



Identifying ITS Opportunities for the HA EasyWay Fact Sheet

■ SUMMARY

The Highways Agency along with over 20 other European countries has joined EasyWay – a €300m EU initiative designed to encourage greater coordinated investment in Intelligent Transport Systems (ITS) schemes on major European routes.

The objectives of EasyWay are to reduce congestion, reduce accidents and manage down the environmental impact of road networks using ITS technologies. The EasyWay objectives are aligned with those of the Highways Agency.

The Highways Agency will benefit from targeted investments that support greater deployment of ITS on the strategic network, as well as research into ITS services and their effectiveness.

This Fact Sheet summarises the EasyWay programme, European policy, EasyWay activities and HA involvement in them.

■ KEY WORDS

European Commission, Safety, Environment, Policy, Project, Traffic Management.

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■ WHAT IS EASYWAY?

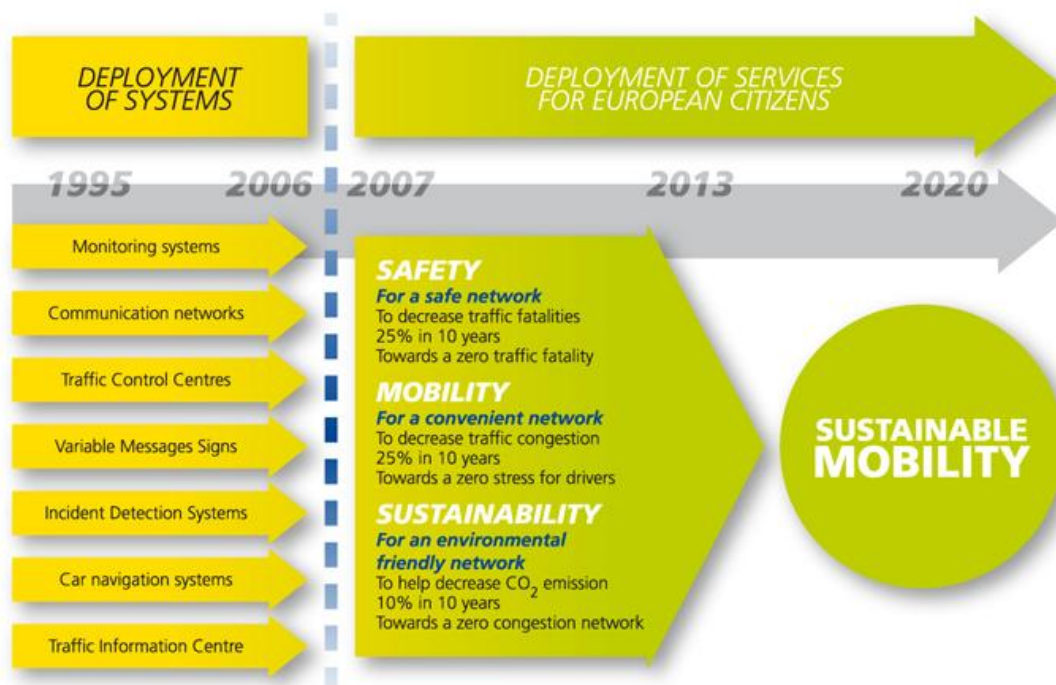
EasyWay is designed to encourage harmonisation of Europe-wide ITS deployments to help provide customers with a similar level of service from road operators no matter which European country they are travelling through. The Highways Agency is contributing to the development of standards and technical guidelines and the definition of core services.

EasyWay is a deployment-oriented project that follows on from the success of the TEMPO programme (2001-2006). The scope of EasyWay was developed by the members of the Euro-Regional projects in order to continue and foster the successful collaborative work undertaken in TEMPO.

EasyWay incorporates eight Euro-Regions (ARTS, CENTRICO, CONNECT, CORVETTE, ITHACA, SERTI, STREETWISE, VIKING) facilitating the integration of all new Member States. EasyWay is managed and led by each participating European highway authority under a set of principles agreed with the European Commission. The Highways Agency is active member in STREETWISE and CENTRICO.

EasyWay has four main objectives. These are to:

- improve safety;
- reduce congestion;
- reduce environmental impacts; and
- promote continuity of services at regional and European level, using coordinated deployment of real-time information and management systems and services in Europe.



