



Final Dissemination Conference

Deliverable 2.5

December 2011



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Instrument: Coordination Action

Executive summary

ERA-NET ROAD II aims to enhance road research conducted by the European Research Area by coordinating national and regional road research programmes and policies.

The first ERA-NET ROAD project, which was funded under the Sixth Framework Programme, made considerable progress towards the networking of road research programmes across Europe. ERA-NET ROAD focused on information exchange between national owners of road research programmes and the definition and preparation of joint activities.

ERA-NET ROAD II builds on this work, focusing on the implementation of joint activities and funding of joint trans-national research. As owners of road research programmes, the partners in ERA-NET ROAD II ensure that coordination between the owners of the national and regional road research programmes from both within and outside the Consortium is broadened and deepened. They pave the way towards achieving an expenditure of 10% of their research budgets on trans-nationally funded collaborative research by 2013. They also liaise with other public and private stakeholders in transport research programming in Europe and encourage collaboration with non-European research programmes. At the end of the project, a permanent structure is expected to be in place that will be self-sustaining, and further encourage the trans-national coordination of road research programmes after completion of the project.

This report is Deliverable 2.5, which reports on the final ERA-NET ROAD II dissemination conference i.e. the second Plenary Group meeting.

The conference took place in Paris on 17th November 2011.

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1 Background: Work Package 2

This report is a product of Work Package 2 (WP2) of ERA-NET ROAD II (ENR2). WP2 “Dissemination: Access Facility for Road Research” aimed to provide strategies geared towards improved dissemination of completed, on-going and planned activities in road research at the national and European level. The Deliverable (D) at hand, D 2.5, reports on the final ERA-NET ROAD II dissemination event.

The original Tasks of this WP were to define the requirements of the Road Research Access Facility (RRAF) (Task 2.1), to develop the RRAF (Task 2.2), to collect information on planned research activity (Task 2.3) and to embed the RRAF (Task 2.4).

Within the contract amendment, three tasks were added:

Task 2.5: Project dissemination (formerly Task 6.4)

Task 2.6: Upgrade the RRAF

Task 2.7: National Roadshows

A description of WP2 as stated in the DoW of ENR2 may be found in Annex I.

The Deliverable at hand is related only to Task 2.5, and specifically, the final ENR2 dissemination conference.

The Tasks of WP2 were carried out by five project partners. WP2 was led by the German Federal Ministry of Transport, Building and Urban Development (BMVBS), represented by the German Federal Highway Research Institute, BAST.

France had offered to host the conference and consequently led the organisational activities. This was conducted within WP2, and under the supervision of the ENR Executive Board (EB) and ultimately of the Network Steering Group (NSG).

2 Aim of the Event

The final dissemination conference of ENR2 was actually the second Plenary Group meeting organised by the project. It followed the first one, which took place in Brussels (Belgium) on 8th of September 2010. This final dissemination Conference took place in Paris (France) **on Thursday, 17th of November 2011.**

The aim was to provide networking, dissemination and information exchange regarding trans-national cooperation experiences, projects and priorities.

The Plenary Group brought together the organisations involved in road related transport research in Europe. It provided a forum for an exchange of information between the ENR partners and the other key stakeholders. It further provided both a forum for dissemination of the findings from ENR and an opportunity to receive feedback.

The overall objectives of ENR were to:

- embed the culture of collaborative road research in the partners' organisations
- further broaden collaborative road research beyond the current fifteen countries and two regions
- establish a permanent structure that would take forward the European Research Area for road research after completion of the project
- pave the way towards increased research budgets being allocated to transnationally funded collaborative research and
- liaise with other public and private stakeholders in transport research programming in Europe.

The overall objective of ENR was to achieve better value for money for road administrations and to help them obtain answers to their needs more efficiently.

This Plenary Group was an opportunity for ENR2 partners to present their results on ENR activities to the stakeholders, as well as presenting their plans on how to best use the results of the project. The partners demonstrated the tools developed by ENR that are to facilitate transnational programming.

3 Target Audience

The event was aimed at all European road research stakeholders. This included representatives from national and European road research programmes, Technology Platforms, and other relevant networks and associations in the European road research area who were all invited to join this forum of exchange.

A first invitation was sent out on 22nd July 2011, followed by reminders, to the NSG members of ENR2, road research programme owners and managers (Technical Group Research (TGR) and Transnational Programme Meeting (TPM) of CEDR), as well as representatives from the European Commission and from networks such as relevant Technology Platforms and ERA-NET TRANSPORT as well as European Associations.

Furthermore, the chairs of all Programme Executive Boards (PEBs) of current ENR initiated research programmes as well as the Programme Managers were invited.

In addition, invitations were sent to other European road administration (such as Belgium, Croatia, Estonia, Germany, Hungary and Iceland), international organisations and international road administration (such as Australia, Serbia, South Africa, USA). A complete list of invitees is in Annex II.

Invitations to join and take part in the discussions were also sent to some American partners. One of them had expressed interest in learning how the programme was transitioning over to CEDR and has invited the ENR2 Coordinator to discuss the progress informally during the upcoming Transport Research Board Annual Meeting (January 2012).

4 Agenda

The final agenda of the Plenary Group meeting may be seen in Figure 1.

ENR2's WP 2 had the overall responsibility for preparing an agenda and did so under the supervision of the ENR EB and ultimately NSG. Several successive versions of the draft were prepared.

A final draft was eventually circulated to all invitees along with the invitation to register.

5 Speakers

Potential speakers were identified early in the process and were contacted by Ifsttar, France, so as to confirm their availability and the topics they wanted to touch upon in particular.

Amongst them was Mr Liam Breslin from the European Commission but due to his unavailability, Mr William Bird and Mrs Alexandra Gurau were approached. Unfortunately they were also unable to attend. The Commission was consequently not represented at the event.

Some reaction proved necessary as several speakers who had confirmed their participation nevertheless cancelled at the last minute. The agenda for the day had to be reviewed accordingly. This was done during the ENR2 EB meeting, which was held two days before the Plenary Group. The output was a more compact agenda.

The final agenda in Figure 1 is this shortened agenda. The original longer agenda may be found in Annex III.




**TRANS-NATIONAL ROAD RESEARCH
ERA-NET ROAD II PLENARY GROUP 2011
THURSDAY 17 NOVEMBER 2011**

Hotel Mercure
Paris Porte de Versailles Expo
36 – 38 rue du Moulin
92174 Vanves cedex - France

Start	Item	By
09h30	Registration - Coffee	
10h00	Welcome and introductions	Patrick Malléjacq ENR Coordinator
10h15	Outputs from past transnational calls	Christian Pecharda, PEB Chair Mikkel Bruun, PEB SRO4 chair
10h45	How ERA-NET ROAD / CEDR transnational calls will work in the future	Martin Steward, CEDR TGR TPM Chair
11h15	Coffee break	
11h30	Transnational road research from research providers' perspective	Steve Phillips, FEHRL Muriel Attane, EARPA
12h00	Technology platforms' vision for road research	Claude Dumoulin, ECTP Govert Sweere, ERTRAC
12h30	Questions and answers session	Patrick Malléjacq ENR Coordinator
13h00	End of meeting	
13h00	Lunch	

ENR PG2 agenda Page 1 of 1

Figure 1 Plenary Group meeting final agenda

6 Attendees

All in all a total of 31 people attended the conference.

Please view Annex IV for a list of all attendees.

You will find below some pictures taken during the conference.



Figure 2 Photo taken at the Plenary Group meeting (Photo: Ifsttar)



Figure 3 Photo taken at the Plenary Group meeting (Photo: Ifsttar)



Figure 4 Photo taken at the Plenary Group meeting (Photo: Ifsttar)

7 Presentations made

The following presentations were made by the invited speakers. The presentations are to be found as *Annex V*.

Presentations by ERA-NET ROAD II partners

- Annex V.1* **Introduction and general overview**
by Patrick MALLEJACQ – ENR 2 coordinator
(Ifsttar France)
- Annex V.2* **The ENR2 Call 2010 – Asset Management – Effective asset management meeting future challenges**
by Mikkel BRUUN – Programme Executive SRO 4 Chairman
(DRD Denmark)
- Annex V.3* **Output from past transnational calls**
by Christian PECHARDA - Programme Executive Chairman
(FFG Austria)
- Annex V.4* **How ERA-NET ROAD / CEDR Transnational calls will work in the future**
by Martiin STEWART – CEDR TGR TPM Chairman
(HA England UK)

Presentations by European Associations

- Annex V.5* **Presentation of EARPA**
by Muriel ATTANE – EARPA Secretary General
- Annex V.6* **Benefits for road owners from transnational research**
by Steve PHILLIPS – FEHRL Secretary General

Presentations by Technology Platforms

- Annex V.7* **Research for Future Infrastructure Networks of Europe**
by Claude DUMOULIN – ECTP reFINE
(Bouygues Travaux Publics, France)
- Annex V.8* **The ERTRAC Strategic Research Agenda**
by Govert SWEERE – ECTRAC Vice-Chairman

Each presentation was followed by a short Question & Answer session, and the whole event proved to be rather lively.

Topics that were discussed include:

- How industry can be involved in the definition of future road research calls
- Could longer term research be covered by future ERA-NET ROAD calls
- How has CEDR planned for the transition after the end of the ERA-NET ROAD FP project
- How could existing research agendas such as FEHRL's, ERTRAC's, EARPA's fit into CEDR's strategy
- Etc.

8 Conclusion

The success factors of the project can be summarised in three words:

Trust, Understand, Commit

It is hoped that these three words, which were stressed during this meeting (and all previous ENR events and presentations) will remain to be the key success of any future collaboration between the different stakeholders. The objective of ENR was to promote commonly funded road research in Europe, achieve a better value for money of road research, obtain good quality research, and eventually help solve road administrations' problems.

This final conference enabled the partners to present the tools that ENR had developed to meet these needs, discuss priorities with stakeholders and plan for the future.

Discussions also touched upon how the research results can be implemented in order to engage strategies with stakeholders and further encourage a better international cooperation in the field, hence creating a greater understanding and better synergy.

The audience was very interested in the results of the ENR project, congratulated the partners on the work which had been carried out and encouraged the further development of European collaboration.

The strong emphasis was on the dissemination and use of the results of ENR for any future calls. A toolkit is in the process of being finalised (as Deliverable D1.6, due at the same time as the Deliverable at hand) and it will give coordination, management and dissemination procedures to be followed in order to collect ideas for topics and define the real needs before preparing and opening a call.

This last Plenary Group was very fruitful and positive. It paved the way for a successful transfer of ENR to CEDR, which was the objective of Work Package 3. CEDR is now committed to ensuring that the outcomes of this project are put into use for its future European transnational road research projects.

Annex I: Work Package 2

Description of work taken from the Grant agreement for: Coordination and support action (coordinating), Annex I – “Description of Work”:

Methodology

A review will be undertaken of existing mechanisms for disseminating road research and the findings will be used to define the requirements for a Road Research Access Facility that meets the needs of programme owners and programme managers. The facility will be developed and its use embedded in National Road Administrations. The work will be broken into three tasks: (i) defining the requirements, (ii) developing a facility for delivering the need and (iii) embedding the use of the facility within road administrations. The aim will be to enable improved use and faster implementation of research, and avoidance of duplication.

Task 2.1: Define requirements for a Road Research Access Facility (Leader: ZAG)

Those responsible for developing, funding and managing research programmes and implementing their results, require access to information on completed, on-going and planned activities in road research at the regional, national, European and international level. In particular, they require more information on planned or ongoing research than is available through existing databases, such as the Transport Research Knowledge Centre (TRKC) which gives an overview of research activities at European and national level, the OECD International Transport Research Documentation (ITRD) database, or the Transportation Research Information Services (TRIS) database which is produced and maintained by the Transportation Research Board in the USA. They also need that information to be available in both detailed and synthetic formats, in a form that they can use and in a variety of languages.

It is not proposed to set up a new database but rather to collect information from existing sources, such as the above databases as well as from national research knowledge centres and the Transport Research Programme Information Centre that is being developed by ERA-NET Transport. There are a variety of mechanisms available for doing this and these will be reviewed. It is envisaged that the tool will comprise a dedicated front end that might give the appearance of a single database but in practice make use of existing information. This will require ERA-NET ROAD II to liaise with National Road Administrations to ensure that the Road Research Access Facility can communicate with databases owned by the National Road Administrations.

The findings from this study will be used to define the requirements of a Road Research Access Facility which will provide those responsible for developing, funding and implementing road research programmes with the information they require. Some of the issues that will be considered are the need to ensure that the facility is sustainable i.e. is supported and funded after completion of ERA-NET ROAD II and provides access to research reports in different languages. Whilst the Facility will be developed for National Road Administrations, it will be actively promoted and made publicly available for use by all stakeholders and, in particular, researcher providers and the wider transport community.

Task 2.2: Develop Road Research Access Facility (Leader: BMVBS)

A detailed work plan will be prepared for developing the facility defined in Task 2.1. The plan will also cover the process for continued funding to maintain the facility after completion of ERA-NET ROAD II. It will provide easy access to information on completed, on-going and planned research and will assist programme managers to identify colleagues that share similar objectives, develop joint programmes at the sub-European (i.e. an area that covers part or all of several countries such as the Alpine area) and European level and ensure better

coordination of public research funding and public procurement and implement the results of research.

Progress will be monitored against the work plan and risks will be identified and mitigated. Once completed, the Road Research Access Facility will be comprehensively tested before it is promoted to stakeholders within the National Road Administrations.

Task 2.3: Collect information on planned activities (Leader: BMVBS)

Whilst information on completed and on-going research is already available on existing databases, information on planned research is not as easily accessible. National Road Administrations will be contacted through CEDR and other organisations that fund road research both in the public and private sectors will also be contacted. Relevant documents such as the planned research programmes and research strategies will be requested and made available through the Road Research Access Facility. Mechanisms will be developed for ensuring that information on planned research is regularly up-dated.

Task 2.4: Embed Road Research Access Facility (Leader: BMVBS)

The development of a Road Research Access facility will be of no value unless programme managers are aware of the availability of the facility and adopt it for determining what research had been done, is on-going and planned, and identifying areas of common interest with other National Road Administrations. The focus in this task will be on promoting its use by programme managers. An embedment strategy will be developed which will consider the issues discussed in Section 1.3 (Figure 1.6). It will include preparation of examples illustrating good practice and production of brochures comprising a short description of how the facility can contribute to projects from inception to implementation of the results. Presentations for each example will be developed for use by national programme managers to demonstrate the benefits of the Road Research Access Facility within their organisations. These embedment activities will be undertaken in coordination with Work Package 3 Task 3.2. An evaluation will be undertaken of whether the facility is being used both by National Road Administrations and other stakeholders, and of the benefits being obtained. Recommendations will be made for improvements, where appropriate.

Task 2.5: Project dissemination (Leader: BMVBS)

The findings and recommendations from both the project as a whole and the individual work packages will be disseminated to all organisations with an interest in road and road operations research as well as those with interests in the broader issues relating to public funding policy in this sector. A strategy for achieving this will be developed which will be broadly based on the following dissemination mechanisms:

- the web site developed in ERA-NET ROAD I will be further used in ERA-NET ROAD II,
- newsletters/leaflets for circulation to stakeholders and many other interest groups
- production of posters for display at key conferences and workshops,
- articles for professional journals
- involvement in the Learning Platform for ERA-NETs and liaison with NETWATCH.

