

NATIONAL ITS ACTIONS IN THE NEXT FIVE YEARS - REPORT TO EC 2012

1. Background

In Article 17 in the ITS-Directive, 2010/40/EU, and in the Guidelines of 13 July 2011 there are demands for three kinds of reporting from the member states to the EC. The three different kinds of reports include the following content:

1. Status for the present national ITS-actions in 2011
2. Planned ITS-actions anticipated for the next five years
3. Reporting every three years including the achieved progress compared to the ITS actions reported in the first report.

The first report was delivered to the EC late August 2011.

The present report is the second one, and it has to be delivered to the EC late August 2012.

The third kind will be delivered every three years counting from the first report which was finalized in August 2011.

2. The Danish procedure and strategy for introduction of ITS

The main objectives for introducing ITS are to ensure:

- Good traffic flow
- The best possible traffic safety
- The reduction of congestion
- Road user information of good quality
- Contributions to a more environmental friendly transport

- A better utilization of the road infrastructure

In October 2009 an ITS Development Forum was set up with stakeholders from the Danish transport sector and the Danish Road Directorate.

The Forum's main tasks are to target and strengthen the actions concerning ITS, to act as adviser to the Ministry of Transport and to carry out assessments of the perspectives of ITS activities.

During 2010 – 2011 the ITS Development Forum and the Danish Road Directorate outlined a Strategy for ITS, and subsequently prepared an ITS Action Plan.

The Danish Road Directorate's priority by implementing ITS

- The strategic road network, divided in congested and less congested parts
- Safety and security related ITS measures
- Road user information of good quality, real time and customer focused

The three priority areas are related respectively to the following three priority areas mentioned in Article 2 of the ITS Directive:

- I. Optimal use of road, traffic and travel data
- III. ITS road safety and security applications
- IV. Linking the vehicle with the transport infrastructure

The next chapter includes all relevant national ITS actions currently envisaged over the following five year period deployed in the field of road transport and in the interfaces with other modes of transport.

3. Catalogue of the national ITS actions and road projects which are anticipated and planned for during the next five years

1. Intelligent traffic control at the Helsingør motorway

The project consists of a motorway control and information system in both directions on a road sections during road works for widening the road. Outside this site another Traffic control system has been established in the northbound and southbound direction. A similar system on another part of the motorway close to Copenhagen City will be set in operation primo December 2012.

2. Intelligent traffic control of the main traffic in the Aalborg area close to the Limfjord tunnel

The project includes an up-grading and expansion of the following subsystems: Speed harmonisation, Traffic information signs, and maps with dynamic traffic information in and around the Limfjord Tunnel. The project is financed by the Road Directorate in common with Aalborg Municipality.



3. **Pilot project with hard shoulder running at the Hillerød motorway**

The project includes driving in the emergency lane (hard shoulder running) in combination with the necessary ITS equipment to open and close the lane and equipment for surveillance of the traffic flow. The project is the first of its kind in Denmark and will provide experience and concept for possible projects in the future.

4. **Establishing of a central database with dynamic data**

The Road Directorate has developed and put into operation a central data base with dynamic data, and it has appeared that there is a big potential by gathering dynamic data from all relevant sources. There is an even larger potential by collecting dynamic data from all relevant data sources, ensuring data quality assurance and by putting them into a standardized format. The dynamic database is the first step towards a possible future data warehouse. By this you can ensure an efficient distribution of the data, which are required according to the ITS Directive.

5. **Method for assessment of the socio-economic feasibility of ITS measures**

The Danish Road Directorate sees large interests and needs for cost-benefit analyses and assessments of the feasibility of ITS measures. The Danish Road Directorate has elaborated a method for the mentioned kinds of analyses. As one of the tools The Danish Road Directorate has carried out a catalogue with all the effects we know from evaluations of the ITS measures in 2011 – 2012. The Danish Road Directorate still has to calculate or estimate the value of some of the effects, and for the time being The Danish Road Directorate is estimating the value of traffic information in order to calculate the feasibility of the traffic information.

6. **Road user charging for heavy goods vehicles**

The Danish Ministry of Taxation has started the planning and implementation of a national road user charging scheme for both Danish and foreign lorries with a total permissible weight of more than 12 tonnes. The road user charging scheme is intended to be in agreement with the Commission Decision i.e. the EETS Specification. The scheme is expected to go into operation in first half of 2015. The national legislation process is expected to be completed by summer 2013.

7. **Improved information for buses, metro and trains on stations**

The purpose of the project is to improve the traffic information for connecting buses, trains and metros on selected stations. Information will be provided via a monitor located at the platform. During normal operation the monitor will show the departure time for buses, trains and metro at the station. In the event of a major disorder, the monitor will be used to give information about alternative means of transportation towards selected traffic hubs. The project scope also includes the delivery of a telephone service that will provide the same information via phone as is available on the monitors. Furthermore the project will deliver an incident system that will support the train dispatcher in determining how to handle traffic in the event of a major disorder.