EasyWay is a collaboration of more than 20 European Member States and has three stages of funding (€300m in total) from the European Commission's Directorate-General for Transport and Energy (DG TREN). These stages are 2007- 2009, 2010-2011 and 2012-2013.

■ EUROPEAN POLICY OBJECTIVES

European ITS Policy Overview

The European Commission (EC) has a vision to deploy Intelligent Transport Systems and services throughout Europe.

The potential of ITS applications has encouraged the EC to refer to them in its 2006 mid-term review of the Transport White Paper¹, the EC's key policy paper on European transport.

Since 1996, the Trans-European Transport Network (TEN-T) Guidelines were the EC's instrument for European-wide transport network planning. The EC is currently undergoing a broad review of the TEN-T Guidelines and has issued several papers as part of this process. Key EC papers include:

- The Greening Transport Package, July 2008
- ITS Action Plan , European Commission, December 2008²
- A Sustainable Future for Transport, June 2009

In its latest transport strategy paper "A Sustainable Future for Transport - Towards an integrated, technology-led and user-friendly system" the EC's objectives on ITS are set out. These objectives concern accelerating ITS deployment in a coordinated way and developing European standards "to make road transport and its interfaces with other transport modes more environment-friendly, more efficient, safer and more secure."³

Trans-European Network for Transport (TEN-T)

To support Europe-wide services, the EU supports ITS in road transport by co-funding deployment projects. The grant programme for the TEN-T aims to establish interconnections, interoperability and continuity of services especially on long-distance routes and across borders. Its guidelines cover the infrastructure for traffic management, traveller information, emergency systems and electronic fee collection.

The TEN-T work programme 2007-2013 outlines the following priorities for road ITS:

- Europe-wide traffic and travel information service
- Europe-wide traffic management service
- Europe-wide freight & logistics

Within the framework of the TEN-T programme for the period 2007-2013 an indicative amount of €300 million has been programmed for ITS road projects (of about €8 billion for TEN-T in total). This amount will be spread over three calls. One was in 2007, which selected the EasyWay project. Two more are

¹ White Paper – 'European transport policy for 2010: time to decide', European Commission, September 2001

² EU ITS Action Plan, European Commission, December 2008

³ A Sustainable Future for Transport – Towards an integrated, technology-led and user-friendly system, European Commission, June 2009

planned respectively in 2009 (€100 million) and 2011 (€100 million). EasyWay provided a proposal for the 2009 Call, which is currently being assessed by the EC.

Outlook on European ITS Policy Objectives

The EC is currently working on legislation for a framework for the European-wide deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other transport modes.

ITS is therefore set to remain on the EU agenda as one of the instruments for delivering European transport policies.

