EU ITS Action Plan and Directive, European ITS Fora and CEDR

Position Paper

April 2014

Approved by the CEDR Governing Board at their meeting on April 15th 2014 in Paris from the proposal of Task Group N7 "Utilising ITS for NRAs"
About CEDR

The Conference of European Directors of Roads (CEDR) is a platform for cooperation and promotion of improvements to the road system and its infrastructure. CEDR’s twenty-seven members represent their respective national road authorities or equivalent bodies and provide support and advice on decisions concerning the road transport system that are taken at national or international level.

The mission of CEDR is:

- To analyse future developments of the road system and its infrastructure as part of a sustainable transport system under the environmental, economic and social aspects and identify new challenges in order to promote common strategies.
- To promote international networks of personal contacts between Road Directors and their staff.
- To provide a platform for understanding and responding to common problems.
- To develop a strong involvement in EU developments on matters relating to the road system and its infrastructure.
- To use existing representations in relevant international groups for mutual benefit.
- To make use of the results of common understandings as well as research results in each member country.

CEDR members currently have twenty-two expert committees tasked to provide technical and strategic advice on important topics. These include Road Safety as well as climate change, performance indicators, energy, procurement, financing, professional development, legislation and standards, Intelligent Transport Systems (ITS) etc.

CEDR also supports research activities through its own Transnational Research Programme which has funded numerous research projects, several on safety related topics. In 2012, the partnership with the European Commission was strengthened with the creation of the Infravation (infrastructure innovation) ERANET Plus that brings together European and US national agencies as well as the EC itself. Cooperation with the EC also facilitates many activities including those requiring cooperation with private sector stakeholders such as the automotive industry, for example, for Vehicle-to-Infrastructure (V2I) connectivity.

CEDR members address the full range of road transport and road infrastructure issues and are the key players when implementing directives, standards, or recommendations. They can develop more effective technical approaches by learning from successes and failures elsewhere.

Task Group N7 (Utilising Intelligent Transport Systems (ITS) for NRAs) has the following objectives for the period 2013-2017

- Provide CEDR strategic eyes and ears in the ITS arena, with focus on key European actions and initiatives relevant to NRAs, discussing and elaborating on important issues with the relevant stakeholders and organisations (e.g. ITS standardisation bodies, industry fora, …).
- Provide strategic assistance to EB & GB on ITS related matters, including advice on recommended position taking and actions
- Establish and maintain close liaison with the EC on appropriate levels
- Identify concerns of NRAs related to EU ITS Action Plan and Directive, monitor the progress of the implementation of the ITS Directive, and elaborate on common views,
- Where relevant, support and provide high quality input to the EC decision making process for ITS: a) How to optimise the flow of traffic taking into account safety and environment concerns (role of ITS); b) Monitor the progress on implementation of the ITS Directive; and c) Provide input and support for the CEDR representative in the ITS Advisory Group (timing partially dependent on the EC agenda)
- Transversally discuss and elaborate on ITS with other CEDR SP3 tasks, and support the utilisation of ITS by these CEDR SP3 tasks.
INTRODUCTION

ITS (Intelligent Transport Systems) is the integration of information and communication technologies with transport infrastructure, vehicles and users. ITS provides National Road Administrations (NRAs) valuable tools to enhance their core business of network operation and to improve the service to their customers as well as to reach their policy objectives. In order to maximise the benefits from ITS by providing seamless continuity of ITS services across European borders and to set up European ITS Markets, the European Commission (EC) initiated the EU ITS Action Plan and Directive. The ITS Action Plan and Directive have focused the interest of NRAs as well as other stakeholders into a number of priority services, for which CEDR and NRAs need to have a strategic view and vision to be able to act as a trusted partner towards other stakeholders including the EC. The same applies also to the key European Fora within the development and deployment of ITS. The transversal Task Group "ITS for National Road Authorities" acts currently as the eyes and ears of CEDR towards ITS, and is providing advice and guidance to both CEDR Governing and Executive Boards, other tasks as well as NRAs on issues related to ITS. This position paper highlights CEDR's position towards the six priority services of the ITS Directive, Cooperative ITS, and the key European ITS fora.

