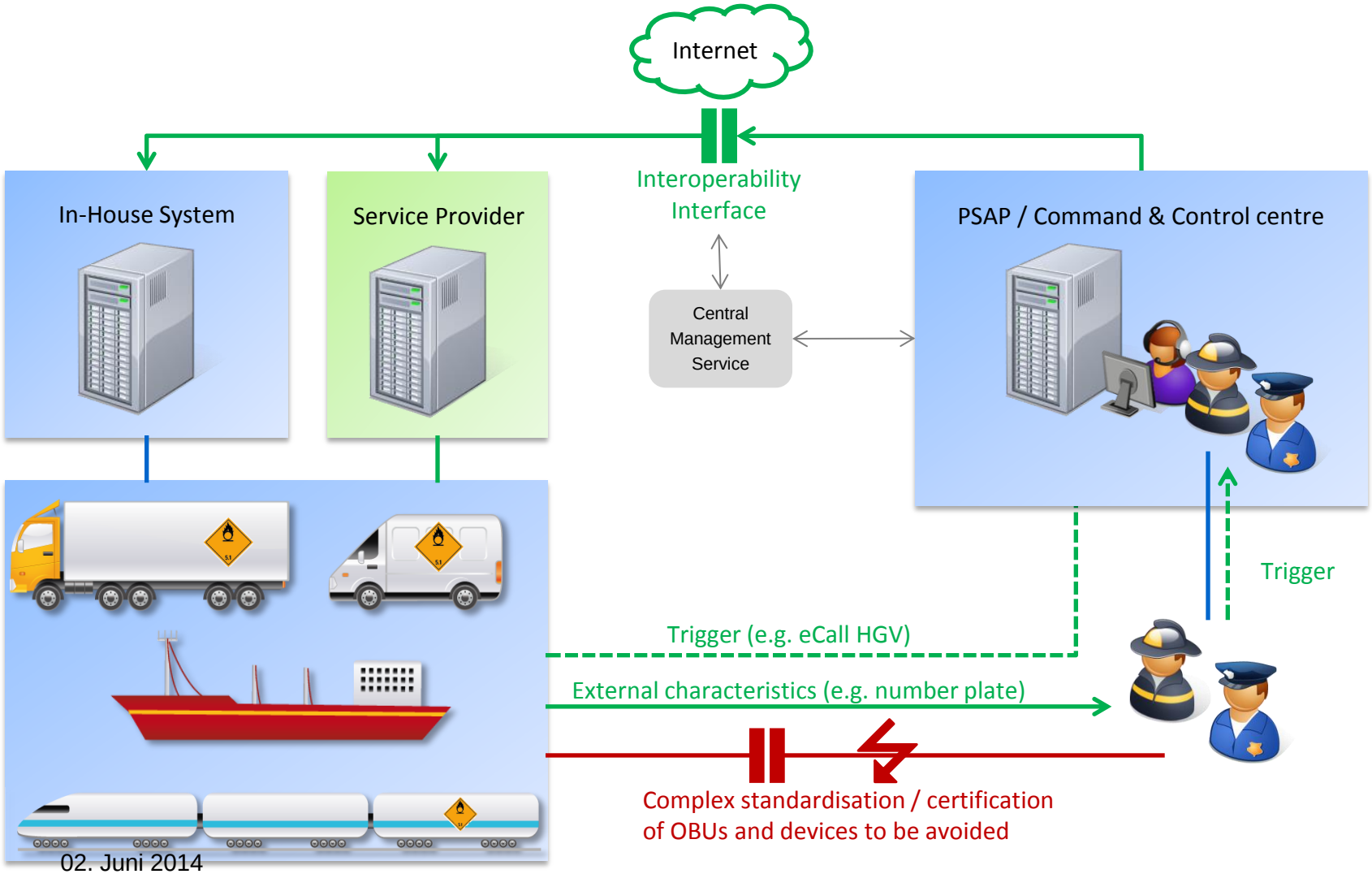
DG- Telematics System



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- The assumptions and definitions in the architecture:

  - The adopted architecture shall ensure that neither the companies nor the government agencies have to make extensive investments in new hardware.
  - The different national systems to control policing and to organize the rescue services as well as the necessary means for the transmission of the necessary data (by phone, fax, SMS, e-mail etc.) shall remain unchanged.
  - The provision of the specific data for each individual carriage shall remain with the companies/ commissioned third party service providers.
  - As regards general IT solutions which are already existing for a specific transport mode or are being developed, such as TAF-TSI, ECall or RIS (River Information System), it should be possible for these to interact with the architecture without any difficulty.
  - The telematics system for the transport of dangerous goods should permit further applications which are of importance in the individual countries.

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- The specific design of the interface to information management:

  - It is necessary in the case where data must be exchanged that this exchange can be performed without delay.
  - For this purpose, the information must be stored in the system via a physical interface (management centre) setting forth which government agencies are allowed to participate in this exchange and to what extent (definition of roles).
  - Moreover, this centre will also be responsible for the management of electronic certificates of the registered stakeholders which enable the safe handling of the transactions provided by the system.