The website will also be used to allow stakeholders to gain access to the findings from the project, support the implementation of results and recommendations, serve as an information channel for ongoing activities within the project and beyond the project and provide a notice board/discussion area to give interested parties an easy means to provide information in electronic format.

Dissemination materials will be made publicly available. Newsletters will be distributed to all stakeholders with an interest in the project and at key conferences which will be identified during the course of the project. Particular focus will be given to disseminating material to

research providers. This will include using CEDR to ask all its members to distribute information to their research providers. Networks of research providers such as ECTRI, FEHRL and FERSI will also be encouraged keeping their members informed of the activities of ERA-NET ROAD and the funding and information opportunities (road research facility). Interested parties, including research providers, will be encouraged to register on the web site to receive regular up-dates on progress and advance notice of calls.

In addition, ERA-NET ROAD II will be promoted at existing national conferences as well as European and international events (e.g. TRA, TRB). This will be done in liaison with Work Package 5. The consortium is aware that participation and presentation at international events requires the formal approval of the European Commission is requested.

Each WP team will designate a representative so as to ensure proper coordination of all communication within the ERA-NET ROAD II project.

The Learning Platform for ERA-NETs aims to collect and synthesise the experiences and lessons learnt from running ERA-NETs. This is a two way process and ERA-NET ROAD II will seek to learn lessons from other ERA-NETs as well as providing information on lessons learnt in ERA-NET ROAD II and provide cooperation with the associated European Research Area Monitoring Network NETWATCH.

Task 2.6: Upgrade the RRAF

The core team recognized that some additions are very useful, especially for those NRAs that do have their research programmes available in electronic format on their website. The development will be based on an exact definition of the aims and features of the upgraded RRAF and will include tools to assist those NRAs that do have their research programmes available in electronic format to transfer data to their own NRA websites, as well as tools to assist in the identification of commonalities between NRAs' research programmes. The development will be led under careful management, as such developments can be very resource intensive. The task will also liaise with WP3 and will encourage NRAs to use and feed into the RRAF.

Task 2.7: National Roadshows

In order to foster transnational research and encourage a dialogue between partners and progress towards setting up transnational research agendas, promotional and dissemination roadshows will be organised on a national or regional basis. They will target the road administrations, the research community as well as industry stakeholders. The Climate Change conference that was held in Cologne in December 2010 will be used as a reference. A common set of tools will be prepared, such as a template for the agenda, common slideshows etc. These events will then be tailored to meet local expectations and will be organised in local languages. It is foreseen that three such roadshows could be organised, one in France (with the involvement of Belgium, Luxembourg and Switzerland), one in Germany (with the involvement of the Netherlands, Austria and Belgium) and one in Denmark (with the involvement of Sweden, Norway, Iceland and Finland).

Annex II: List of Invitees

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Annex III: Original Agenda

road  net



TRANS-NATIONAL ROAD RESEARCH ERA-NET ROAD II – PLENARY GROUP 2011 THURSDAY 17TH NOVEMBER 2011

Location:

Hotel Mercure
Paris Porte de Versailles Expo
36 – 38, rue du Moulin
92174 Vanves Cedex
France

No.	Start	Item	By
	09h30	<i>Registration – Coffee</i>	
1	10h00	Welcome and Introductions	Patrick Malléjacq, ENR coordinator Govert Sweere, chair of the Plenary Group meeting
2	10h15	The ENR contribution to the future of European Road research	Patrick Malléjacq, ENR and CEDR TGR chair
3	10h45	Achievement of the European Research Area and Horizon 2020	European Commission speaker to be announced
	11h15	Coffee break	
4	11h45	Transnational Road research from a research providers' perspective	Joris Al , president , FEHRL Caroline Almeras, ECTRI, secretary general
5	12h15	CEDR and Transnational Road Research	Michel Egger, CEDR Secretary general
	12h45	Lunch	
6	13h45	Outputs from past Transnational Calls	Christian Pecharda, PEB chair Mikkel Bruun as PEB NRA,

Annex III: Original Agenda



			SRO4 chair
7	14h15	How ERA-NET ROAD/ CEDR transnational Calls will work in the future	Martin Steward, HA, CEDR TGR TPM chair IPMIT, TPM Secretariat
	14h45	Coffee break	
8	15h15	Panel discussion with EC, CEDR, ASECAP, ERA-NET TRANSPORT	ASECAP speaker to be announced Oliver Althoff, ERA-NET TRANSPORT coordinator Muriel Attane, secretary general, EARPA
9	15h45	Technology platforms' vision for road research	Jean-Luc di Paola-Galloni, Vice-Chairman of ERTRAC Claude Dumoulin, ECTP
10	16h45	Close and round up	Govert Sweere
	17h00	End of the meeting	

Some speakers are still under confirmation

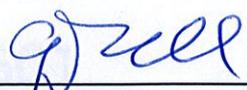
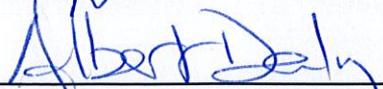
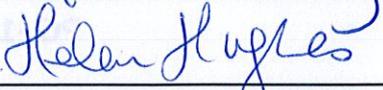
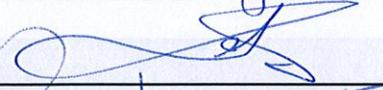
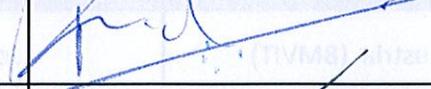
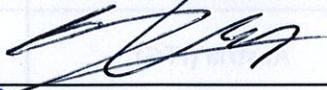
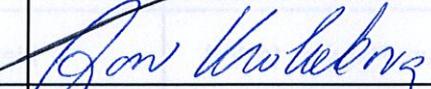
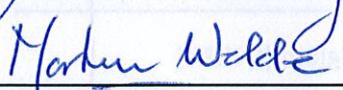
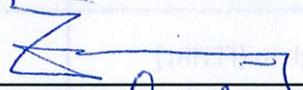
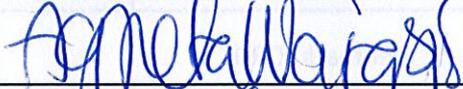
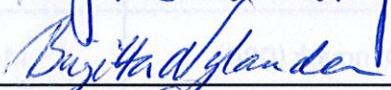
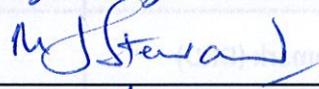
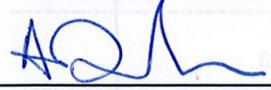
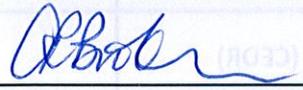
Annex IV: List of Attendees



PG -17th November 2011- Paris

Institute	Participant	Presence
Austria (BMVIT)	Johann Litzka	
Austria (FFG)	Christian Pecharda	
Belgium Flanders (AWV)	Pieter De Winne	
Belgium (EARPA)	Muriel Attané	
Belgium (FEHRL)	Steve Phillips	
Denmark (DRD)	Mikkel Bruun	
Denmark (DRD)	Mette Holm Duelund	
Denmark (DRD)	Gregers Hildebrand	not present
Estonia	Andrus Aavik	
France (CEDR)	Michel Egger	
France (ECTP)	Claude Dumoulin	
France (Ifsttar)	Patrick Malléjacq	
France (Ifsttar)	Marie-Françoise Sherratt	
France (MEDDTL)	Thibault Prevost	
France (MEDDTL)	Georg Stern	
Germany (BMVBS)	Ulfert JOOP	
Germany (BAST)	Kamala Sharma	

Annex IV: List of Attendees

Hungary (KTI)	Laszlo Gaspar	
Ireland (NRA)	Albert Daly	
Ireland (NRA)	Helen Hughes	
The Netherlands (Rijkswaterstaat)	Govert Sweere	
The Netherlands (Rijkswaterstaat)	Remco de Vos	
The Netherlands (Rijkswaterstaat)	Richard van der Elburg	
Norway (NPRA)	Jon Krokeborg	
Norway (NPRA)	Morten Welde	
Slovenia (ZAG)	Aleš Žnidarič	
Sweden (Trafikverket)	Agneta Wargsjö	
Sweden (Trafikverket)	Birgitta Nylander	
UK (HA)	Martin Steward	
UK (HA)	Alex Dunsdon	
UK (Technical Consultant)	Chris Britton	

Annex V: Presentations

- Annex V.1* **Introduction and general overview**
by Patrick MALLEJACQ – ENR 2 coordinator
(Ifsttar France)
- Annex V.2* **The ENR2 Call 2010 – Asset Management – Effective asset
management meeting future challenges**
by Mikkel BRUUN – Programme Executive SRO 4 Chairman
(DRD Denmark)
- Annex V.3* **Output from past transnational calls**
by Christian PECHARDA - Programme Executive Chairman
(FFG Austria)
- Annex V.4* **How ERA-NET ROAD / CEDR Transnational calls will work in the future**
by Martiin STEWART – CEDR TGR TPM Chairman
(HA England UK)
- Annex V.5* **Presentation of EARPA**
by Muriel ATTANE – EARPA Secretary General
- Annex V.6* **Benefits for road owners from transnational research**
by Steve PHILLIPS – FEHRL Secretary General
- Annex V.7* **Research for Future Infrastructure Networks of Europe**
by Claude DUMOULIN – ECTP reFINE
(Bouygues Travaux Publics, France)
- Annex V.8* **The ERTRAC Strategic Research Agenda**
by Govert SWEERE – ECTRAC Vice-Chairman



ERA-NET ROAD

Plenary group meeting
Paris, 17 November 2011

Trust. Understand. Commit.



- European National Road Administrations (NRAs) each have their research programmes
- NRA road research: >> 150 M€ annually in total
- Aims and objectives:
 - Strengthen the European scientific base and support the structuring of the European Research Area (ERA)
 - Achieve transnational road research programmes which are strategically planned and trans-nationally funded
 - Bring about the mutual opening of national research programmes in the road sector
- NRAs' focus is on research **procurement**

- ENR2 is a European Commission FP7 project:
 - €1.5M FP7 funding from the Commission
 - 2 years duration: May 2009 – December 2011
- Successor of ENR1 (2006-2009)
- ENR2 consortium consists of 21 partners
- Led by Ifsttar on behalf of the French MEDDTL ministry



ERA-NET ROAD achievements

1. Numerous ENR partners

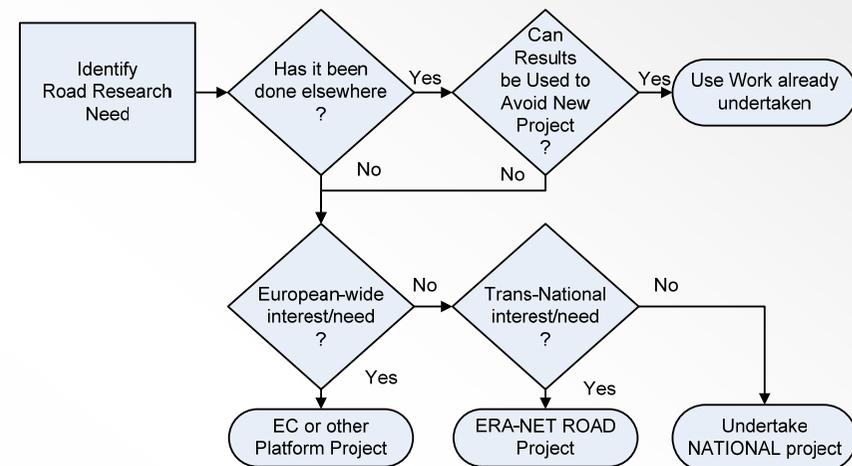
- Originally 11 partners
- Expanded to 21 partners (16 regional areas):
 - Austria, Belgium-Flanders, Denmark, France, Finland, Germany, Hungary, Ireland, Lithuania, Netherlands, Norway, Poland, Slovenia, Sweden, Switzerland, United Kingdom
- CEDR is an associate partner
- And expanding:
 - Iceland has joined in
 - Funders and providers from non-consortium countries



2. Procedures that work

- Coordination Procedure
 - Do we want to launch a new call? On what?
- Management Procedure
 - How do we prepare the call and fund it?
- Monitoring Procedure
 - When to do it?
 - Quality assurance

- The ENR approach (4 steps):



3. Useful projects

- Originated from confirmed needs at national level
- 3 initial calls confirmed that procedures DO work
- Then moved on to programme calls
 - If and when necessary, ENR organises joint transnational calls
 - The calls are funded by voluntary NRAs
 - Money crosses border, each call is centrally managed
- ENR identifies topics of joint interest for NRAs
 - Strategic research opportunities (SRO)
 - In the future: CEDR strategic research agenda
- Calls in 2008, 2009, 2010, 2011 etc.

4. Dissemination

- NRAs' objectives:
 - Is not research for research's sake
 - Is to find answers to their confirmed needs...
 - ... through more research if needed
- Dissemination towards implementation
 - A step towards innovation
- How do we disseminate?
 - Liaising with CEDR groups and industry
 - Reports publicly available on our website, workshops
 - Transnational projects are requested to include dissemination activities
 - Presentations at conferences such as TRAs and TRBs
 - Commission's ERA-NET efforts...

5. RRAF

- RRAF = Road research access facility
- Web based system that facilitates the search for road research projects:
 - Linked to existing databases (TRID, FEHRL...)
 - Includes finished and ongoing research
 - Fully searchable
 - Several access levels (confidentiality issues)
- Aims at:
 - Reducing duplication of research
 - Facilitating dissemination
 - Helping identify topics for transnational calls
- Fully operational at www.rraf.info

6. Networking

- Networked with other related research
 - Public or privately funded
 - Road related as well as other modes of transport
- Ensures that ENR does not duplicate existing research
 - Checks existing research and planned research
 - Sources : DG RTD, INFISO, MOVE, national projects...
- ENR coordinates with ERA-NET TRANSPORT
 - On « road safety » calls in 2009 for example

7. Broadening

- International broadening
 - Across Europe: workshop organized in Vilnius
 - Learned from and had a dialogue with research structures in the US, Australia, Japan...
- Successful links with the USA:
 - AASHTO, NCHRP...
 - Contacts at project level
 - Knowledge exchange
 - No money crossing borders (yet)

- Conference of European Directors of Roads (CEDR)
- CEDR was instrumental in setting up ENR and is an associate partner in ENR2
- CEDR agreed in 2010 to continue transnational research after ENR2's end



Conférence Européenne
des Directeurs des Routes

Conference of European
Directors of Roads

ENR proven benefits

International
best practice

Reduced duplication
of research

Improved quality
of research

Shorter
timescales

Wider choice
of suppliers

Exchange of
knowledge

Better value
for money

Trust. Understand. Commit.



