

# ITS DEPLOYMENT GUIDELINES

## FACT SHEET - UPDATE 2015

### HGV Overtaking Ban

*Service Description –An HGV Overtaking ban service means to channel the heavy goods vehicles onto a single lane (slow lane). The heavy goods vehicles overtaking ban implementation is one of the traffic management measure allowing traffic managers and road operators to propose solution for a better fluidity of their network during peak periods. This traffic control measure constitutes one of the priority services to improve the cohabitation of heavy goods vehicles and private cars on networks with high levels of traffic.*

#### Objectives

- Monitor and manage the HGV traffic flow onto the motorway network
- Improve journey times for light vehicles and safety by reducing vehicle queues caused by slow lorries overtaking
- Ensure a better acceptance of heavy goods vehicles by the other road users.

The service allows traffic managers and road operators to **support better fluidity on the network during peak periods.**



#### General Service Description

During peak or congested periods on the main carriageway, HGV Overtaking may cause vehicles to break or change lanes, giving rise to higher occupancy and lower headways. This causes drivers to reduce their speed.

This speed reduction often causes following vehicles to brake, resulting in a propagation wave of slowing vehicles that travels back along the line of traffic on the main carriageway upstream where the HGV overtakes.

Traffic congestion on the network due to HGV overtaking with a low speed differential result in traffic slowdown in the middle and/or left lanes. The major impact is a decreased capacity of the network.

Additionally, during peak periods when congestion is increased there may also be a higher risk of accidents.

The HGV overtaking ban service is implemented through the deployment of ban signals on the main carriageway. This service intends to organize flow of heavy goods vehicles on the motorway network by channelling them onto a single lane (slow lane) in order to improve the traffic flow conditions.

#### Harmonisation requirements

##### Functional Requirements

Two functional requirements were proposed:

**FR1:** It is recommended to prepare HGV Overtaking ban service implementation with an easy functional decomposition. The proposed seven sub functions may be followed when implementing the service.

1. Prepare the HGV Overtaking ban implementation
2. Collect and analyse data transmitted from monitoring systems
3. Decide the relevant HGV Overtaking ban implementation strategy to apply

4. Inform partners and users about implementation
5. Make the users aware of the measure and enforce the implementation
6. Track the decision for assessment use
7. Evaluate and assess, measure the impacts in order to provide recommendation and

**FR2:** for the dynamic service, it is recommended that the data collection system may be able to detect real time vehicle flow, speed and HGV%.

# ITS DEPLOYMENT GUIDELINES

## FACT SHEET - UPDATE 2015

### Organisational Requirements

The organisational and operational structure of the HGV overtaking ban involves different organizations, so all involved organizations (road authorities, road operators, traffic police, HGV representatives, media, service providers, including navigation boards...) as well as the role of each one and their tasks, must be defined.

### Technical Requirements

Technical requirements depend on the level of the service. Static HGV do not need specific ITS infrastructure. However, the deployment of dynamic systems can make use of ICT equipment. This equipment could be specific for this service or it could use infrastructures developed for other ITS services. The main ICT are

### Common Look & Feel Requirements

Some evaluation results showed that for a better acceptance of the service, the ban should be implemented on sections from 5 to 20 km long.

### Level of Service

The Level of Service (LoS) defines the specific characteristics of the service to be deployed. It is classified in three qualitative levels.

Depending on the operational environment and the local context, the HGV overtaking ban service can be deployed according to 3 levels of service. These levels are defined using 3 core criteria:

Services operators **must** be able to integrate the DATEX II publications provided by the road operators when they publish the ban information measure.

based on Data collection (before and along the ban), the existence of video surveillance in the system, the existence of a control system to determine when the service is active or not and the information systems.

The requirements are focused on the dynamic VMS signalization. It is focused on the types of pictograms and the location of the signals along the ban.

- a) monitoring equipment in the ban,
- b) signalization in the ban area and
- c) how the activation and deactivation is deployed (decision and action).

Levels of Service table: HGV overtaking ban			
Core Criteria	A	B	C
Monitoring	Manually on site	Semi automatic	Automatic through loops, sensors and/or cameras
Overtaking area signing	Fixed (permanent or intermittent service)	Prism or VMS (Dynamic service)	Prism or VMS (Dynamic service)
Activation and de-activation (decision and action)	Manual	Manual and remote controlled	Manual, based on decision support systems and remote controlled

#### Further Information

[dg.its-platform.eu](http://dg.its-platform.eu)

#### Questions and help

[dg.its-platform.eu/user-support](http://dg.its-platform.eu/user-support)



[www.its-platform.eu](http://www.its-platform.eu)

EIP+ is supported by the European Commission's Directorate Mobility and Transport