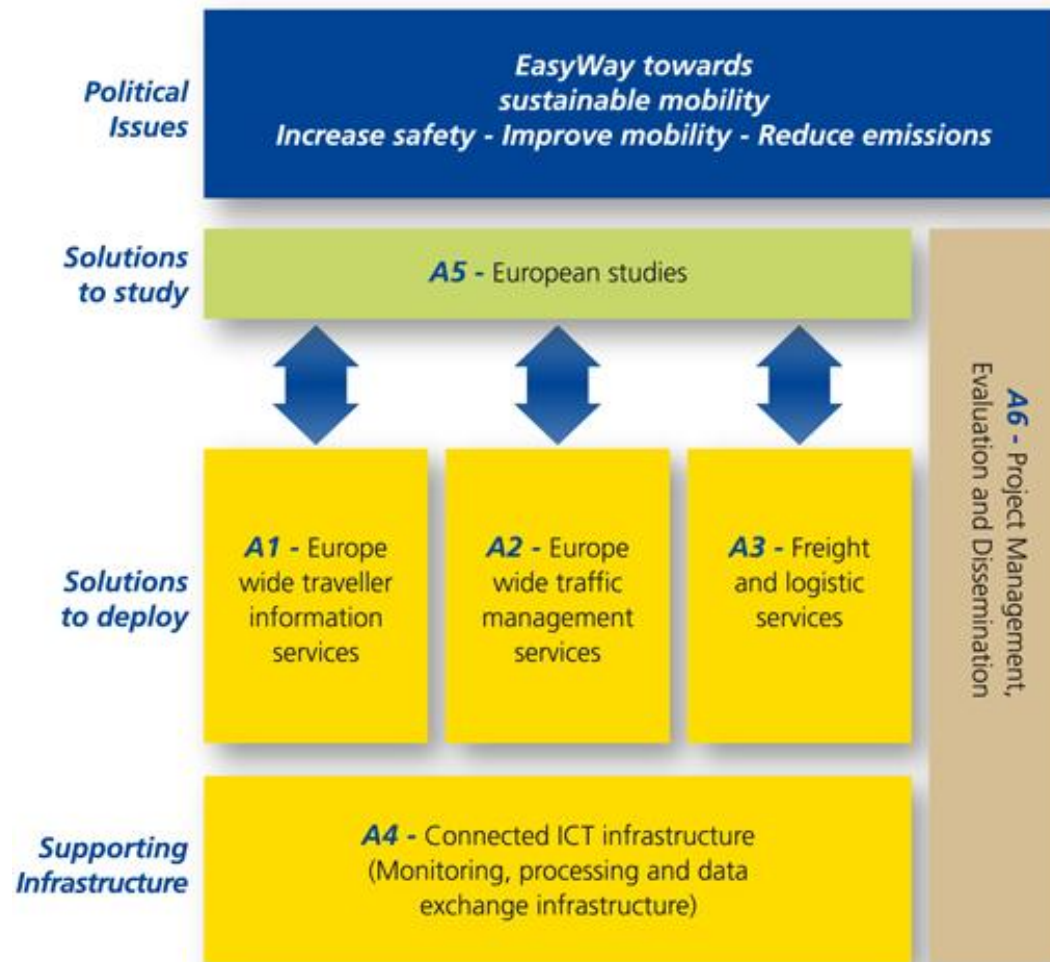
In 2010 the EC will issue a new White Paper on transport which will set out the policy measures to be adopted in the next decade, 2010–20. ITS will no doubt be part of it.

■ EASYWAY ACTIVITIES

Activities (A1-A4 in the illustration below) implemented within EasyWay are structured through three groups of core services: Traffic Information Services, Traffic Management Services, Freight and Logistics Services, which all depend on a well-connected ICT infrastructure.

The European Studies (A5 in the illustration below) prepare and facilitate harmonised deployment of these core services, through the development of guidelines and plans for deployment within the Euro Regions.

The EasyWay partners have established appropriate organisational structures to steer and assess the project against the targets. A key element of EasyWay is the evaluation of implementations (A6 in illustration below) and exchange of best practices allowing benchmarking of achievements to promote optimised and adapted solutions.



A1 - Europe-wide Traveller Information Services provide the European traveller with comprehensive real time traffic information allowing for well-informed pre-trip travel decisions as well as information during the journey. It includes real time information concerning the Trans-European Road Network (TERN) as well as interfaces with urban networks and with other transport modes, especially in urban areas. This typically includes the rollout of Variable Message Signs (VMS) on Europe's motorways, the provision of journey times on VMS, as well as radio and Internet information services. Notable examples of traveller information services in the programme are:

- The Highways Agency Digital Traffic Radio serves as a best practice example in this service area;
- ETTIN (European Traffic and Traveller Information Number), an initiative enabling the provision of traffic information services via a single short telephone number all over Europe. In April 2009 the demonstrator kicked off in four different countries: France, Spain, Switzerland and The Netherlands;
- On the eastern French-Spanish border, between Perpignan and Barcelona, a 10 km section is one of the very first cross-border stretches where road operation is now internationally coordinated. This included upgrading the ICT infrastructure, so combined services could be implemented, shared access to the operator's internal applications

such as CCTV, information displayed on VMS, cross-border traffic management plans, integrated signage for roadworks, snow alert sharing, etc.;

- The Netherlands is implementing the National Data Warehouse for traffic information (NDW), which will provide complete, reliable and up-to-the minute information on the status of the basic Dutch road network. This combined investment by 15 authorities is expected to have major social benefits. NDW will become the databank that will collect, process, store and distribute all relevant traffic data in the Netherlands; and
- The French motorway operator Sanef is investing in Global Navigation Satellite System technology to improve the efficiency and safety of its highway maintenance and operations teams.