Thank you for your attention

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info@eranetroad.org

Patrick Malléjacq

Ifsttar France, ENR coordinator

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The ENR Call 2010 – Asset Management

November 17th 2011
Paris

*Effective asset management
meeting future challenges*

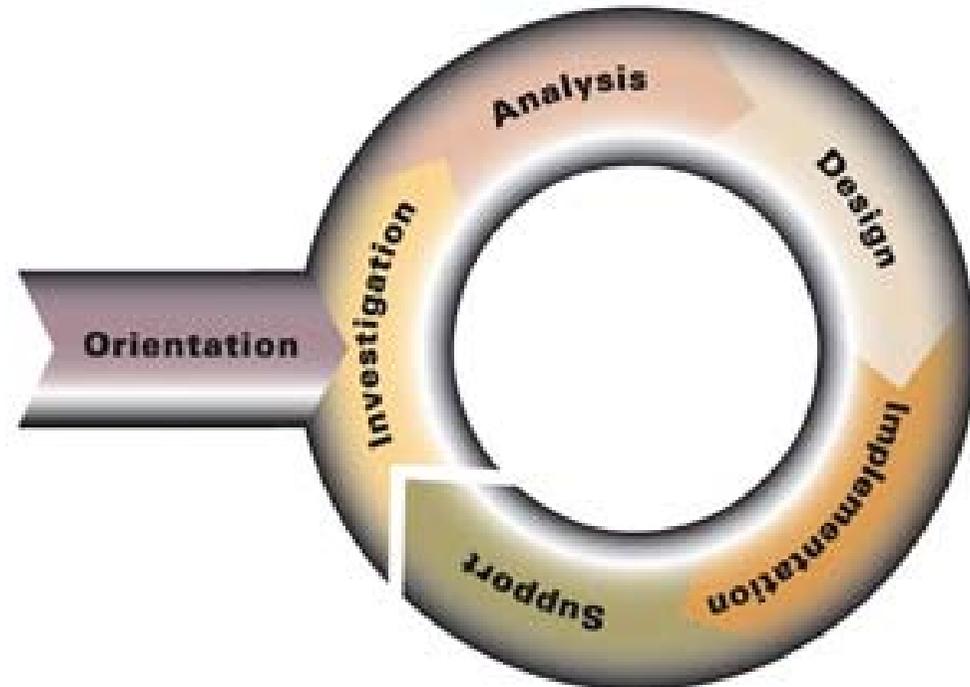
Mikkel Bruun, Programme
Executive Chairman



Share experiences
on the AM call.

Research is an ongoing
process

And so is programme
management



- The programme – projects and structure
- SWOT
- Dissemination & implementation

Effective asset management meeting future challenges

- **14 funding partners** in the Programme Executive Board with Denmark as Programme Leader
- Research budget: **EUR 2,85 million**
- **Call opened** in January 2010
- **20 proposals** were submitted
- **7 projects** were selected



*The **aim** of the programme is to **improve the management of the European road network** by identifying and developing methods and procedures which optimise performance from a technical, economic and sustainability point of view. The management of a road network involves a wide range of areas including engineering, economics, social development, civil engineering, traffic management, safety, information technology, and many more. It is important that a **holistic approach** is adopted encompassing the whole service life “from cradle to grave” in order to maximise the potential benefits of these important national assets.*

The Programme Executive Board



- **A: Meeting stakeholders' requirements and expectations**
- **B: Understanding asset performance**
- **C: Development of suitable Key Performance Indicators (KPIs) for the future**
- **D: Framework for optimised asset management**

- Presentation of projects:
 - SABARIS (Objective A)
 - EXPECT (Objective A)
 - HEROAD (Objective B)
 - SBAKPI (Objective C)
 - EVITA (Objective C)
 - ASCAM (Objective D)
 - PROCROSS (Objective D)

- Vijay Ramdas (TRL, UK) Project Coordinator/EXPECT
- Richard Abell (TRL, UK) Project Coordinator/EXPECT
- Ramesh Sinhal (HA, UK) PEB, project manager/EXPECT
- Duncan Bond (TRL, UK) Project Coordinator/SBAKPI
- Margo Briessinck (AWV, BE) PEB, project manager/SBAKPI
- Phillippe Lepert (IFSTTAR, FR) Project Coordinator/EVITA
- Christian Cremona (MEEDDM, FR) PEB, project manager/EVITA
- Stefan Deix (AIT, AT) Project Coordinator/PROCROSS
- Roland Weber (BAST, DE) PEB, project manager/PROCROSS
- Geert Dewulf (University of Twente, NL) Project Coordinator/SABARIS
- Jenne van der Velde (DVS, NL) PEB, project manager/SABARIS
- Leif Sjögren (VTI, SE) Project Coordinator/HEROAD
- Ulla Ericson (STA, SE) PEB, project manager/HEROAD
- Jos Wessels (TNO, NL) Project Coordinator/ASCAM
- Tom Casey (NRA, IE) PEB, project manager/ASCAM
- Vesa Männistö (FTA, FI) PEB member
- Arunas Rutka (LRA, LT) PEB member
- Helen Riddervold (NPRA, NO) PEB member
- Jan Jansen (DRD, DK) PEB member
- Bojan Leben (DRSC, SI) Dep. PEB member
- Mikkel Bruun (DRD, DK) PEB chair
- Mette Holm Duelund (DRD, DK) Programme leader

Meeting in Delft the 17-18 March

Day one: Progress presented by PCs
Economy, collaboration

Day two. Decisions, strategies, future

SABARIS: *Stakeholder benefits and road intervention strategies*

Aim of SABARIS:

“ The research project SABARIS addresses the challenge of road agencies to select an **intervention strategy** for road networks that is **optimal** taking into consideration the varying and conflicting values of **road benefits for the stakeholders** of this network.”

Research questions:

- Who are the stakeholders of a particular road network?
- What are the benefits and expectations of the road network for these stakeholders?
- How does the valuation of these benefits vary?
- Which intervention strategies are optimal for the likely values of these benefits?
- How can optimal intervention strategies be selected taking into consideration the variation in of these values, especially in the case of conflicting values?

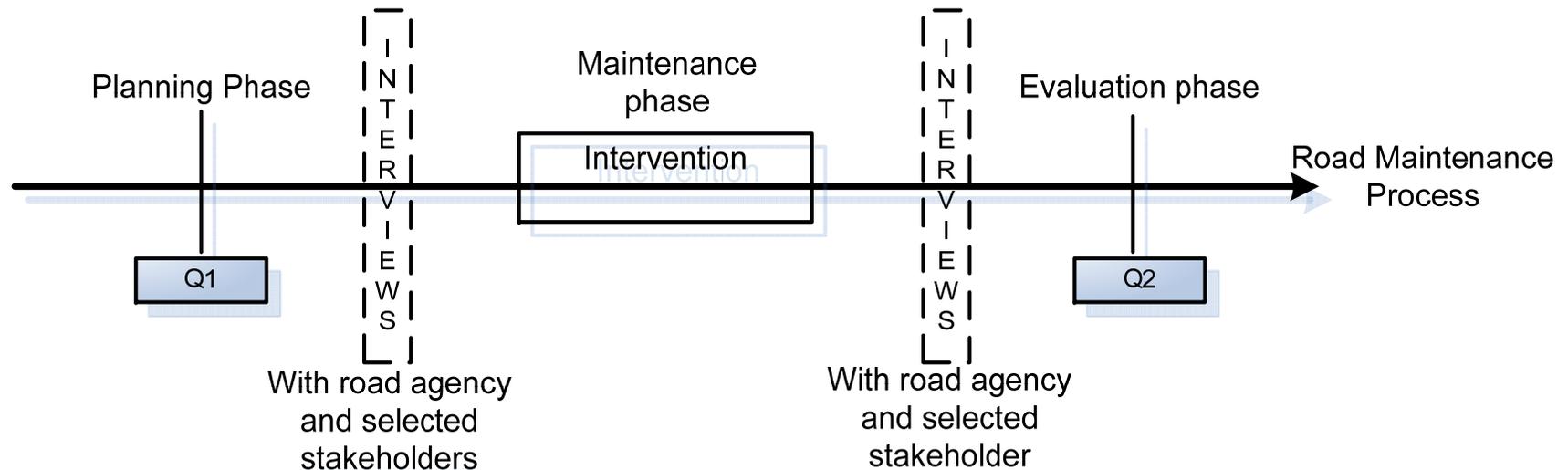
<i>Results</i>	<i>Due Date</i>	<i>Submission Date</i>
▪ Stakeholder classification (four main groups, eight subgroups)	30-11-2010	15-12-2010
▪ Benefit hierarchy (up to three levels, linked to stakeholder groups)	31-12-2010	15-12-2010
▪ Engagement strategies (generic strategies)	30-11-2010	15-12-2010
▪ Case study design (Netherlands and Belgium)		
▪ The results are compiled in a <u>working document</u>	31-01-2011	19-01-2011

Next Project Results (until December 2011)

<i>Results</i>	<i>Due Date</i>	
<ul style="list-style-type: none"> ▪ Data collection in the case studies which will deliver: <ul style="list-style-type: none"> - Valuation of stakeholder benefits - Variation of benefit valuation over time - Stakeholder expectation about and satisfaction with maintenance ▪ Optimization model for intervention strategy 	Case NL	Case BE
	31-07-2011	30-04-2011
	31-08-2011	30-11-2011
	31-08-2011	30-11-2011
	30-09-2011	31-12-2011

Unique case study approach

- Goal: Finding expectations and benefits of stakeholders of a certain road link
- Tool: Questionnaires and interviews (for context of stakeholder management)
- Uniqueness: Data collection before and after the maintenance.



Case selection criteria

- solely road maintenance project
- length of 5-10 km (longer no problem)
- at least two objects (e.g. pavement, tunnel, bridge)
- interventions are done before summer 2011
- situated within a densely populated area
- different intervention strategies can be applied
- if possible, information about road characteristics, road conditions, traffic situation, and environmental situation should be available
- possibility to send questionnaires to stakeholders (road users, companies around the road, neighbours)



***EXPECT - Stakeholders'
Expectations and Perceptions of
the future Road Transport System***

Ramesh Sinhal & Vijay Ramdas



road **ERA** net

 **Consortium Partners**
Conférence Européenne
des Directeurs des Routes
Conference of European
Directors of Roads



- Strategies for engaging with stakeholders;
- Methodology to include stakeholders' expectations within highway asset management;
- To deliver maintenance strategies to meet financial, environmental and social requirements.



Work packages and progress

1

State of the Art and current practice in asset management

2

Stakeholder perceptions and expectations

3

Prioritisation of stakeholder requirements

4

Stakeholder service levels in asset management

5

Exploitation & Dissemination of Results

6

Management



Current
Progress

- Studies of road users' opinions on the condition of the different aspects of the road network;
- Approaches used in these studies, and specific aspects of condition that influence users;
- User perception studies from other transport modes, e.g. Rail;
- Common terminology in asset management including use by non-technical people;
- Identify gaps in current asset management approaches.

- Semi-structured interviews with European road administrations;
- Identify the objectives and aims of National Road Administrations for managing their road assets;
- How are stakeholder needs and requirements accounted for in the asset management process;
- Communication between managers/operators of different asset categories;
- Cost and environmental factors/drivers.

- Report on the State of the Art in understanding stakeholders' perceptions.



- Draft Report
 - Currently in preparation
- Literature Review
 - Complete
- Interviews
 - 11 complete
 - 4 remaining
- Report
 - Due end of March

- Definitions of stakeholders and assets
- Literature identified in:
 - Australia, Belgium, Canada, Finland, France, Germany, Hungary, India, South Africa, Spain, Sweden, The Netherlands, UK, USA.
- Road, Rail and public transportation studies
- Stakeholder expectations of road assets
- Stakeholder fulfilling expectations
- Common methods in asset management

Current national road authority practice - 15 interviews

Country	Organisation	Interview Date
England	Highways Agency	11th January 2011 (Completed)
Ireland	National Roads Authority	21th January 2011 (Completed)
Scotland	Transport Scotland	9th December (Completed)
Austria	BMVIT	16th February 2011 (Completed)
Germany	BMVBS	Awaiting agreement on date
Slovenia	ZAG	14th February 2011 (Completed)
Belgium (Flanders)	AWV	1st February 2011 (Completed)
France	Direction Générale des Routes (DGR/GR-CO)	15th February 2011 (Completed)
Switzerland	ASTRA/OFROU	Awaiting agreement on date
Netherlands	Rijkswaterstaat - DVS	17th January 2011 (Completed)
Finland	The Finnish Transport Agency	1st February 2011 (Completed)
Lithuania	Arunas Rutka	Completed by email
Sweden	The Swedish Transport Administration	7 th February 2011 (Completed)
Denmark	Danish Road Directorate	Awaiting agreement on date
Norway	The Norwegian public roads administration	Awaiting agreement on date

- Work Package leader - VTI
- Task 2.1
 - Preparation and formulation of stakeholder groups and discussion topics
- Task 2.2
 - Consultation with 'user' groups
- Task 2.3
 - Meetings between road administrations and users
- Task 2.4
 - Deliverable

- Using the results of work package 1 select the types of stakeholder groups (funders, managers, operators, users, others);
- Select topic areas that will be addressed (e.g. asset types, drivers and barriers to change).



Task 2.2 - Consultation with 'user' groups

- 'Representative' focus groups in 3 different partner countries;
- Ensure overlap between key user categories to identify cultural differences;
- Aim to achieve a deeper understanding of users needs and expectations related to the level of service provided, asset priorities and awareness of the challenges faced by road operators;
- Develop and test a methodology for road administrations to use to understand and identify user (road users as well as those affected by the network) perceptions and how the information can be used.

- Framework to observe and monitor discussions and a pro-forma to interview selected participants after the meeting.
- Identify and attend consultation meetings (in different countries) to assess the achievements of the meetings in terms of improved communications and improving understanding of the issues involved.
- Interview selected participants after the meeting.
- Develop a format and trial a meeting between a road authority and stakeholders in a different country.
- Build on best practice and provide generic guidance.

- A generic format for effective engagement between stakeholders and road administrations.
- How to understand, communicate and resolve the expectations of different stakeholders.



- TRL:
 - Car and LGV drivers
 - Motorcyclists (Commuters)
 - PSV & HGV drivers
- VTI:
 - Car and LGV drivers
 - Decision makers (politicians/civil servants)
 - Vulnerable road users: Physical disabilities
- AIT:
 - Car and LGV drivers
 - Motorcyclists (Weekend, 'fun' or recreational riders)
 - Vulnerable road users: Pedestrians & Cyclists
- Topic Guide – In preparation

- Currently planning approach



- First meeting 18th March 2011
 - Task 3.1
 - Define criteria for stakeholder requirements
 - Task 3.2
 - Develop a methodology for cost benefit and multi-criteria analysis for prioritising stakeholder requirements
 - Task 3.3
 - Deliverable
-

- Investigate multi-criteria and cost benefit analysis;
- Requirements and relative priorities of stakeholders;
- Requirements and relative priorities of different asset types (such as road furniture, pavements, bridges, etc);
 - Visible (surface condition, flooding);
 - Invisible (structural strength, additional drainage capacity);
- Prioritising requirements e.g. safety, environment and accessibility.

- Methodology to compare and prioritise requirements of different stakeholders and assets for effective fund allocation;
- Investigate methodologies for *Social Cost Benefit Analysis*;
- Methodology to translate social costs and benefits into a monetary value.



