EasyWay: from systems to services

**Deployment of Systems**
- Monitoring systems
- Communication networks
- Traffic Control Centres
- Variable Messages Signs
- Incident Detection Systems
- Car navigation systems
- Traffic Information Centre

**Deployment of Services**
- For European Citizens

**Safety**
- For a safe network
- To decrease traffic fatalities
- 25% in 10 years
- Towards a zero traffic fatality

**Mobility**
- For a convenient network
- To decrease traffic congestion
- 25% in 10 years
- Towards a zero stress for drivers

**Sustainability**
- For an environmental friendly network
- To help decrease CO₂ emission
- 10% in 10 years
- Towards a zero congestion network

Sustainable Mobility

EasyWay presentation 26-06-09, Thessaloniki
EasyWay follows on from the success of the TEMPO programme (MIP I), which started in 2001 and concluded in 2006. This programme provided a great many achievements and convincing results.

To continue the success of TEMPO, within 2006 the scope of the EasyWay project was developed by the members of the Euro-Regional projects in order to continue the successful collaborative work undertaken as part of the TEMPO programme.

EasyWay incorporates eight Euro-Regions (CENTRICO, STREETWISE, ITHACA, SERTI, ARTS, CORVETTE, CONNECT, VIKING) facilitating the integration of all new Member States. It reinforces the co-operation between the existing participating countries by providing a new integrated framework with clear objectives and reporting methods.

The eight Euro Regions will retain the management structure for EasyWay.
What is EasyWay?

EasyWay is one of the most important programmes for the European Commission / Directorate-General for Transport and Energy on Intelligent Transport Systems, along with programmes for railways, waterways and air transport. EasyWay is a collaboration of more than 21 member states, with a budget of 500 m€ and funding of 100 m€ has been secured for 2007 - 2009.

EasyWay has three stages to secure funding from the European Commission / Directorate-General for Transport and Energy. These are: 2007-2009, 2010-2011 and 2012-2013.

Within 2009 EasyWay will start to develop the proposal to secure the next stage of the programme - 2010 – 2011.
What is EasyWay?

A project for Europe-wide ITS deployment on main TERN corridors
More than 21 member states involved.
Driven by national road authorities and operators with associated partners including the automotive industry, telecom operators and public transport stakeholders.
It sets clear targets, identifies the set of necessary ITS European services to deploy (Traveller Information, Traffic Management and Freight and Logistic Services).
An efficient platform that allows the European mobility stakeholders to achieve a coordinated and combined deployment of these pan-European services.
Retains the successful management structure from MIP1
Which 21 Member States are Involved within EasyWay?

- Austria
- Belgium
- Cyprus
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Lithuania
- Netherlands
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom
There are 8 EuroRegions
- **Greece** chairs the ITHACA ER (blue)
  - Greece
  - Romania
  - Cyprus
  - Southern Italy

Attempts to have Bulgaria and Malta join ITHACA for phase I (2007-2009) and for the recent submission of the proposal of phase II (2010-2011) unfortunately have all failed

These MS have not been able to sign the Application Forms yet

We are now in a negotiation phase and contacts are ongoing (awaiting feedback)

Possibility to have a workshop in Bulgaria in October with the public sector to inform at best on the benefits of the EW project

Also today is a good occasion for dialoguing!
How is EasyWay organised?

**The EASYWAY Steering Committee:**
- Consists of the eight Euro-Regions chairmen;
- It is in charge of making decisions, managing the programme and ensuring the interface with the EC;
- The SC will meet three to four times every year and more if needed by the programme management; and

**The EASYWAY Secretariat:**
- Consists of the Euro-region chairmen support;
- It is in charge of the operational management of the programme (cost and time schedule);
- The management of technical reporting (with the Expert Groups); and
- Administrative interface with the EC.