PRIORITY ITS SERVICES

Multimodal Travel Information and Planning Services

This is the priority action a) of the ITS Directive. The multimodal travel information and planning services involve lots of different stakeholders, such as public and private road and rail authorities and operators, public and private transport operators, federal or regional governments and private service providers. The stakeholders also include many multinational companies, mostly as service providers but also in some cases as partners or competitors. In most countries, the NRAs have no obligation to develop multimodal travel service. The strategic decisions by the NRAs of the provision and the roles of a multimodal travel service as NRA’s priority service vary considerable between countries. The decisions vary from a key strategic service according to the national transport policy, to no participation at all, or just to act as a content provider. The latter is the case for many NRAs. Most of the national service stakeholders see the need of implementing real-time information to the service, if they don’t already have it, in addition to the improvement of data quality and event data. The ambition for most of the multimodal services is a national door to door solution.

Due to the important role of multimodal travel information and planning services in both traffic and mobility management as well as sustainable transport, CEDR encourages NRAs to support the development, deployment and operation of these services by providing their own data and information utilising a harmonised data exchange framework for content to such services, and by promoting the use of standardised and open interfaces.
Real Time and Safety-Related Traffic Information

These are the priority actions b) and c) of the ITS Directive. Traffic information is of very high priority for the NRAs: real time traffic information because of its importance for smooth network operation and safety related traffic information because it helps to further improve road safety. Traffic information services involve a multitude of different stakeholders such as public/private road operators, public/private broadcasters or service providers, federal or regional governments, emergency centres and meteorological institutions. Multinational companies have a very important and increasing role in the provision of traffic information services. They act according to business plans and are competing with each other setting their own standards. The broadcasters have a key role in the distribution of the information in the short term, but their commitment to the implementation of the ITS Directive specifications is unclear in some countries. The challenge is to reach most road users with safety related traffic information and warnings. Concerning the obligation of service provision the situation varies in the different countries with regard to EU or national regulation or national transport policy. The user and society benefits of traffic information services are very difficult to express in money. For that reason it is hard to establish how much the NRAs should invest in the deployment, operation, and maintenance of traffic information services. A good knowledge base is contributing to informed policies and decisions and therefore, NRAs support research activities including socio-economic impacts of traffic information and other relevant ITS in collaboration with other stakeholders. Decisions on the strategic position of traffic information services are necessary currently due to the ITS Directive / specifications and the market activities of the private sector.

The ITS Directive and Specification give a basic framework for the implementation of the services and their content. The most important adaptions in the current safety related services are the need to improve the overall process especially related to data quality, timeliness, coverage and treatment of short term events. The ITS Directive refers to the TEN-T roads, but the service can be provided also on other parts of the main road network - depending on the national situation. National decisions on the EU specification’s event types and parts of the road network to be covered will largely determine the investments required from the NRAs. The NRA's role is currently a content provider and also service provider for some specific services, depending on the NRA’s customer policy. There is no common strategy on user rights, content branding and data exchange agreements among the NRAs. In some countries there is already a legal obligation to make content available free of charge for end users. The topic of "Open Government Data" is still in preparation and has consequences for NRAs, the most probable ones seem to be increased requirements to quality, privacy and liability. Ways to meet the demand for an impartial and independent national body competent to assess compliance with the specifications are being discussed by many countries.