- Report describing tools to evaluate and prioritise different stakeholder requirements and support the decision making process for effective asset management.





Heroad

Holistic Evaluation of Road Assessment

DELFT 2011 17 March



- VTI, Sweden
- TRL, United Kingdom
- BRRC, Belgium
- AIT, Austria
- ZAG, Slovenia
- FEHRL, Belgium





HeRoad
Overall Assessment Evaluation

High volume roads

Low volume roads

Environment

Road surroundings?

Road furnitures

Road equipment?

Pavement performance

Structures

Task	Leader	Task objectives
1	TRL	Pavement performance
2	ZAG	Structures
3	BRRC	Road furniture
4	AIT	Environment
5	VTI	Overall view
6	VTI	Management



Nr.	Deliverable Name / Report Name	Due date
1.1	Report on pavement performance: Recommendations on optimised assessment of pavement condition, in particular making best use of new data collection methods (including traffic-speed techniques)	23
1.2	How the quality of pavement condition data is controlled in the EU, and recommendations for QA procedures	18
2.1	Report on structures performance: Recommendations on optimised structural assessment and their implementations in an efficient bridge (asset) management	Last month
3.1	Report on road furniture performance	TBD
4.1	Report on environmental components: Strategies for the effective integration of environmental parameters into asset management systems	Month 23
5	Report on overall asset performance	TBD
6	Final summary report	TBD



Start meeting in December 2010

Work still in the beginning phase

- Literature reviews, National experiences
- Expert interviews
- Workshops to assess and establish findings



The ambition is to interview the following countries:

Country	Responsible
• Sweden	(VTI)
• Denmark	(VTI)
• Norway	(VTI)
• Finland	(VTI)
• France	(TRL)
• United Kingdom	(TRL)
• Ireland	(TRL)
• Switzerland	(AIT)
• Germany	(AIT)
• Lithuania	(ZAG)
• Slovenia	(ZAG)
• Belgium	(BRRC)
• The Netherlands	(FEHRL)

Planned expert workshop

- **Expert workshop** in connection with EPAM 2012 in Malmö 5-7 september, 2012

A first version of the report covering task1 to 4 will be the *main working material* at the workshop.

The outcome from the workshop will be incorporated in the *final report*.

- 16 March 2012, Progress and planning meeting in Brussels



SBAKPI

Strategic Benchmarking and Key Performance Indicators

road ERA net



BENCHMARKING FRAMEWORK



SBAKPI

BENCHMARKING FRAMEWORK

- Voluntary System - not Compulsary
- Document for Benchmarking Guidance and KPI Development
- How to use the KPI's to Benchmark
- How to develop New KPIs or Modify Existing KPIs (Joint Working / Quality Management)
- How to Monitor and Report using the KPIs

Framework Sections 1-3

Benchmarking Framework Contents (initial Ideas)

Section 1 Introduction

ERAnet

Background

Section 2 Introduction to Strategic Key Performance Indicators

- Universal Indicators

Applicable for all NRAs

To enable the widest comparison these types should be developed where possible

- Focused “Regional” Indicators

Applicable for a number of NRAs where a KPI is not universal but would be helpful for understanding NRA performance, for Example;

A shared KPI on a shared Climate/Weather / Significant issue attribute

A shared KPI due to a similarity of NRA institution type i.e. Federal structure etc

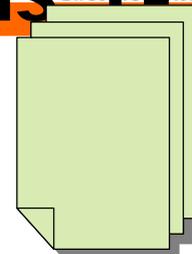
Section 3 Benefits of using the Framework to NRA and Key Stakeholders

Comparability

Driving Up Standards/ Improving Network Performance

Identifying NRA Good Practice

Improved data collection, audit, reporting



Clean Water Asset

- Water Quality

Cultural Heritage Assets

- Designated Heritage
- Managed Heritage

Nature and Biodiversity Assets

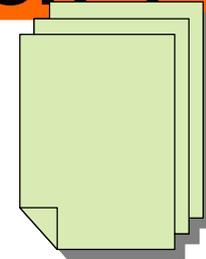
- Nature Designations
- Biological Action Plans
- Protected Species
- Invasive/Alien Species Control
- Nature Corridors

Resources and Waste

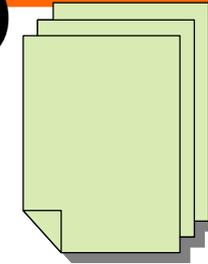
- Significant Material use (i.e. aggregates, steel, cement etc)
- Waste Production/ Reduction
- Energy Use

Soil and Geology Assets

- Designated Soils and Geology



(Continued)



Environmental

Climate Change and Carbon Emissions

- Carbon
- Mitigation
- Adaptation

Landscape Assets

- Landscape Designations (management)
- Overall Landscape Condition
- Landscape Quality/Characteristics

Clean Air Assets

- Air Quality (SO_x/NO_x Particulates etc) / Health impacts

Noise Assets

- Nuisance
- Tranquillity
- Vibration

Section 4 Introduction to Environmental and Social Topic Areas

Social Topics

Safety

- KSI
- Road Operator/Contractor Safety

Education

- NRA Staff (Env/Social Training)
- Local Communities (Outreach)
- School College (Future NRA staff)

Society and Community

- Community involvement on Road Projects
- Communication and feedback
- Accountability
- Community Health
- Gender Equality

Accessibility

- Access to the Road Network by vulnerable Groups
- Reduction in Community severance

Spatial Planning

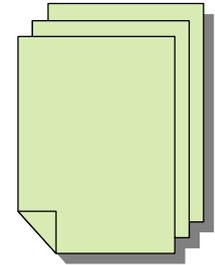
- Demand Management (Proactive)
- Collaboration with other Networks (rail, waterway etc)

Poverty Reduction/Job Creation

- Jobs Created/Protected
- Increase in Economic Activity

Development

- Regional Market Improvements



road **Draft Benchmarking Framework**



Conférence Européenne
des Directeurs des Routes
Conference of European
Directors of Roads

Sections 5-6

Section 5

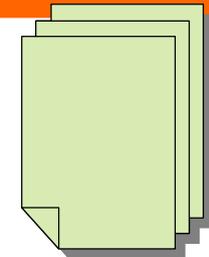
Using Existing Key Performance Indicators (Either available now or the 10 developed)-**Process**

- Selection
- Monitoring/Audit
- Reporting KPIs to Stakeholders

Section 6

Modifying Existing KPIs (VIA ERAnet FERHL/CEDR?) -
Process

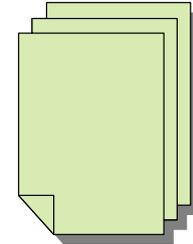
- Identification of potential Change and the benefits of Change
- Collaboration with other NRAs and Stakeholders to develop
- Quality requirements
- Dissemination of Change/ Updating Framework Document



Section 7

Developing New KPIs (Via FERHL/CEDR?) -Process

- Identification of Need for a New KPI (i.e. Gap in existing KPI set, an identified need for a Focused KPI for a number of NRAs)
- Collaboration with other NRAs and Stakeholders
- Quality Requirements
- Dissemination of New KPI/ Updating Framework Document



Section 8

Links to Project Level (Local) Key Performance Indicators (EVITA)

Section 9 References

EVITA/ Asset ERANet

NRAs

- Glossary (Universal Activity)

European National Road Administrators

- Senior directors/managers with overall environment/social responsibility.
- A chair/deputy chair or nominated member of a NRA environment/sustainability committee/ steering group.
- NRA strategic policy/business managers/advisors (sustainability/environment responsibilities if possible).
- NRA head or senior member of sustainability/environment departments (or of departments within an NRA with this responsibility).
- Other nominated NRA representatives and those interested in technical/environmental KPIs.

Other Stakeholders

We are also keen to obtain the perspective of other NRA such as:

- European national government staff with responsibilities for NRAs/Transport/Environment or Social matters.
- European environment/social organisations and agencies with an interest in road transport networks.
- Other stakeholders who will be able to contribute to the development of the Benchmarking Framework Tool and KPIs.





EVITA

Environmental Indicators for the Total Road Infrastructure Assets



Strategic Benchmarking and Key Performance Indicators (SBAKPI)

Key Performance Indicators Benchmarking Tool Presentation and Workshop

5th April, to be held at European Conference of Transport Research Institutes, Brussels 10.30am-4pm

Background

Event

To support NRAs on sustainability issues, a draft of a voluntary strategic sustainability benchmarking framework tool will be introduced at the event for initial stakeholder comment, further workshop development and with further feedback eventual trial within NRAs. The framework is designed to manage a set of environmental and social Key Performance Indicators (KPIs), initially 10 strategic KPIs will be developed for the framework and ideas for these will be presented at the event.

We will also be examining environmental KPIs on behalf of the closely linked EVITA project which is developing KPIs suitable for use at a technical project level. For more information on SBAKPI and EVITA please see the website <http://e-kpi.fehrl.org>. The presentation language will be English.

Evita objectives

Development and integration of new and existing key performance indicators in the asset management process

Specificities:

- Taking into account the expectations of all stakeholders
- Applicable to managing all road infrastructure components
- Easily understandable Environmental technical KPIs.
- Identifying existing best practice in the implementation of KPIs



Evita: The program

“From the stakeholders to the technical elementary indicators, via the expectations and the KPIs”

Mainly, three phases:

1. Comprehensive state of the art investigation, in close co-operation with the Road Administration Authorities in Europe
2. Recommendation of different E-KPIs for the following environmental areas: Noise, Air and Water, Natural resources and GHG.
3. Recommendation for the implementation and the use of E-KPIs



WP1 : Management

Task 1: Support and administrative management

- A Project Management Group (PMG) installed at T0, is meeting every six months (12 October 2010, 15 March 2011, 22 Sept. 2011).

First progress
report sent on
2 March 2011

Task 2: Quality

- Production of a Quality Assurance Plan (1st version send on December 2010, final version sent on 14th February 2011)
- Accordingly, a Quality Advisor is reviewing all scientific documents prior to their delivering

QAP sent on
23/11/2010, comments
received on 2/02/2011,
corrected version sent
on 14/02/2011

Task 3: Application

- An Application Advisor is in charge of providing the consortium with perspectives from the authorities.

WP2: Investigation on KPIs

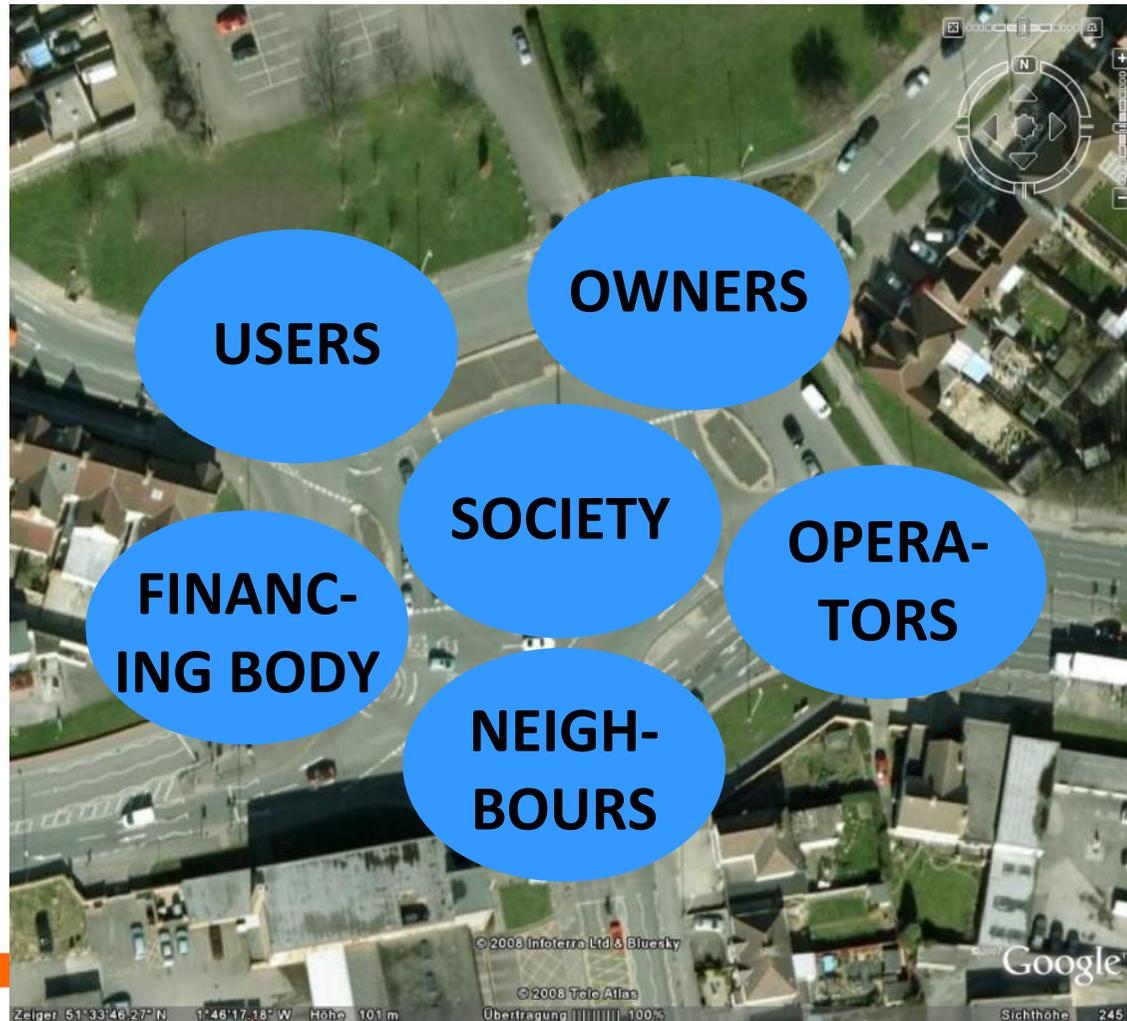
Task 1 : Expectations and inventory of KPIs

- Inventory of stakeholders and their expectations
 - PIARC D1.2
 - Specific WS (held in Paris on 2/02/2011)

Task 2: Assessment of existing E-KPIs

- Inventory of existing E-KPIs
- Evaluation from several standpoints: relevance; performance; availability, reliability, sustainability...
- Need for development of new KPIs