**The Euro-Regions Steering Committees:**
- In charge of deployment activities,
- ER SC is the institutional intermediary between the EW SC and the partners
- Managing and evaluating deployments, and nominate representatives for the Expert Groups.
EasyWay activities

EasyWay is structured in six deployment activities, which are linked together. This is illustrated in the below diagram:

A5 – European harmonisation
- European studies (Deployment guidelines)
- Cross fertilization and European harmonization
- Pilots

A1 – Europe-Wide Traveller Information Services
A2 – Europe-Wide traffic management Services
A3 – Freight and logistic services
A4 – Connected ICT infrastructure (Monitoring, processing and data exchange infrastructure)
Deployment is the main element of the EasyWay Project. Regional work plans have been developed to carry out these activities, which focus on the needs of the specific regions and cross-border corridors in relation to the goals set out in the EasyWay Programme.

Deployment activities are the result of the core of effective ITS innovations in Europe.

They also include regional preparatory studies and their related investments. They will continue to be developed within the frame of the regional co-operations and will be supported by the European Studies with their results and evaluated technologies to be applied Europe-wide.
The Expert Groups (EGs) main activity is the dissemination of the knowledge about the ongoing studies and implementations among all the EasyWay partners. They meet regularly to identify common processes and to discuss the ongoing ones. Furthermore, they promote and organise workshops and meetings with all EasyWay partners, where the exchange of experiences can be facilitated.

The Experts support the EasyWay Secretariat and in particular the EasyWay Steering Committee by highlighting important or critical situations, suggesting choices and preparing decisions. In addition, the EGs support the European Studies by defining specific studies which should deliver relevant services across Europe and deployment activities by validation and assessment of their results.

Five Expert groups have been determined. These are:

- iCT infrastructures;
- Traveller Information Services;
- Traffic Management;
- Freight and logistics; and
- Evaluation.
European Studies

EasyWay has launched dedicated European Studies (ES) in six different fields for the period 2007-2009. These will support pilots, develop frameworks and deployment guidelines to improve the availability of accurate, relevant and timely data/information to support policy decisions and will be a platform for future projects.

All member states have been invited to participate in the European Studies: platform for common discussions and initiatives with the private sector and other organisations. Each of the ES has started with the provision of a synthesis of existing work and available guidelines for service development within the domain. This synthesis is considered as a summary of the activities performed in MIP 1 (2001-2006) and provides a solid basis for the future tasks to be undertaken.

Six European studies have been determined to specify key services needs in terms of European harmonisation. These are:

- ES 1 Europe-wide Traveller Information continuity and co-modality;
- ES 2 Europe-wide Traffic and Network management and co-modality;
- ES 3 Freight and Logistics services;
- ES 4 VMS Harmonisation;
- ES 5 DATEX II; and
- ES 6 European ITS Deployment Road Map.
The stakes of the road operators on the TERN are challenging:

- **Strategic and Busy corridors**
  - total increased by 60% since 15 years on some parts of the TERN

- **High proportion of HGV**
  - up to 35%

- **High proportion of foreign drivers**
  - up to 50% on summer migrations or on cross-borders

- **Numerous road operators and organisations** (more than 150 in the EU)

- **Road safety, mobility, congestion problems to tackle**
EasyWay Key points

An integrated project for Europe-wide ITS deployment on the TERN

3 European objectives:
- Increase road safety,
- Increase mobility and decrease congestion,
- Decrease transport burden on the environment

One mean: deploy European harmonized ITS services
- 95% of the budget is allocated to deployments
- A set of 6 European studies set the frame for harmonized deployments

One project gathering 21 MS and more than 135 TERN operators with associated partners including the automotive industry, telecom operators and public transport stakeholders.