Due to the strategic role of safety-related and real-time information for network operation, the ITS Directive stressing the continuity of services across borders, and the increasing role of multinational companies, CEDR recommends that each NRA should determine their own strategic position towards these services utilising the possibilities of CEDR as a platform to discuss the strategic choices. CEDR and NRAs support European actions aiming to ensure the continuity and optimal quality of these services, where the optimality is determined according to the overall benefits and costs. CEDR and NRA will also support the harmonisation and interoperability of the services by promoting standardisation where needed.
Automatic In-vehicle Emergency Call (eCall)

This is the priority action d) of the ITS Directive. The NRAs do not have the role in the provision of the eCall service itself. However, the quicker notification and accurate positioning of accidents due to eCall will improve the incident management process of the NRAs.

Thereby CEDR supports the deployment of eCall. In order for the NRAs to fully utilise the incident information from the emergency centres/public safety answering points receiving eCalls, automated data exchange should be facilitated by bilateral agreements between these and the NRAs also including processes, roles, and protection of privacy in managing eCall reported events, with CEDR as the platform to exchange good practices with regard to these agreements.

Intelligent Truck Parking Information

The specifications for this priority action e) of the ITS Directive were published by the EC in 2013. The NRA is one of the content providers for the services with also other possible roles such as service provider in the countries, where Intelligent Truck Parking is provided. Some NRAs have already made their plans for deploying Intelligent Truck Parking services because of the imminent need for such services.

CEDR recommends that the NRAs having deployed or currently deploying the services will share their experiences about the benefits, costs and deployment issues related to the services to facilitate informed decision making by all NRAs. CEDR encourages NRAs also to support efforts to facilitate continuity of these services across national borders.

Cooperative ITS

Cooperative ITS (C-ITS) is related to EC’s ITS Action Plan Action Area 4 (Integration of the vehicle into the transport infrastructure). Although constituting not yet a priority action of the ITS Directive, it represents an important forthcoming deployment initiative. Cooperative ITS involve many stakeholders, including NRAs and road operators (incl. their suppliers), automotive and telecom industry as well as service providers. Priority C-ITS services are safety oriented and make traffic management more efficient as well as more reliable. Fixed and mobile roadside infrastructure for C-ITS services will be deployed mostly related to the TEN-T roads, where critical sections are involved or traffic is dense. Additional road network coverage will rely on utilising cellular networks for vehicle-infrastructure communications. In the infant days of C-ITS deployment the penetration within the vehicle fleet is not yet high enough (critical mass) for harvesting the benefits which – in medium term – NRAs and road operators can make use of in order to improve their traffic management and network operation. In this respect, a first NRA initiative for deploying initial services is the Cooperative ITS Corridor between the Netherlands, Germany and Austria. Actions by other NRAs are also being prepared. C-ITS involves several organisational and business related issues such as privacy, security framework, ownership of data, parallel Intellectual Property rights, and quality of content. All of these need to be solved for deploying C-ITS successfully.
CEDR supports the accelerated deployment of cooperative ITS together with strategic stakeholders. CEDR is ready to continue to co-chair the Amsterdam Group and extend cooperation to other key stakeholders (e.g. telecom industry, routing and navigation industry) to solve the pending deployment issues. CEDR recommends the individual NRAs to enforce the deployment of day-one applications - utilising roadside and other feasible communication infrastructure - in liaison with the European cooperation groups and fora. NRAs are also recommended to actively participate in the related standardisation activities. CEDR and NRAs should closely monitor developments in the connected vehicle and road user field in order to react quickly when necessary.

EUROPEAN ITS FORA

Need for improved coordination and integration

There are currently a number of ITS bodies and fora working towards ITS deployment in Europe, such as the ITS Action Plan and Directive related bodies and groups, the iMobility Forum, the Amsterdam Group, and ERTICO's various platforms. However, many lack a clear understanding by all stakeholders of the role and tasks of the different ITS bodies, and the different platforms seem to be working on partly overlapping areas while including often many same stakeholders with some variations.

CEDR proposes encouraging the moves towards the coordination and integration of the various European ITS deployment bodies with the lead by the European Commission in order to clarify the orientation, focus, roles and tasks of the different bodies and improve their coordination likely also resulting in a reduction of the number of different deployment cooperation bodies. CEDR is willing to engage in such coordination and integration action in support of the European Commission and other key stakeholders in ITS deployment.