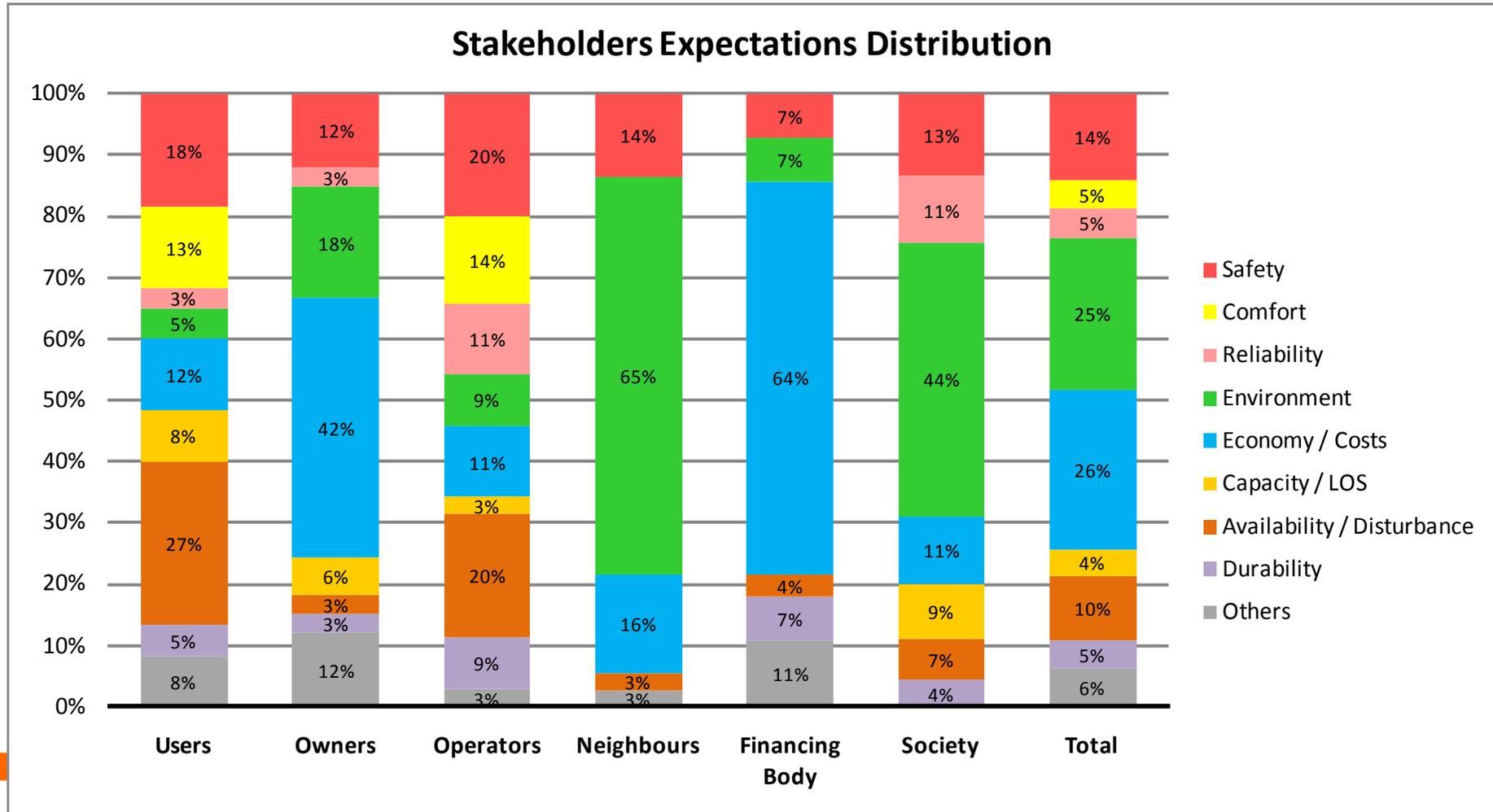
Concept and families of stakeholders



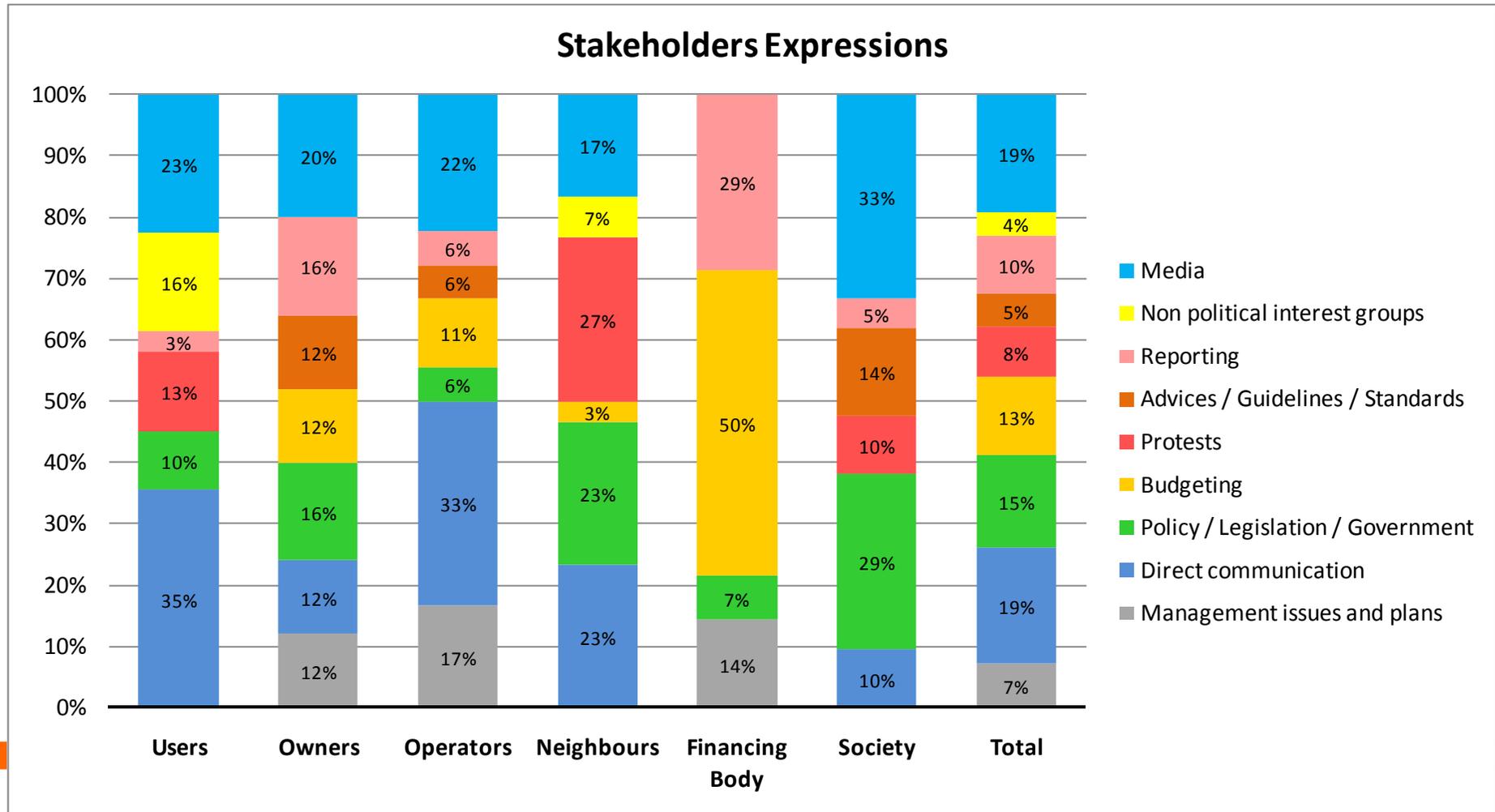
Delft, 17 March 2011



What are the stakeholders expectations ?



How do the different stakeholders express their expectations and how to know ?



Delft, 17 March 2011

List of documents and projects under review

- Research projects
 - COST 354, COST 350, COST 356, COST 351
 - SYLVIA, SILENCE, PERSUADE, MIRIAM
 - ALT-MAT, HEATCO, POLMIT
- PIARC D1 draft report
- HDM-4, v7 Model on environmental effects
- EEA reports
- LCA tools and reports: PALATE, COLAS, FINNRA
- Other tools: asPECT
- Rating systems: Greenroads (FHWA), BE2ST in highways
- Other documents (i.e. ASJ RTN-Model 2008 etc.)

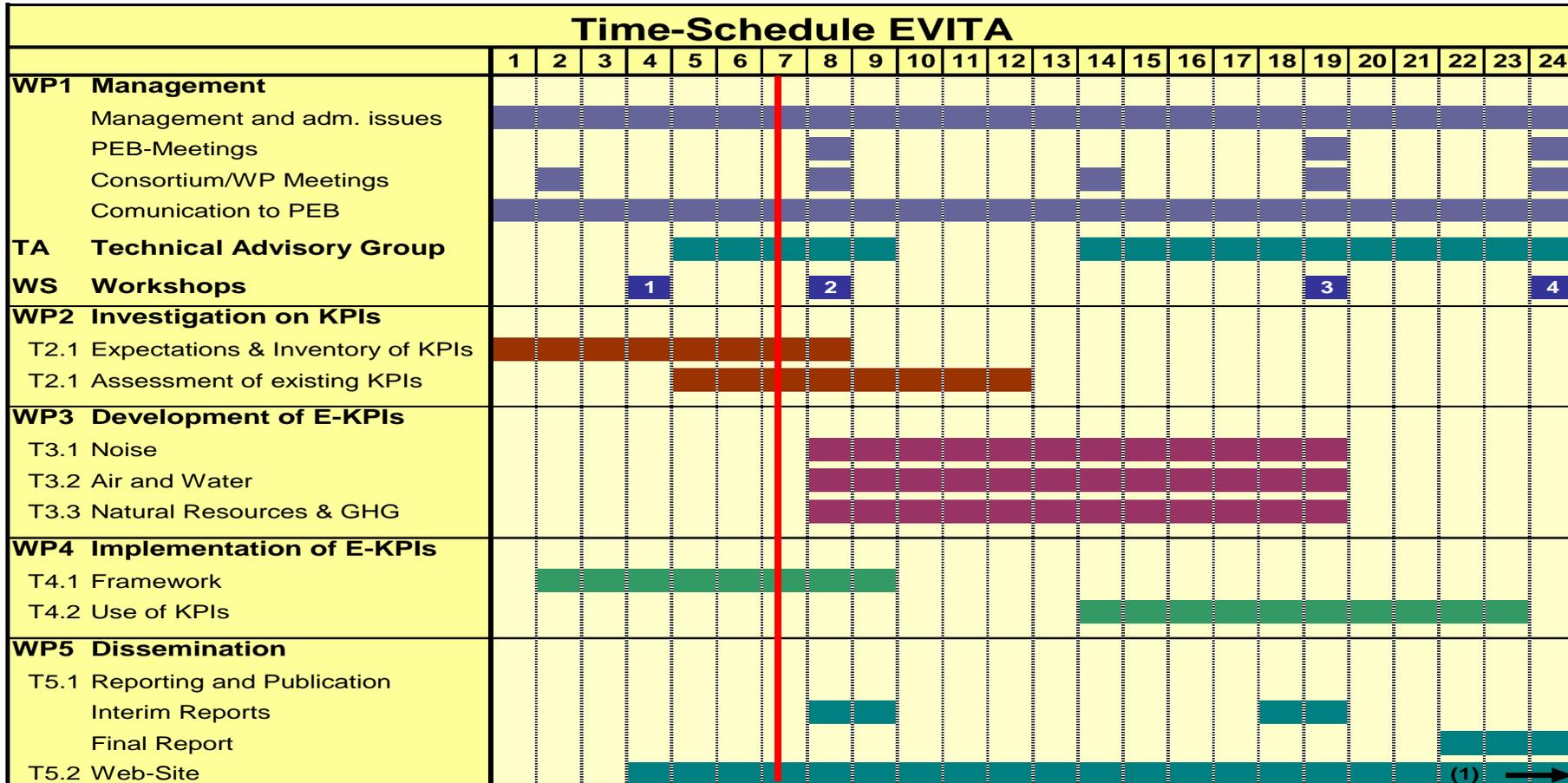


Next steps

- Update our questionnaire (3 questions)
- Send the questionnaire to the PEB members
Please, answer !
- Interview a few environment agents or agencies with this guide
- Go through literature to inventory and evaluate existing indicators
- Present and discuss the results in the 2nd workshop (28 June)
- Finalize the report (to be delivered by end of June 2011)



Evita planning



- WS1 : Workshop on expectations and KPIs
- WS2 : Workshop on E-KPIs
- WS3 : Workshop on Implementation
- WS4 : Final dissemination workshop



Thank you for your attention

ASCAM: MODELING PHILOSOPHY & GUIDELINES FOR DATA REQUIREMENTS

1. Introduction.

This document describes briefly the model philosophy, and data requirements for the implementation of a 'proof of concept' tool for ASCAM. The main objective of ASCAM is building a framework for asset management. Condition of infrastructure, costs and value are of prime importance in this framework.

ASCAM is a multinational project where stakeholders are distributed across different sectors even country wise. In this sense, standardizing as much as possible the information requirements and utilization becomes of extreme importance. Therefore, in this document we aim at providing guidelines for the information to be gathered from different partners. We also give examples of these requirements. Finally, a brief summary of the mathematical properties underlying the modeling techniques is provided as an appendix.

PROCROSS

Development of Procedures for Cross Asset Management Optimisation

WG	Name	leader	Y1												Y2											
			H1						H2						H3						H4					
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
WG1	Identification of best practice	ZAG	█	█	★	█	█	█	█																	
WG2	Monitoring requirements	AIT				█	█	█	█	█	█															
WG3	Development of cross asset procedures	TCD										█	█	█	█	█	█	█	█	█	█	█	█	█	█	
WG4	Implementation barriers and efficiency	SEP																							█	
WG0	Project Management	AIT	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	

★ Dialogue: workshop/forum discussion

- Chair Technical Advisor: Prof. J. Litzka
- Invitation to :
 - **Austria**,
 - Belgium (Flanders),
 - **Denmark**,
 - **Finland**,
 - France,
 - Germany,
 - Ireland,
 - Lithuania,
 - Netherlands,
 - Norway,
 - **Slovenia**,
 - Sweden,
 - **Switzerland**
 - United Kingdom

- In addition to that other ENR SRO4 Project Coordinators will be invited to join the TAB to connect PROCROSS with other Asset Management projects.
 - ASCAM
 - HEROAD
 - EXPECT
 - EVITA



- What are the governing influencing factors in cross asset management?
- What are the Stakeholders' requirements and expectations for cross asset optimisation?

Road
Authority

Road User

Road
Operator

Society

Road
Owner

Neighbours

- Next steps:
 - PROCROSS sends out presentations
 - PROCROSS (TCD) sends out Questionnaire
 - PROCROSS develops summary of this workshop
 - Next TAB workshop on the 8. – 10. September 2011 in Vienna

AIT Austrian Institute of Technology

Stefan Deix
AIT – Mobility

Stefan.deix@ait.ac.at

your ingenious partner

Economy and programme progress

Contributions

EUR	Budget				Planned				Actual			
	Total	2010	2011	2012	Total	2010	2011	2012	Total	2010	2011	2012
PEB member	2.850.000	950.000	950.000	950.000	900.000	900.000	0	0	1.450.000	900.000	350.000	300.000
BE	150.000	50.000	50.000	50.000	50.000	50.000	0	0	0	0	0	0
CH	150.000	50.000	50.000	50.000	50.000	50.000	0	0	50.000	50.000	0	0
DE	300.000	100.000	100.000	100.000	100.000	100.000	0	0	300.000	100.000	100.000	100.000
DK (lead)	150.000	50.000	50.000	50.000	50.000	50.000	0	0	50.000	50.000	0	0
FI	150.000	50.000	50.000	50.000	50.000	50.000	0	0	50.000	50.000	0	0
FR	150.000	50.000	50.000	50.000	50.000	50.000	0	0	50.000	50.000	0	0
IE	150.000	50.000	50.000	50.000	50.000	50.000	0	0	50.000	50.000	50.000	50.000
LT	150.000	50.000	50.000	50.000	50.000	50.000	0	0	50.000	50.000	0	0
NL	450.000	150.000	150.000	150.000	150.000	150.000	0	0	450.000	150.000	150.000	150.000
NO	150.000	50.000	50.000	50.000	50.000	50.000	0	0	100.000	50.000	50.000	0
SE	300.000	100.000	100.000	100.000	100.000	100.000	0	0	100.000	100.000	0	0
SI	150.000	50.000	50.000	50.000	0	0	0	0	50.000	50.000	0	0
UK	450.000	150.000	150.000	150.000	150.000	150.000	0	0	150.000	150.000	0	0

Evaluation of research project progress

		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
	Joint activities	PR			A/TRB		PEB/PG		TRA		PEB				PEB											EAPA/PEB	PR	
Stakeholder Expectations	SABARIS	LR	LR	LR	LR		FG	FG						IW												WS		
	EXPECT	LR	LR	LR	LR		FG	FG	FG				FG	FG	FG													
Understanding Asset Performance	HEROAD																											
Key Performance Indicators	SBAKPI																											
	EVITA																											
Cross Asset Management	ASCAM																											
	PROCROSS																											

A Swot analysis has been carried out by DRD.