A2 - Europe-wide Traffic Management Services provide real time guidance information to the European traveller and haulier, detecting incidents and emergencies, aimed at ensuring safe and efficient use of the road network, with a focus on cross-border transport. These services include for example:

- implementation and upgrading of traffic control systems and evaluation of its effectiveness;
- dynamic traffic management, including the implementation of additional dynamic speed limit services on parts of the French and the Spanish motorways;
- further roll out of hard shoulder running in Germany, Belgium and Italy;
- implementation of a ban on truck overtaking on some parts of the motorway network in France
- congestion reduction in the Netherlands by providing financial rewards to drivers for not driving at peak hours;
- further implementations of ramp metering, including on the Paris urban motorway;
- to support incident management for traffic managers in the traffic centre control room, the Netherlands is carrying out a test with remote controlled cameras mounted on road inspectors' vehicles; and
- implementation of a noise- and pollution-reduction driven traffic management system in Austria.

A3 - Freight and Logistics Services aim to optimise the capacity and efficiency of goods transport, by providing safe and easy access to intermodal terminals (ports, rail and road connections, etc). Providing European hauliers with dedicated seamless service information on the TERN, and creating measures for the management of hazardous or sensitive cargo from key components of this part of the programme. Key activities in this area since 2007 include:

- improved or new parking facilities for HGVs, for example along the Brenner motorway in Italy;
- to avoid dangerous overcrowding of motorway parking areas, HGV parking guidance systems have been installed along several parts of the German motorway network where a shortage of HGV parking spaces occurs regularly;
- regulations, the applicable procedures and the responsible authorities handling abnormal loads differ within the EU Member States. For the northern European region an Internet portal service (www.transportxxl.eu) has been implemented to support the haulage industry;
- the Alpine region as well as Europe's southwest have undertaken several studies and pilots with the objective of improving the transport of hazardous goods throughout Europe. The longer term objective of this work is to lead the way towards future international regulations for hazardous goods transportation; and
- implementation of weigh in motion sensors on the Scottish trunk road network as a more efficient means to improve safety and reduce the damaging effect of HGVs on road pavements.

A4 - An efficient Connected ICT Infrastructure is a prerequisite for ITS deployment. It provides the end user services with information from systems that monitor the road situation in real time. Thus it enables cross-border interoperability and continuity of services through harmonised data provided by connected systems. Information on the available networks and their characteristics is seen as a key element of the ICT infrastructure. Key activities include for example:

- Météoroutes in Belgium aims to collect and process data from weather stations specifically equipped to collect weather data relevant to the road network. Further recent developments made it possible to improve the integration of local winter maintenance operations with the actions taken by the traffic centre;
- with the aim of optimising operations in real time, motorway service vehicles in France have been equipped with a location and fleet management tool;
- EasyWay promotes the use of DATEX II as the standard for traffic data exchange in Europe and an increasing number of countries are compliant with DATEX II. Spain has launched the activity 'DATEX II to support Traffic Management Plans' to further integrate this data exchange standard into everyday road operations;
- the Danish Road Directorate has developed and implemented a test site on one of its major roads enabling them to try out new equipment and technologies under live conditions. The site is designed to install test equipment without interference to traffic;
- implementation and upgrading of data communications networks to support the collection and processing of traffic data; and

- Upgrading and improving the equipment, tools and operations of traffic control centres throughout Europe.

■ HA INVOLVEMENT

The Highways Agency is an active member of the Euro regions STREETWISE and CENTRICO, which plan and administer the deployment of the four key EasyWay services. STREETWISE is chaired by Steve Crosthwaite from the Highways Agency.

The Highways Agency is also involved directly in the following European Studies, which are currently developing European 'deployment' guidelines to ensure a consistent approach to the implementation of ITS throughout Europe:

- Traveller Information Continuity
- Freight and Logistics
- VMS Harmonisation
- DATEX II – data quality and data exchange protocols

STREETWISE partners, namely Transport Scotland, Welsh Assembly Government, NI Roads Services and Ireland National Roads Authority, represent the Highways Agency in the European Studies Traffic and Network Management, ITS Deployment Road Map and the Evaluation Expert Group.

The advance payment received from the European Commission is being used to increase the Highways Agency's active engagement in EasyWay.