- The companies must also determine who may participate in this exchange and under what conditions. In addition, the management centre must in each individual case be informed that a transport unit carrying dangerous goods is en route and how to retrieve the pertaining dataset. This means in practice that before starting a carriage the relevant identification must be deposited together with a clear service access point for the retrieval of the dataset.
- All processes in connection with the operation of the management centre must be laid down by legal provisions and supplementing standards. For this purpose, the EU should issue a standardization mandate. Apart from standards relating to the technical design of the interface this also concerns standards for the certification of implementations of the service.

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- The importance of other projects:

  - Within the framework of the introduction of the ECall for HGV it might be possible with this ECall to transmit information on the carriage of dangerous goods and clear identification of the vehicle for the retrieval of the dataset with the dangerous goods data.
  - Talks are held to coordinate the further development of the RIS in order to take account of the planned architecture in this course.
  - Talks should continue in order to assess the interactions with TAF-TSI regulation and electronic consignment note (eRail freight) in rail transport.
  - For field trials of the proposed architecture and of the interfaces it might be useful to continue the implementation of national or international pilot projects which should be monitored by a coordination project at European level.

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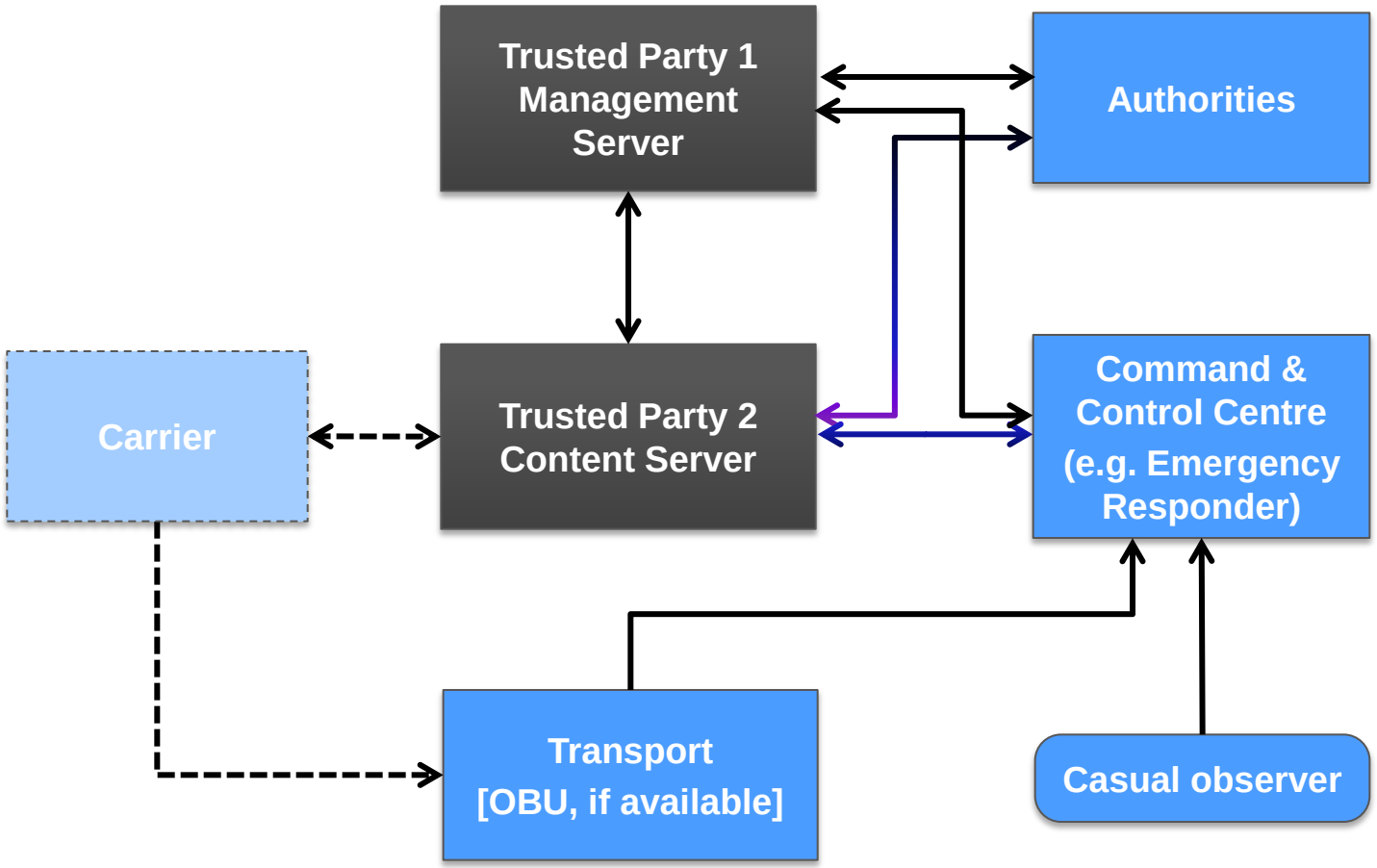
Telematics system high-level architecture



Thank you for your attention!

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