Focus on dissemination/workshops/
interviews/questionnaires

SKAL RETTES

1st step: It was decided that the first step should be a SWOT analysis of the 7 projects. Mikkel and Mette will ask Rikke Rysgaard to facilitate the analysis, as she was involved in the contract negotiations and hence knows all the projects already.

The SWOT analysis is to be carried out within the next 2-3 months (**Finished by ultimo May**).

The main objective of the SWOT is to identify areas where we can sponsor improvements.

2nd step: The next step is to see whether some of the money should be allocated to the projects to optimise their results – this is a PEB decision.

3rd step: For the next meeting (**primo Sep.**) DK is to give a presentation on dissemination/implementation and how a “missing link project” could be carried out.

Also money should be allocated to finalise a summary of the entire programme. DRD could do this.

S	<p>Transnational research/benchmark (14) Importance of Asset Management (6) Strong teams (5)</p>
W	<p>Project focus and content (8) No overall programme focus/Links between the projects (7) NRA/PEB role and support (5) Implementation aspects (5)</p>
O	<p>Opportunities for further developments within projects and beyond (13) Communication/dissemination of programme (8) Implementation (3) Involving PEB/NRA more (3)</p>
T	<p>Not a joint programme but 7 projects (10) No implementation/useable results (6)</p>

- Proper end-product linking all together (9)
- Coordination between the projects (7)
- Implementation plans/demonstration activities (3)
- Conferences sessions/workshops (3)

It is also suggested that one from each project to check DoRN (2) to see what is not covered or a scientific coordinator gets hired (1). A few points are made on the general selection of research projects in relation to available funds.

- To perform the SWOT
- To hire a Technical Advisor
- To hire a Dissemination Advisor

In other words: To invest in coherence,
communication and dissemination

Common goal: **Implementation**

- **More (technical) support directed to the individual projects**
- Reading and auditing the project reports to ensure the quality and adequate uniformity of the reports and if necessary give advice to the project manager
- Go through all the projects' deliverables and give advice to the project manager and project coordinator on what to do better to meet the final result of the programme
- Discuss the progress reports of the projects with the PC and PM and provide the PL and PEC with a status up-date on each (suggestions for improvements)
- **Look for gaps between the projects and the programme objectives as well as for overlaps between the projects**
- When looking at the programme as a whole, is there coherence and synergy between the projects focusing on the intended final result?
- Are there coherences, synergies not fully exploited? Are there duplications that lead to suggestions for better allocation of work and resources?
- Is one or more of the objectives falling behind or in need of special attention/further support?
-
- **Coherence, benefits**
- Provide suggestions for improved collaboration between related projects, for instance joint project meetings, workshops, interviews, conferences etc
-
- **Support to the technical dissemination of the programme at conferences etc.**
- Development of presentations focusing on the findings of the programme and the implementation needs of the European road sector, one providing a good overview, one giving more details.
-
- **Writing the final report – technical part**

- Summaries of projects and how they are related to each other
- Recommendations collected from the projects and an analysis thereof
- Future work needed
- Which are the key results and how are they to be implemented into the NRA's
-
- The view is to be on the benefits for the NRA's with focus on:
 - Stakeholders' expectations
 - Asset performance
 - KPI's
 - Cross asset management (models and procedures)

Keeping the Dissemination Plan updated and overseeing that it is followed through

Handling all press and media activities within the programme, including producing and distributing at least 2 general press-releases and 2 general public articles about the programme during 2012 as well as writing and distributing quarterly newsletters to stakeholders.

Promoting the programme at conferences and events, specifically the Transport Research Arena conference, TRA, April 2012 and the European pavement and asset management conference, EPAM, September 2012, and the Final Event, early 2013, including producing generic power point shows, leaflets and other promotional material

Supporting the Programme Leader and the Programme Executive Board Chair in connection with PEB meetings and keep the PEB updated on dissemination activities and to gather information for newsletters and articles.

Writing a social science report, due at the end of the programme. This will be done by keeping a close contact with the Programme Leader and the Technical Advisor. The social science report will focus on the benefits of the programme findings for society and the stakeholders, as well as use the results from the Technical Report to point out specific opportunities for implementation of the results in all the participating NRAs.

Objective A: SABARIS + EXPECT

Timely intervention strategy for road maintenance

+

Involving stakeholders in the prioritising of road maintenance

Objective B: HEROAD

Hollistic view of road maintenance (provides a new view on effect)

Objective C: SBAKPI + EVITA

Finding best methods to assess the value of road maintenance

+

Thinking about the environment in road maintenance

Objective D: ASCAM + PROCROSS

Costs and benefits of road maintenance

+

Involving all aspects of the road in road maintenance

The expected outcomes of the dissemination are:

A sound basis for the eventual implementation of the results

An increased awareness of Asset Management with the target groups

A better international cooperation in the field of Asset Management

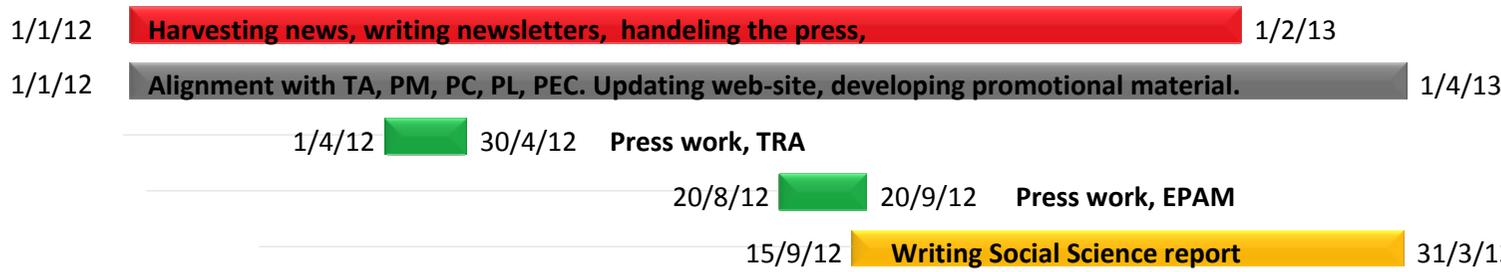
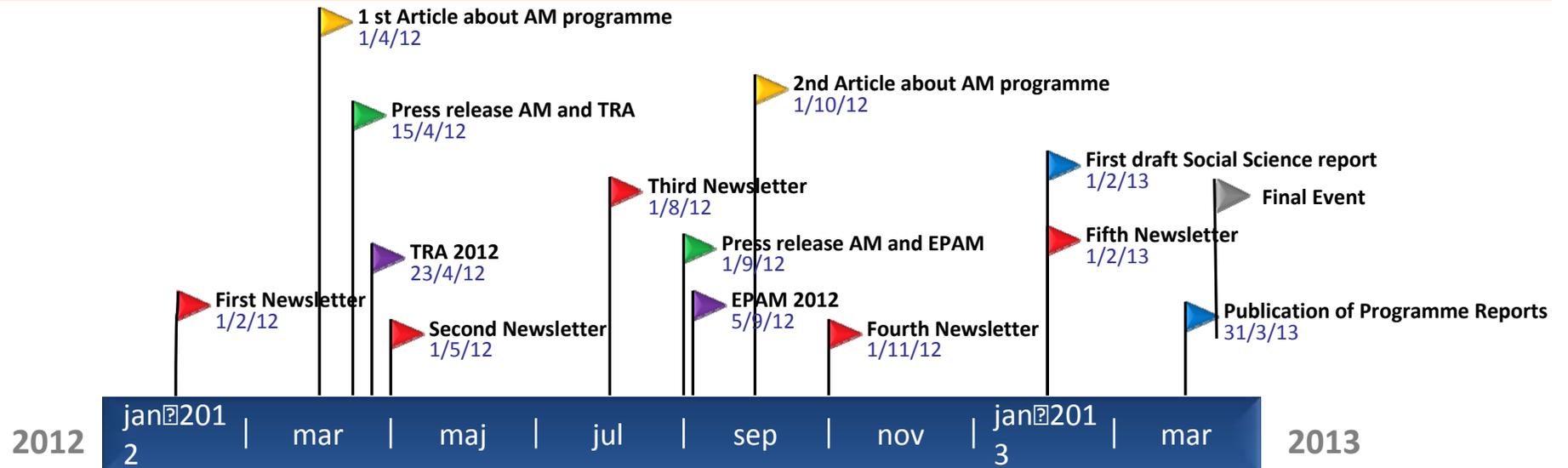
A satisfied sponsor team – the NRAs

A satisfied production team (PEB, PC, PM)

A dedicated CEDR (who will manage the joint calls in the future)

A set of networks established for future contacts – on AM

A door opened for future collaboration on other topics



- Newsletters.** All PCs will deliver status on their projects in popular form.
- Articles.** PMs and PCs will offer stories and proof-read.
- Press releases.** PEB will approve and PMs and PCs available for press. Everybody must help distribute press releases internally (nationally).
- Events.** PCs and PMs will present their projects.
- Reports.** Everybody will read and approve.
- Final Event.** Everybody will attend. All PCs will present results. All will commit to help bring along stakeholders.

- Knowledge is the basis for implementation
- Dissemination/communication is an on-going and valuable process
- Keep the pot boiling, evoke that interest
- Use the project-results for promoting the programme – and the idea/CEDR
- We do see success (CC), so let's use it!
- Everybody is an ambassador.

Special Session at the TRA 2012

<http://www.traconference.eu/>



Asset Management session at EPAM

<http://www.vti.se/en/epam-2012/>



Join us there!!



ERA-NET ROAD II

Plenary Group 2011
17th November, Paris

Outputs from past transnational calls

- Success factors

Output from...

- 1st Programme: Climate Change
- 2nd Programme: Road Safety

Trust.

Understand.

Commit.

ENR SRO3

“Road Owners Getting to Grips with Climate Change”

1st cross-border funded joint programme

FINISHED

All updated information on www.eranetroad.org

Road Owners Getting to Grips with Climate Change

- Provide Road Administrations with tools to **identify and prevent problems** with road infrastructure **due to climate change**
 - Risk Analysis and Risk Management
 - Climate Impact on Road Infrastructure
 - Mapping and classifying vulnerable structures
 - Climate change scenarios
 - Adapting design rules and specifications

Road Owners Getting to Grips with Climate Change

(ENR SRO3) June 2008 – May 2011

- **11 funding partners** in the Programme Executive Board with Sweden as Programme Manager (AT PEBchair)
- AT, DK, ES, FI, DE, IE, NL, NO, PL, SE, UK,
max. research budget: **EUR 1,5 million**
- **Call open** from 22.03.-12.05.2008
- **19 proposals** were submitted
- **4 projects were selected**
(**finally research budget EUR 1,2 million !!!**)

- **RIMAROCC**: Risk Analysis and Risk Management
- **IRWIN**: Adapting design rules and specifications
- **P2R2C2**: Climate Impact on Road Infrastructure
- **SWAMP**: Mapping and classifying vulnerable structures

Risk Management for Roads in Climate Change

- **Partner:** SE, FR, NL, NO; **Budget:** EUR 366.000
- **Duration:** 22 Months (10/2008 - 09/2010)

Develop **common method** of risk management with regard to climate change

Improvement of existing methods;

Adaptation measures in the road infrastructure

The **Handbook** covers 7 steps that are compatible with existing methods (in line with ISO 31000)

The Risk analysis method was used in SWAMP

Reports on www.eranetroad.org

Improved local Road Winter Index to assess maintenance needs adaptation costs in climate

- **Partner:** FI, SE; **Budget:** EUR 320.000
- **Duration:** 14 Months (11/2008 - 12/2009)

Develop an improved local **Road Winter Index**

Data base for future road condition scenarios

Evaluate some factors

Reports on www.eranetroad.org

- **Pavement Performance and Remediation Requirements following Climate Change**
 - **Partner:** UK, SI, NO, FI; **Budget:** EUR 214.000
 - **Duration:** 18 Months (02/2009 - 08/2010)

Develop an **advice tool** for road owners

Avoidance of loss of pavement performance

Reports on www.eranetroad.org

- **Storm Water Prevention - Methods to predict damage from the water stream in and near road pavements**
 - **Partner:** DK, SE; **Budget:** EUR 289.000
 - **Duration:** 20 Months (10/2008 - 06/2010)

Develop **Guidelines** for finding places in existing network (so called "Blue Spots")

Define **necessary initiatives** to be undertaken

Reports on www.eranetroad.org

road  Climate Change Dissemination

- **Kick-Off** in Copenhagen 13.03.2008
- **Joint Meeting** at Climate Change-Conference in Oslo 31.3./1.4.2009
- **Final Conference** in Cologne 9.12.2010
- **Final Programme Report is finish**
- **Results are used in NO, NL, FI**

ENR SRO1

“Safety at the Heart of Road Design”

2nd cross-border funded joint programme

ONGOING

All updated information on www.eranetroad.org

Safety at the Heart of Road Design

Improve Road Safety by
increasing the awareness and acceptance
of road authorities

- Development of evaluation tools
- Assessment of **forgiving road (FR)** safety measures
- Comparison and implementation of approaches of **self-explaining roads (SER)**

Safety at the Heart of Road Design

(ENR SRO1) January 2009 – December 2011

- **11 funding partners** in the PEB
with AT as Programme Manager (SE is PEBchair)
- AT, BE, FI, HU, IE, DE, NL, NO, SI, SE, UK
total budget in **EUR 1.650.000**
Research budget: EUR 1,485 million
- **Call open** from 06.03.-27.04.2009
- **18 proposals** were submitted
- **5 projects were selected**
(final research budget **EUR 1,484 million**)

- **ERASER**: common approach to SER
- **RISMET**: evaluation tool for SER
- **SPACE**: focus on speed adaptation (SER)
- **IRDES**: evaluation tool and guidelines for FR
- **EuRSI**: automated roadside mapping (FR)

Evaluations to Realise a common Approach to Self-Explaining European Roads

- **Partner:** NL, DE, AT, UK, SE; **Budget:** EUR 287.280
- **Duration:** 24 Months (01/2010 - 12/2011)

Fundamental knowledge on Self-Explaining Roads will be **compared and evaluated**.