The benefits of active involvement in EasyWay include:

- It enables the Highways Agency to apply for European funds to contribute to the cost of their ITS implementations;
- It provides the Highways Agency with the opportunity to reduce and manage the impact of European ITS standards on their own standards;
- Cross border cooperation with similar road authorities, exchange of best practice and honest information exchange on impact of ITS implementations and development.

Ian Fraser (ian.fraser@highways.gsi.gov.uk) coordinates the Highways Agency's involvement in EasyWay, including putting into contact technology practitioners with their counterparts across Europe.

■ FUTURE PROGRAMME

Despite its size (23 EU countries, over 150 partners) EasyWay remains an exchange forum for ITS practitioners. As ITS is maturing, bringing new challenges with it, EasyWay will continue to evolve to support its community in facing those challenges.

The European Commission appears to have ITS firmly on their agenda and is hoping that EasyWay will be instrumental in accelerating ITS deployment in Europe. The first €100 million grant for EasyWay 2007 – 2009 will soon come to an end whilst the European Commission decides on the proposal for EasyWay 2010+2011. A third €100 million grant is planned for 2011+2012.

■ BIBLIOGRAPHY

EasyWay Website:

<http://www.easyway-its.eu/>

EU ITS Action Plan: Action plan for the deployment of intelligent transport systems in Europe, European Commission, December 2008:

http://ec.europa.eu/transport/its/road/action_plan_en.htm

A Sustainable Future for Transport – Towards an integrated, technology-led and user-friendly system, European Commission, June 2009

http://ec.europa.eu/transport/strategies/2009_future_of_transport_en.htm

White paper – 'European transport policy for 2010: time to decide', European Commission, September 2001:

http://ec.europa.eu/transport/strategies/2001_white_paper_en.htm

The Greening Transport Package, European Commission, July 2008

http://ec.europa.eu/transport/strategies/2008_greening_transport_en.htm

■ ACKNOWLEDGEMENTS

The diagrams are reproduced by permission of EasyWay.

■ GLOSSARY

- ARTS** Advanced Road Telematics in the South-west: Euro-Regional Project coordinating regional, national and multi-lateral ITS implementation projects in south west Europe covering the Atlantic corridor, linking parts of Portugal, Spain and France, within EasyWay
- CENTRICO** Central European Region Transport Telematics Implementation: Euro-regional project coordinating implementation plans for traffic management and traveller information services in Belgium, Luxembourg, and parts of France, Germany and The Netherlands, within EasyWay
- CONNECT:** Euro-regional project: coordination and stimulation of innovative ITS activities in Central and Eastern European countries is a cooperation between public authorities, road administrations and traffic information service providers. Partners from Austria, Czech Republic, Germany, Hungary, Italy, Poland, Slovakia and Slovenia are working together to improve cross-border traffic and transport through implementing harmonised and synchronised ITS applications on the high level road network in this area, within EasyWay
- CORVETTE** COoRdination and Validation of the dEployment of advances Transport TElematics in the alpine area: Euro-regional project that coordinates regional bi-lateral and multi-lateral ITS implementation projects in Austria, Bavaria, northern Italy and Switzerland, within EasyWay
- DATEX II** (to add from project glossary)

DG TREN	Directorate-General for Transport and Energy
EC	European Commission
ETTIN	European Traffic and Traveller Information Number
ITHACA:	Euro-regional project for coordination of ITS deployment in Greece and Italy, within EasyWay
SERTI	Southern European Road Telematics Implementation: A Euro-regional project coordinating the implementation of traffic management and traveller information services in adjacent parts of southern France, Spain, western Germany and northern Italy, within EasyWay
STREETWISE	Seamless Travel Environment for Efficient Transport in the Western ISles of Europe: Euro-regional project coordinating the implementation of traffic management and traveller information services in England, Wales, Scotland, Northern Ireland and the Republic of Ireland, within EasyWay
TEN-T	Trans-European Transport Network
TEN-TEA	TEN-T Executive Agency: Since 2007 the new TEN-T Executive Agency is managing the technical and financial implementation of the TEN-T programme, including road ITS. This includes the organisation of calls and evaluation.
TERN	Trans-European Road Network
VIKING:	Euro-regional project: Road traffic implementation in northern Europe – coordinating national and bilateral traffic management and ITS implementation projects in Denmark, northern Germany, Finland, Sweden and Norway, within EasyWay
VMS	Variable Message Sign