European ITS Advisory Group

The European Commission has set up two important groups to facilitate the deployment of the EU ITS Action Plan and Directive. The European ITS Committee contains the representation of the Member States, and the Advisory Group a high-level representation of the key stakeholders in ITS. CEDR has a seat in the Advisory Group. The CEDR ITS task has continued the practice of providing advice and guidance to the CEDR member in the Advisory Group by compiling the NRAs' views and discussing their commonalities and differences, resulting in advice containing the overall view of the NRAs.

CEDR continues its active participation in the European ITS Advisory Group.
EasyWay Follow-ups

The EasyWay projects (supported by the EC via the TEN-T programme, followed now by Connecting Europe Facility programme) were carried out by a consortium containing almost all European Road Authorities and Road Operators in a framework of harmonised European ITS deployment via voluntary cooperation.

CEDR supports such projects aiming towards harmonised ITS deployment on the TEN-T roads, provided that the deployments are coordinated on the European level, anchored in the needs and priorities of the NRAs and the ITS Directive, and promote more efficient road network operation. CEDR also supports these projects towards EC as part of the NRAs' deployment programme. CEDR aims to provide strategic guidance to such projects, where most NRAs are involved and which support CEDR’s strategic objectives. When motorway operators are involved, CEDR is ready to liaise with ASECAP concerning the strategic orientation of these projects.

iMobility Forum

The iMobility Forum (earlier known as eSafety) is dealing with intelligent vehicles and infrastructure. This multi-stakeholder forum aims to accelerate the deployment of safe, smart, and clean road mobility mainly in vehicles but also on the roadside. The cooperation in iMobility is quite unique with a close cooperation between industry and public parties in the various working groups.

CEDR recommends NRAs to actively participate in the relevant iMobility working groups, including co-chairing them, in order to increase NRA influence on the development of intelligent vehicles and infrastructure. CEDR participates actively in the iMobility Forum Steering Group continuing the work of the last couple of years, underlining the importance of the developments in iMobility to NRAs, and liaise with ASECAP to provide a common road authority and operator view to the governance of the iMobility Forum.

Amsterdam Group

The Amsterdam Group was formed as a strategic partnership between the automotive industry (Car2Car Communication Consortium) and infrastructure organisations (CEDR, ASECAP, POLIS) as committed core stakeholders in the C-ITS deployment. The deployment partnership is focused on deploying from 2015 onwards of simple non-complex services with a clear user benefit supported by a solid business model. In such a way the deployment is viable even with limited penetration in the vehicle fleet and limited hot spot implementation of short-range communications infrastructure. The role of the Amsterdam Group is thus to facilitate consensus building on deployment related matters on a European scale, to initiate work on important issues needed for (initial) deployment based on a roadmap (which serves as a guiding star for the deployment of members in corridors) and to consolidate the findings from deployment initiatives as a basis for further agreement among the deployment partners. CEDR has taken up a prominent role in chairing the Amsterdam Group from the very beginning. In May 2013, the CEDR Governing Board has mandated two NRA representatives to act on behalf of CEDR in chairing the Amsterdam Group and representing it externally as well as coordinating the related CEDR membership issues. On a European scale, the Amsterdam Group is perceived as a valuable partner in preparing C-ITS deployment.

CEDR continues its support for the Amsterdam Group.
Task Group N7 members
Austria - Manfed Harrer
Austria - Markus Meissner
Belgium Flanders - Roel Coupillie
Denmark - Claus Lund Andersen
Estonia - Tanel Jairus
Finland - Risto Kulmala (Chair)
Finland - Pirkko Rämä
France - Boris Ly
Germany - Torsten Geissler
Greece - Kostas Papadimitriou
Netherlands - Frans op de Beek
Netherlands - Hans van Saan
Norway - Jacob Trondsen
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Sweden - Clas Roberg
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