First step focus on road users ability to **recognise and understand** road categories.

Second step implements the results in a **decision support tool** for Road Authorities.

The output will include a **checklist** and **practical guidelines with design elements** for Road Authorities.

ongoing – reports so far on www.eranetroad.org

Road Infrastructure Safety Management Evaluation Tools

- **Partner:** NL, DE, PT, NO, UK, AT; **Budget:** EUR 334.100
- **Duration:** 24 Months (09/2009 - 08/2011)

Easy identification of **(potentially) unsafe locations** in the road network.

Calculate **potential benefits and potential effects** on aspects like driver behaviour.

Based on output of the project: **RIPCORDER-ISEREST**.

The output will include an **evaluation tool** for Road Authorities.

ongoing - reports so far on www.eranetroad.org

Speed Adaptation Control by Self Explaining Roads

- **Partner:** SE, UK, BE, CZ, IE, AT, BE; **Budget:** EUR 314.730
- **Duration:** 24 Months (01/2010 - 12/2011)

It focuses on self explaining roads, identifying parameters and validation through **driving simulation**.

Estimate and evaluate **potential safety benefits** and register **change in driver behaviour** and why changes occur.

Determine **speed adaptation** and **situational awareness**.

The output will include a tool to identify unsafe or non-explaining areas, **technical notes** and a **final report** for Road Authorities.

ongoing - reports so far on www.eranetroad.org

Improving Roadside Design to forgive Human Errors

- **Partner:** IT, AT, SE, FR; **Budget:** EUR 267.710
- **Duration:** 24 Months (09/2009 - 09/2011)

Covers a broad range of **Forgiving Roadsides** and will achieve an evaluation tool along with practical solutions to make roadsides more forgiving.

The output will include a **evaluation tool** and a uniform **guideline on forgiving roadsides** for Road Authorities.

Deliverable 1 State of the art report on existing tools for the design of forgiving roadsides - **alignment with CEDR TG Safety**

ongoing - reports so far on www.eranetroad.org

European Road Safety Inspection

- **Partner:** IE, NL, AT, UK, IE; **Budget:** EUR 280.000
- **Duration:** 18 Months (10/2009 - 03/2011)

Project proposal focuses on forgiving road sides and methods of evaluation using innovative **automated mapping systems** for the identification of hazards.

Exploring **risk assessment** approach and testing **independent validation** of the system.

The output will include a **mobile route-corridor mapping system** for Road Authorities.

ongoing - reports so far on www.eranetroad.org

- **Kick-Off** in Malmö 03.02.2009
- **Joint Meeting** at CEDR TG Road Safety meeting in Budapest 4.3.2010
- **Final Conference** in Stockholm 13.01.2012
- **Final Programme Report** in March
- Results usefull for many countries



Simply do it.

Christian PECHARDA





ERA-NET ROAD Plenary Group 2011

17 November 2011

How ERA-NET ROAD / CEDR Transnational Calls will work in the future

Martin STEWARD, Highways Agency, England, UK



- Recap on where we are now
- The new structure after ERA-NET ROAD:
 - CEDR Technical Group Research (TGR)
 - TGR Transnational Programme Meeting (TPM)
 - TPM Secretariat
- Development of Call 2012
- Timetable for Call 2012
- Call 2013?
- Medium / longer term CEDR research strategy

- ERA-NET ROAD finishes on 31 December 2011
- We have an excellent track record of DELIVERY:
- Four road research programmes delivered/ongoing:
 - Climate Change (1.3M EURO, started 2008, completed 2010)
 - Road Safety (1.5M EURO, started 2009, to complete Jan 2012)
 - Asset Management (2.8M EURO, started 2010, to complete 2013)
 - Call 2011 – Design – Energy – Mobility (4.8M EURO, started 2011)
- Toolkit of our best 'tried and tested' procedures – for future use
- Road Research Access Facility (RRAF) – shared knowledge/ plans
- Appointed new Secretariat to support TPM future activity
- Progressing Call 2012 consultation and refinement
- We have: Trust. Understanding. Commitment



road net Transnational Programme Meetings

- A sub-group of CEDR TGR – reports back
- Terms of Reference agreed by CEDR EB/GB
- TPM first meeting - February 2010
- Meets 3-4 times a year – prior to TGR meetings
- October 2011 - 8th meeting
- Next meeting – 22 February 2012
- Membership:
 - All CEDR TGR members, plus
 - NRA's invited research programme managers

- Promote culture of willingness to make available summary of NRA road research programmes, past, present and future
- Present objectives and predicted outcomes of the national, European and international programmes.
- Present the national road research programmes, including:
 - projects completed over the last 2 to 3 years,
 - ongoing projects,
 - planned projects, over the next 2 to 3 years.
- Identify common themes / categories / portfolios across the programmes, to help group projects, to:
 - identify and reduce possible duplication
 - identify planned common projects, for co-funding by interested NRAs
- Utilise the RRAF, to disseminate the results of the road research and to facilitate selection of the trans-national research priorities.
- Monitor the resources required by the members and the secretariat.

road ERA net TPM ToR – Expected Outcomes

- Overview of objectives, planned outcomes of NRAs' road research programmes, including: past, present and planned projects.
- Awareness of new research topics (problems) in other countries.
- Understanding the degree of duplication and benefits realised by reducing duplication and the sharing of knowledge.
- Identification of opportunities to co-fund projects.
- Demonstration of the benefits to all NRAs from the increased value for money and earning power of their road research budgets.
- Openness to the concept of a *Transnational Programme* of common projects and theme areas, to inform future joint programme calls.
- Contribution to the establishment of RRAF.
- Recognition of CEDR's role in the future management of transnational European road research programming.
- Continuous liaison with CEDR TGR to review and appraise role and objectives of the TPM.

- Specification defined
- NRAs invited to propose up to two organisations
- 7 organisations invited to submit proposals – 10 May 11
- Six submissions received - 27 May 2011
- Open and transparent tender assessment
- Slovenian project management organisation, IPMIT selected and advised - 23 June 2011
- Contract signed CEDR : IPMIT - 22 July 2011
- Budget 50 K EUR/year, funded from programme calls
- 3-year contract, min 1 year

- Support the TPM chairman in organisation of the meetings, as a part of the CEDR TGR activities.
- Moderate the Road Research Access Facility (RRAF).
- Analysis of NRAs' programmes (including identification of opportunities for co-funded projects or joint calls).
- Organise collaborative calls, up to the creation of their Programme Executive Boards (PEBs).
- Maintain and update the "Toolkit" of good practice, liaising and exchanging information and experience with the existing Programme Executive Boards (PEBs).
- Assist NRAs and TPM to disseminate results of the transnational research activities.

- ERA-NET ROAD extension deliverable:
 - To 'develop' a Call 2012, by 31 December 2011
- TPM decided (in June) that due to short time available, there would not be an initial scoping workshop
- Timing constraints:
 - CEDR EB to approve outline programme (Themes/ Sub-Themes) at 8 September 2011 meeting
 - If EB accept, proposal to be submitted to CEDR GB for approval at their 27 October 2011 meeting
 - Thematic Workshops required in November

- Decided to conduct consultation exercise with the NRAs, during July / August (not ideal!)
- Two stage approach:
 - Circulate original list of research topics (from Call 2011 scoping workshop) – ask NRAs to review their priorities and propose any new topics (14 - 29 July)
 - All responses collated, to create updated list of topics (29 July – 2 August)
 - Updated list of topics (in 4 research areas – Safety & Security; Mobility & Transport; Environment, Energy & Resources; Design & Production) circulated to NRAs for priority scoring (3 – 17 August)

- Proposal developed:
 - Review all returned questionnaires & analyse scoring
 - Propose outline programme:
 - three Themes, each with Sub-Themes
 - Draft paper for CEDR TGR approval (by email) – 24 August
 - TGR approved – 24 August
 - Outline programme submitted to CEDR EB – 25 August

Outcome of Scoring

- This year, scoring resulted in a wider band of 'reasonably high' total scores
- Last year there was a narrower band of 'high' scores
- Difficult to select a narrower band, without indiscriminately picking some, ignoring others (& thus upsetting some NRAs!)
- So quite wide-ranging outline programme proposed
- A challenge for the Thematic Workshops to narrow it down !

Development of Call 2012

	Theme	Sub-Theme
A	Safety	Review of Speed Limits
		Safety Barriers
		Road Safety Audits
		Road Worker Safety
		Approach to Safety Risk Evaluation, Assessment and Management
B	Environment	Climate Change & Rainfall
		Sustainability
		Noise
		Traffic Route Lighting
		Reducing Emissions and Pollution
C	Maximising Availability of the Road Networks	Sustainable Road Surfacing Policy and Development
		Substitution of Natural Resources in Road Works with Recycled or Stabilised Materials
		Asset Maintenance
		Heavy Freight Transport
		Optimal Use of Network Data

Development of Call 2012

- CEDR EB & GB approved the outline programme
- Approval given to organise Thematic Workshops
- Highways Agency offered to host the three workshops, in London, on:
 - SAFETY – 30 November
 - ENVIRONMENT – 1 December
 - MAXIMISING NETWORK AVAILABILTY – 2 December
- Briefing sessions and working dinners will be held on each previous afternoon/evening

Development of Call 2012

- Invitations issued to NRAs (CEDR EB and TGR members) to nominate maximum 2 delegates per workshop per NRA (on 1 November)
- CEDR Task Groups invited (proposed delegates still via NRAs CEDR EB or TGR member)
- Deadline for nominations: 14 November
- Reminder sent 11 November
- By 15 November 10 NRAs made nominations
- More received since
- Final, extended deadline: Friday 18 November

road  net **Thematic Workshop delegates**

Country	A	B	C	Total
	Safety	Environment	Availability	
Austria	1	1	1	3
Denmark	0	2	1	3
Estonia	1	1	2	4
Finland	0	1	1	2
Germany	2	1	1	4
Hungary	1	2	2	5
Ireland	2	1	1	4
Netherlands	2	2	1	5
Norway	1	1	0	2
Spain	1	1	1	3
Sweden	1	1	0	2
United Kingdom	2	2	2	6
Totals	14	16	13	43
Facilitators	5	5	5	15
Grand Totals	19	21	18	58

Thematic Workshops

Belgium Flanders	<p>No response (yet !)</p>
Belgium Walonia	
Cypress	
France	
Greece	
Iceland	
Italy	
Latvia	
Lithuania	
Luxembourg	
Malta	
Poland	
Portugal	
Slovenia	
Switzerland	

Workshop Objectives

- Briefing packs will be issued in advance, outlining objectives, expected outcomes
- Any excluded areas will be made clear (where another CEDR Task Group has indicated this)
- To narrow down the programme scope and refine the areas to be covered in the drafting of the Descriptions of Research Needs (DoRNs)
- To propose members and leader of the Task Groups (to draft DoRNs) – for TGR approval

- Workshops:
 - Anyone (NRA, research supplier, consultant) nominated by the NRA EB or TGR member
- Task Groups – to draft DoRNs:
 - Nominated at workshops for TGR approval
 - BUT, the organisation/employer of any person on a Task Group CANNOT submit Call 2012 research proposals
- So, to avoid potential conflict of interest, the break point is at the end of the workshops, before the Task Groups start their work.

Programme Manager?

- PLEASE NOTE:
- We still need an NRA to offer to become Programme Manager, to:
 - place the Call
 - organise evaluation of proposals
 - negotiate and award the contracts
 - collect and hold the NRA funding
 - manage the research projects, including payments
- This PM role is fully funded, through a % of the Call funding

road net Programme after Workshops

- DoRNs finalised by end January 2012
- By end of February 2012, NRAs will be invited to commit funding, nominate a Programme Executive Board (PEB) member / Chair
- March 2012 - preliminary Call announcement will be made (public) – to enable suppliers to start setting up consortia
- End April 2012 – Call will be opened
- End June 2012 – Call will close
- Projects expected to start – December 2012

- TPM is developing an action plan
 - Already set up a task group to start to develop objectives for a potential Call 2013, through consultation within CEDR and NRAs
 - Will also consider short term programme – 2-3 years
- TGR has developed an action plan
 - One task is to review NRA / CEDR research priorities over the medium term (3-6 years?)

- We are on track for Call 2012
- The workshops will be a challenge – to achieve the objectives
- See you at the workshops !



THANK YOU FOR YOUR ATTENTION

www.eranetroad.org

Martin STEWARD

Highways Agency

International, Collaboration and Supply Management

Chair, CEDR TGR Transnational Programme Meetings

martin.steward@highways.gsi.gov.uk

Trust. Understand.Commit.



Meeting : ERANET Road Plenary Meeting

Speaker : Muriel Attané – EARPA Secretary General

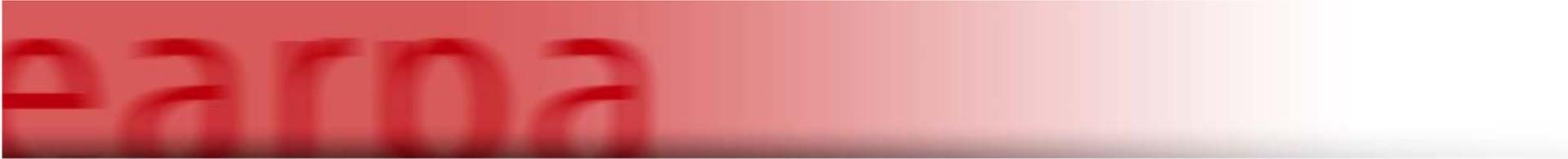
Date : 17 November 2011

EARPA: The European Automotive Research Partners Association

- **EARPA** was founded in 2002 and brings together the key independent R&D providers in the automotive sector in Europe
- **EARPA** co-ordinates the skills and capabilities of top-class R&D specialists for collaborative European Automotive Research
- **EARPA** seeks close cooperation with
 - the automotive industry (EUCAR, individual companies)
 - the automotive suppliers (CLEPA, individual companies)
 - the fuel industry (CONCAWE)
 - the European Institutions & Members States

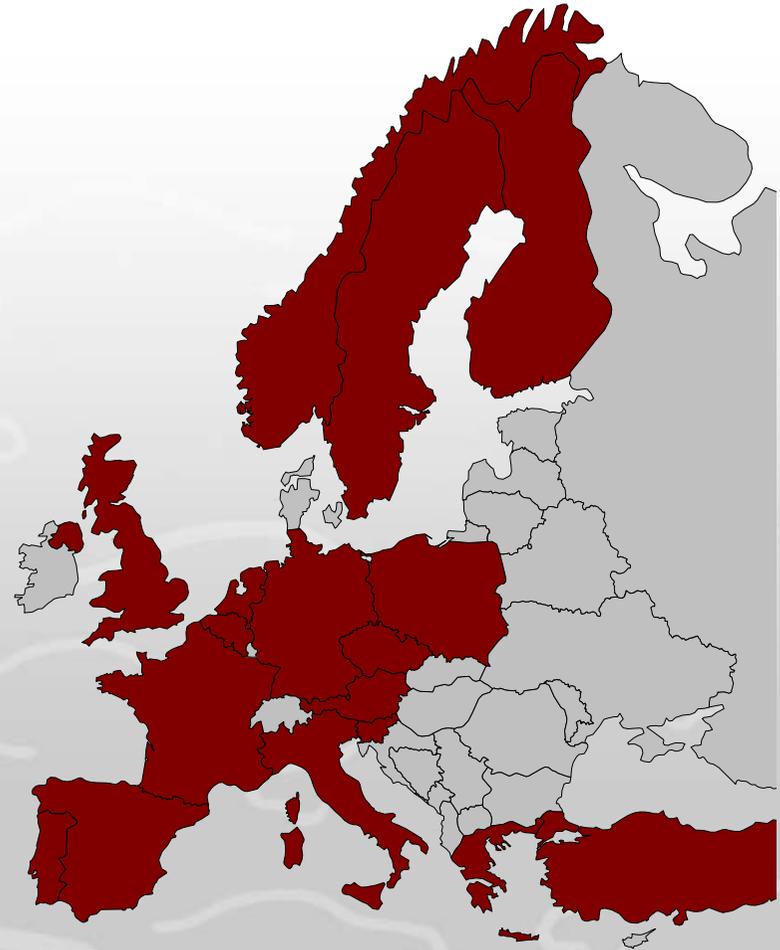
EARPA Objectives

- General: Promote European automotive innovation by cooperation between stakeholders
- Develop (technology) visions and road maps and give input to EU automotive and road transport R&D strategies and programmes
- Promote the capabilities of the members to other stakeholders, like EU institutions and the automotive industry
- Develop ideas and project proposals for EU programmes in cooperation with stakeholders
- Give information to members about EU developments, programmes, etc.
- Stimulate knowledge exchange by organizing events, workshops, etc.