An efficient platform that allows the European mobility stakeholders to achieve a coordinated and combined deployment of pan-European services

EasyWay implements most part of the ITS action plan

Budget: 500 m€, 20% EU funding
EasyWay Key 2007-2008 achievements

- Definition of a set of core services on Traveller Information (TIS), Traffic Management (TMS), Freight and Logistic (FLS)
- Provision of ~15 European core-services deployment guidelines, that are the frame for the deployments.
- Deployments of core services with significant effects on road safety, congestion and environmental impacts of transport (ban overtaking, dynamic speed regulation, travel time information services, ….etc).
- Efficient management: Budget spent as planned, provision in due time of reports, milestones respected
- Cooperation with external stakeholders to organise future deployments of cooperative systems for upgraded or new services
EasyWay facts and figures 2007 – 2008

Traveller Information Services (EW new deployments for 2007-2008)

- More than 50 millions of European citizens targeted through co-modal information deployment in 2007-2008

- More than 23 000 km of the TERN improved in 2007-2008 with on-trip traveller information and warnings
  - Highly congested networks, Alpine crossing, Continuity with urban networks

- About 1500 km of travel time predictions deployed and improved in 2007-2008
  - Real-time predictions on critical road segments, short-term forecasts
EasyWay facts and figures 2007 – 2008

Traffic Management Services (EW new deployments for 2007-2008)

- Increase of safety and a decrease of congestion and emission levels due to several traffic and incident management activities on the TERN and in urban areas:
  - 450 km of Dynamic lane management
  - 95 new Ramp metering systems
  - 5300 Incident warning
  - 2000 km of Incident management
  - 1400 km of Speed control

- Over 30 traffic management plans, different systems and tools contributed to improved traffic management on the TERN.

Freight & Logistics Services (EW new deployments for 2007-2008)

- 966 km of TERN network covered by special information services for freight
- 72 parking stops with dynamic or static information on truck parking services
- 333 km covered by freight information or management systems with intermodal aspects
EasyWay facts and figures 2007 – 2008

Connected ICT Infrastructure (EW new deployments for 2007-2008)

- Increased monitoring infrastructure to improve the quality of or to add the coverage of European ITS services by ca.
  - 1,800 fixed traffic monitoring stations
  - 300 km floating phone or vehicle data coverage
  - 6,300 km travel time monitoring coverage
  - 1,000 km automatic incident detection
  - 68 critical spots covered with automatic incident detection
  - 5,700 CCTV cameras
  - 540 road weather monitoring stations

- New or upgraded centres to operate European ITS services
  - 350 traffic information/control/management centres

- Improved data exchange for seamless European ITS services
  - 33 DATEX nodes
Evaluation and impact results

Context for EasyWay

- Safety – Reduction in accidents overall, but with hot spots – particularly some parts of eastern Europe where accidents have increased – and accident savings are reaching a plateau
- Congestion – large increase in vehicle usage – increasing congestion
- Environment – reduction in some pollutants, but CO2 emissions continue to grow – particularly in Eastern Europe

Added Value of EasyWay

- Safety – particularly beneficial at critical road sections
- Congestion – reversing the trend of increasing congestion where ITS is deployed – incident management through TMPs, hard shoulder running in particular
- Environment – valuable contribution in addressing the current trend of increasing CO2 emissions
Evaluation and impact results / Facts and figures

- Traveller information and early warning systems - 5% savings in accidents, 6% reduction in congestion and 1.5% reduction in CO2 emissions

- TRAVELLER INFORMATION AND WARNING SERVICES
  - Taken as a whole traveller information and early warning systems deliver 5% savings in accidents, 6% reduction in congestion and 1.5% reduction in CO2 emissions
  - Good quality on-board weather information and warning system are particularly beneficial – reduction in accident risk of 11% (15% of fatalities across Europe associated with adverse conditions)
  - Road side information also has a very positive impact on safety – up to 5% savings
  - Incident information, resulting in re-routing reduces overall delays – 20% savings not untypical
  - Commensurate reductions in emissions
Evaluation and impacts results / Facts and figures

Traffic management Services consistently show significant benefits

- Use of pre-defined TMPs has been seen to saved around 80% of time through rerouting
- Dynamic Traffic management increases safety – up to 60% savings in accidents – and increased capacity – up to 5%
- Speed Control on critical sections has reduced accidents up to 40%, with up to 20% improvement in traffic flows

