Intelligent and secure truck parking

The objective of parking area operators is to make the optimum use of the existing truck parking capacities along the highways and to improve safety and security on their (truck) parking area. "Intelligent Truck Parking" will contribute towards optimising the use of available parking areas, which are a limited resource in many corridors today. The service will also enable efficient management of roads and parking areas which may become congested or overloaded with goods vehicles at certain times due to traffic/driving restrictions, weather or road conditions. Access to properly equipped parking and rest areas will reduce the risk for driving on "overtime", will reduce driver fatigue, improve cargo security, and solve other problems related to exceeding driving periods and "wild" overnight parking. This in turn will reduce the sanitary, safety and security problems affecting truck drivers. Reservation services support the individual reservation with the help of telematics services on board of the goods vehicle via internet, call-centre and smartphone app.

ITP Deployment Guideline vision, mission and focus

Information about available parking spaces at the different parking areas (in a section) is provided and leads to a more balanced load of the different rest areas. Thus ITP reduces construction of new rest areas or parking lots on existing rest areas. Furthermore, better informed truck drivers can pro-actively change their route or park earlier and find a safe and secure parking place more easily, sleep well and hence benefit from improved concentration. This information could be provided on-trip and pre-trip using different channels of information and different end-user devices. The service may comprise common information as well as personalised (individual) information.

The implementation of an ITP system has to be considered globally regarding the context and the level of saturation in the areas. In some countries or regions, building new parking spaces

or new parking areas is more economic than investing in ITS solutions for truck parking management. The main problem is in the detection of the occupancy of the areas. Equipping a truck area with an ITP system costs a lot of money but the ROI generated by this investment is very low - parking is free for the drivers in a lot of countries. Moreover, free truck parking doesn't encourage other stakeholders (e.g. logistics platforms or hauliers) to invest in truck parking areas. The Deployment Guideline focuses on Pan-European understanding of the functionality and the benefit of ITP and its services. Another focal point is the Common look & feel for the truck driver. The document focusses on the information passed along the service chain from operator via service provider to truck driver and therefore addresses the data flow governed by Delegated Regulation (EU) 885/2013.

Current Status of Deployment

Most European truck parking areas are operated without the use of ITS or telematics services. Access to national databases containing basic – more or less static – information such as the location, the maximum capacity and services offered at the parking/service area is currently set-up Europe wide in the course of implementing Delegated Regulation (EU) 885/2013.

Following the growing demand for parking capacity in recent years, road operators and service providers furthermore started collecting real-time data using various detection systems and implementing parking management systems. Up to now these projects are mostly isolated applications and/or pilot projects. Coordination is still at a low level and due to the relatively new domain there is not much experience on how best to implement and operate such systems. It is recognized that due to the obvious international dimension of freight traffic, efforts to build up ITS services must be harmonised.

Pre-trip travel planning has developed towards dynamic smartphone applications and easy-to-access websites with TPA as Point of interest, or to information platforms. A few European road operators employ websites as a means of information provision, which can assist with route planning.

On-trip information using a Variable Messages Sign (VMS) is piloted in only a few instances across Europe. These countries are at least experimenting with ITP services at parking areas. The use of in-vehicle navigation systems with parking information through RDS-TMC (Radio Data System Traffic Message Channel) is also possible. In-vehicle information systems seem to be the best basis for driver guidance because information about free parking areas is given in an explicit way. The drivers should only receive the information about free parking lots.

There is also an exponentially growing market for smartphones which can act as in-vehicle navigation systems and/or provide parking information through parking apps on smartphones.

The responsibility for combating crime is a shared responsibility of private stakeholders (shippers, transport companies, insurance companies, drivers and operators of parking areas) as well as public stakeholders. In preparing a classification for and certification of these parking areas, a broad consultation took place. This resulted in a classification as described in the Annex to the EU *resolution on preventing and combating road freight crime and providing secure truck parking areas* (Council meeting of the Ministers of Justice and Home Affairs, 8 and 9 November 2010).

Deployment Guideline harmonisation requirements

Two different services with regard to ITP are considered in the DG:

- Information and guidance (on truck parking areas)
- Reservation (of truck parking spaces)

Distributing static and dynamic information on the truck parking situation on the TEN-T networks and access roads – originally produced for managing parking space – supports the observation of rest and driving periods for drivers, reduces dangerous parking and improves driver, load and vehicle safety and security. This information can be provided on-trip and pre-trip using different channels of information and different end-user devices.

The service can be combined with the individual reservation of a truck parking space with the help of telematics services via different devices. A parking space on site is reserved (blocked) and kept free for the pre-identified goods vehicle.

The ITP Deployment Guideline supports the operational level in the Member States deploying "intelligence" at truck parking areas by providing minimum functional, organisational and technical requirement and national examples of deployment, which have been enriched in 2015 with best practice with regard to fulfilling the DG requirements.

COMMISSION DELEGATED REGULATION (EU) No 885/2013, 15 May

A Delegated Regulation supplements the ITS Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles. The Regulation aims to define harmonised and standardised access to Europe-wide data content for information services on safe and secure parking places for trucks and commercial vehicles. The objective is to optimise the information for the driver by providing binding functional specifications for the provision of content for such information services, to optimise the use of parking places as well as to enhance road safety and security for truck drivers.

It shall apply to the provision of information services situated on the trans-European road network (TERN). The ITP Deployment Guideline had been created before the Delegated Regulation and will have to be adapted to reflect the requirements of the regulation. Concrete recommendations for this step have been specified in the EIP+ phase in 2015.

Requirements for the provision of information services

1. Member States shall designate areas where traffic and security conditions require the deployment of information services on the safe and secure parking places. They shall also define priority zones where dynamic information will be provided.

2. The provision of information services shall fulfil the requirements set out in Articles 4 - 7 of the regulation containing:

- Data collection
- Sharing and exchange of data
- Dissemination of information
- Quality management

Assessment of compliance with the requirements

Member States shall designate a national body competent to assess whether the requirements set out in Articles 4 to 7 are fulfilled by service providers, parking operators and road operators. This body shall be impartial and independent from the latter. Member States shall notify the nominated body to the European Commission.

All service providers shall submit a declaration to the designated bodies on their compliance with the requirements set out in Articles 4 to 7 containing the following elements:
(a) a description of the data collected, pursuant to Article 4 collected on safe and secure parking places for trucks and commercial vehicles including the percentage of parking places registered in the information service;
(b) means of dissemination of the information services to users;

(c) coverage of dynamic information services on safe and secure parking places;
(d) quality and availability of the information provided, point of access to the information and the format in which that information is provided.
The designated national bodies shall randomly inspect the correctness of the declarations of a number of public and private service providers and parking operators, and request a demonstration of compliance with the requirements set out in Articles 4 to 7.
The quality of the service may also be assessed using user-generated comment. Every year, the designated bodies shall report to the relevant national authorities on the declarations submitted, as well as on the results of their random inspections.