- TMP including cross border cooperation and interfaces between interurban and urban networks
  - 150-450 vehicle hours saved through rerouting not untypical – 80+% savings through the use of TMPs arise from travel time savings / reduced overall congestion
  - Long distance corridor studies have indicated transport emissions reduced by 4% as a result of TMPs used during incidents

- Dynamic traffic and network management (Dynamic lane management, Ramp metering, Hard shoulder running, HGV overtaking bans)
  - Hard shoulder running contributed to 40% - 60% accident savings when used
  - Increases capacity – up to 10% effective increase – with journey times reduced by between 20% and 30% - and up to 80% in peak times
  - Ramp metering has been shown to increase downstream speeds by 35% with overall average journey time savings of 13%
  - Improved network operations have resulted in reductions in CO2 emissions by around 4% - fuel consumption reduced by 4% and particulates reduced by 10%

- Safety critical road segments (Speed control, Incident warning, Incident management)
  - Speed control – variable speed limits with enforcement – have reduced accidents by up to 40%, where used
  - Positive impacts on congestion – up to 20% increase in throughput
  - Incident warning techniques, typically reduce accident rates by around 20% - with accident severity also reduced
EasyWay and the EC ITS Action Plan – Link between the EW Deployment guidelines and the ITS AP areas – cooperation possibility!

**ITS Action Plan**

- **Area 1**: Optimal use of road, traffic and travel data
- **Area 2**: Continuity of traffic and freight management ITS services on European transport corridors and conurbations
- **Area 3**: Road safety and security
- **Area 4**: Integration of the vehicle into the transport Infrastructure
- **Area 6**: European ITS cooperation and coordination

### Traveller Information Services - Core Services

- **CS1** Pre-trip and on-trip Road user Information services
  - Real-time event information
  - Traffic conditions (real-time and predictive)
  - Travel time (real-time and predictive)
  - Weather information (real-time and predictive)
  - Speed limits information (permanent and temporary)

### Co-modal information services

- **CS2** Co-modal information services

### Traffic Management - Core Services

- **CS1** Management of sensitive road segments
  - Speed control
  - Ramp metering
  - Hard shoulder running
  - Incident warning
  - HGV overtaking ban

### Frequent & Logistic - Core Services

- **CS1** Intelligent truck parking
- **CS2** Access to abnormal and hazardous transport regulation

### Evaluation EG and EasyWay management

**Future EasyWay II guidelines and ES work**

**EasyWay presentation 26-06-09, Thessaloniki**
EasyWay Main services in future

Traveller Information Services

- Travellers guidance with comprehensive real time traffic information allowing well-informed decisions before and during their journey
  - Seamless (local and cross-border)
  - Multimodal
  - Language independent and with harmonised provision at European level

Traffic Management Services

- Public authorities manage traffic to ensure safe and efficient use of road network
  - Traffic handled on sensitive road segments by the means of high level services as incident warning and management, dynamic lane management, variable speed limits, ramp metering, HGV overtaking ban...
  - Management measures in regional, national, cross-border areas and conurbations, when necessary, deployed with TMP in a coordinated way

Freight & Logistics

- New services dedicated to freight
  - Intelligent truck parkings
  - Make easy abnormal goods transports
EasyWay Stakes for the future

Foster interfaces between public and private stakeholders to provided new or improved services to end-users

- e.g: navigation systems could take into account public traffic management

To be one of the major tools of the ITS AP implementation

- EasyWay contributes to more than 50% of the identified actions

To win the call launched by EC!

- TEN-T Call for proposals 2009 (field n. 9: Intelligent Transport Systems for Roads) for 2010-2011
What can you do?

Give EW your feedback on the vision, the programme...

Create the conditions of deployment of ITS in your countries
- Internal organisation for deploying ITS projects
- Competence of civil servants in charge of road management

Support EW in any scope

ANDREAS ARNAOUTIS
TEO S.A

Email  arnaoutis@teo.org.gr

Thank you for your attention