EARPA Membership

- At present 39 members
- 15 EU countries + Turkey + Norway
- 50% large and small companies and institutes (full members)
- 50% universities (associated members)
- All members are **independent** from OEM's and automotive suppliers
- All members have dedicated **automotive R&D and facilities** and a **track record in EU projects**





EARPA: 39 Top-class independent automotive R&D



EARPA Task Forces

At this moment , the following Task Forces are running:

1. Safety
2. Materials, Design and Production
3. Noise, Vibrations & Harshness
4. Modelling & Simulation
5. Advanced Combustion Engines and Fuels
6. Hybrid and Electric Systems and Components
7. Urban Mobility
8. Electronic and Communication Systems
9. Project Management



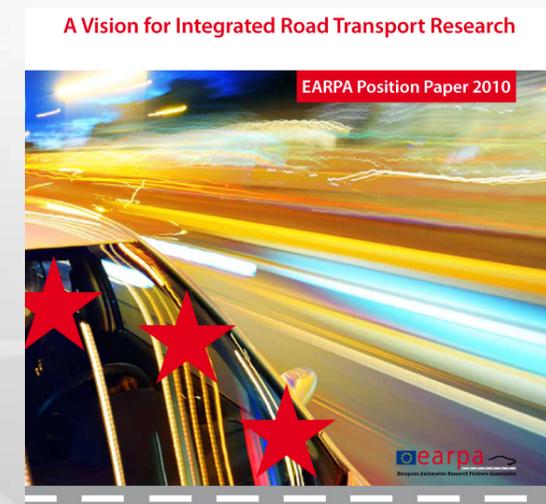
EARPA Participation & Support to ERTRAC

- EARPA Board involved in ERTRAC Steering Committee & supporting ERTRAC SIG and as such part of ERTRAC Plenary Assembly
 - EARPA supporting its main clients (OEMs & Suppliers)
- EARPA members contribute to ERTRAC Working Groups:
 - participate in meetings
 - send valuable input based on EARPA Task Forces work & position papers



EARPA's Vision for Integrated Road Transport Research

1. The importance of road transport research results from both its contribution to GDP and its influential relationship to Societal Grand Challenges.
2. Improve the effectiveness of European research by better coordination, use of best practice, and targeting research that benefits from joined-up effort.
3. The issue of powering and fuelling road transport will remain key for decades.
4. A spectrum of intelligent vehicle and infrastructure technologies can deliver safer and greener mobility – but policy and behavior change are also needed.



EARPA Supported ERANET ROAD Activities

- **EARPA members very active in offering their R&D services to Members States via the ERANETs calls and activities**
- **From EARPA experience, ERANET Road tenders up to now very successful:**
 - Easy dissemination of the call information: ERANET Road representatives participated in various EARPA events to announce their activities & calls
 - Easy submission
 - Rapid evaluation
 - Rapid start of the projects
 - Good running of the projects

Using Experience of the ERANET + on Electromobility for future Member States Plans

Difficulties mainly arising from the variety in national processes: issue which was avoided so far by ERANET Road Calls as tendering was given to only one national authority on behalf of the others!

Some first conclusions (1/2)

Electromobility+

- Topping-up by EC is a strong incentive for national programs
- So far, tools and procedures basically work well (still around 6 months with upcoming procedures...)
- ERA-Net Plus provisions require adaptations in national procedures
- Differences in the national implementation processes need to be reduced.
- User-friendliness needs to be improved
- A two step submission process is highly recommendable
- Duration of the process maybe to be reconsidered



ENT, EARPA, Brussels, 18 October 2011, Oliver Althoff

Be our guest at

**EARPA Reception & Conference
1 & 2 October 2012 in Brussels!**

See www.earpa.eu

FEHRL



Benefits for road owners from transnational research

ENR2 Plenary, Paris, November 2011

Joris AI, President



Steve Phillips, Secretary-General



Questions from ENR2 for this presentation

- *Are we [ENR2] doing the right thing, and doing it right?*
- *How do research providers contribute to the needs of infrastructure managers?*

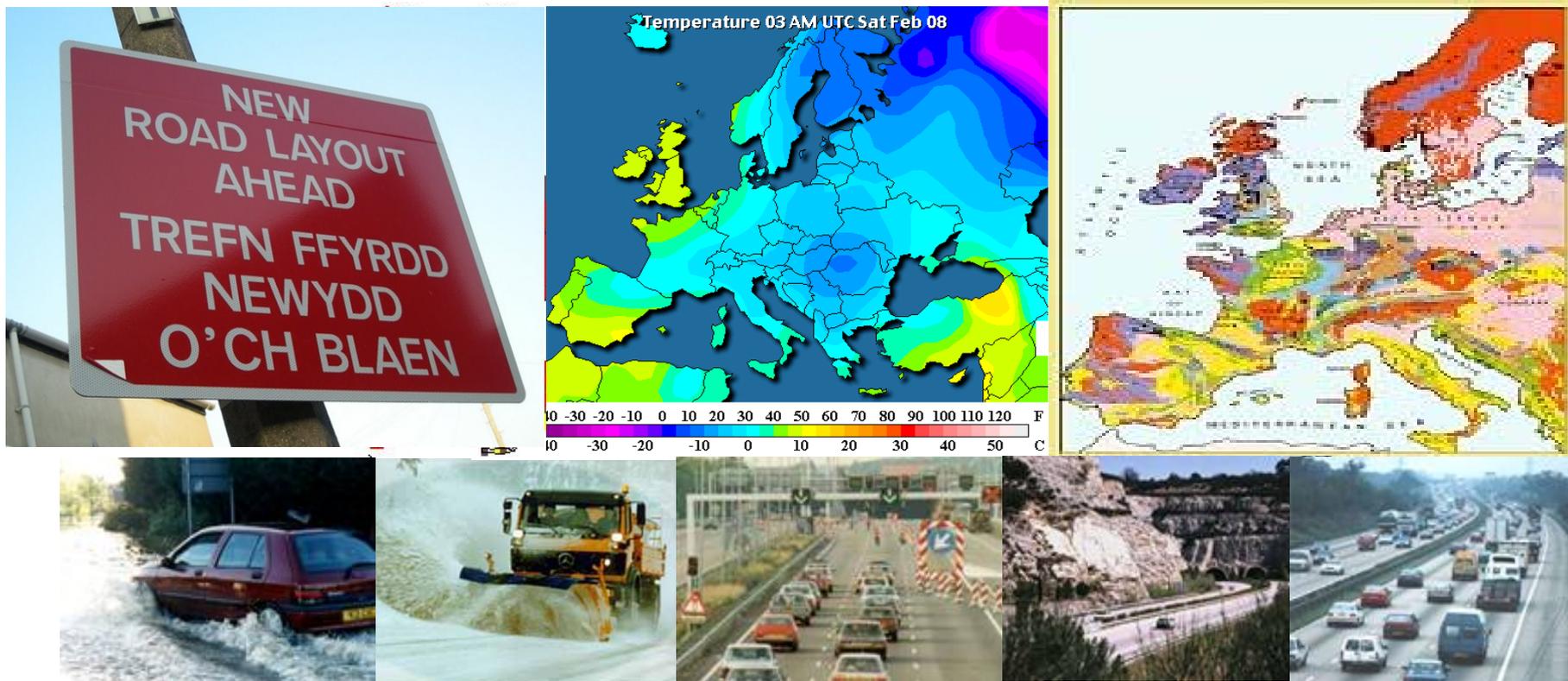
FEHRL's statutory objectives

Through research collaboration, FEHRL's main objectives are to:

- **Collaboration for better advice**
 - Provide scientific input to European and national government policy on highway engineering and road
- **Collaboration for better roads**
 - Create and maintain an efficient and safe road network in Europe.
- **Collaboration to encourage innovation (especially by industry)**
 - Improve the energy efficiency of highway engineering and operations.
 - Protect the environment and improve quality of life.

Common challenges, local needs

Aim to bring together the common needs, bring about solutions and translate those for local application



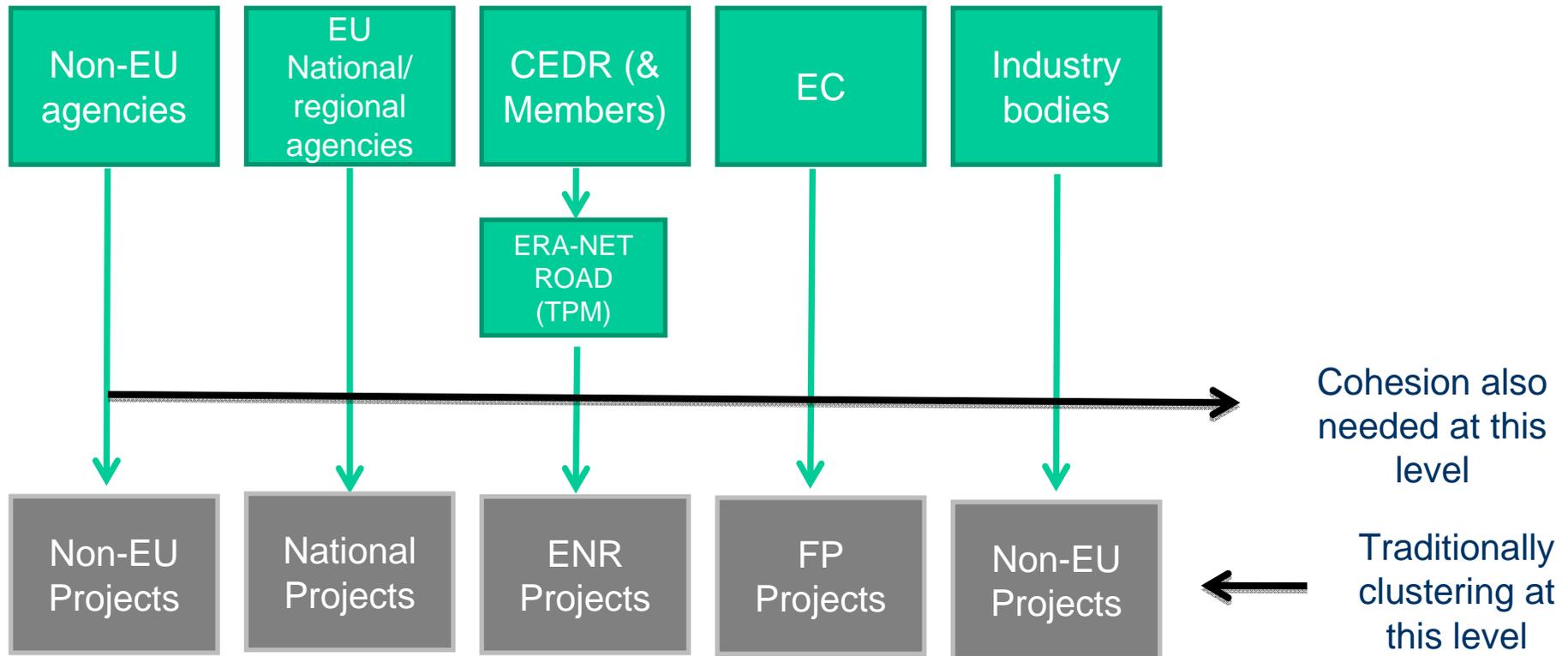
Review of required level of cooperation

- To address current and emerging road engineering challenges, cooperation is absolutely necessary.
 - The objective of FEHRL is not more projects as such, but greater and deeper cooperation.
- By 2000, cooperation established c.10%.
 - From 0% in 1991 to 9% in 1998
- Proposed target of 20% ‘can probably not be attained, and certainly cannot be sustained’ without ‘a more proactive role’ for Road Directorates.
 - WERDNET -> ERA-NET ROAD

Different types of cooperation

- **COST Actions** - widest national participation
- **EC Framework RTD projects** - greatest collaboration with industry
- **EC Study contracts** - policy orientation and avoiding intra-FEHRL disagreement
- **ENR** - Directly address NRA issues
- **Internal projects (incl CEDR/industry)** -flexibility

Correspondence between the activities



Eg. Technical review – IPG and IPL programmes

- Dutch Innovation programmes
- Noise
 - NL-DK IPG
 - NL-DE cooperation
- Air quality

- Independent FEHRL Scientific Board
 - Peer review and advice to overall management



SERRP V view on R&I demand and supply

Objectives

- Societal and policy needs

Programming

- R&D focus, scope, priorities and planning

Supply

- Enabling technology and systems

Principal partners in programming

Objectives

- CEDR, EC, Member States (incl International)

Programming

- ENCORD, EUCAR, ASECAP

Supply

- ECTRI, ENBRI, EARPA, FERSI, Eurnex, Academia

Partnering for quality, cost and the future

- Supply chains need to be strong
- The 'ENR' projects of tomorrow depend on the research of today.
- Generating new knowledge and skills is therefore of interest.
- Maintaining European capacity and capabilities is essential
- FEHRL is looking at strengthening its relations with all research providers to build the skills/capacity base.

Thoughts for the future

- Mostly doing right; would like to see:
 - Some larger projects (especially to widen consortia)
 - Keeping a low level of bureaucracy
 - Consistency of legal framework (eg IPR issues)
 - Opening to more countries
 - Supporting the widest dissemination
 - Consider separation of management and technical review
 - Links to national programmes



Research for Future
Infrastructures in Europe
reFINE



Research for Future Infrastructure Networks of Europe reFINE

Jean-Pierre Hamelin, Soletanche-Bachy,
Claude Dumoulin, Bouygues Travaux Publics

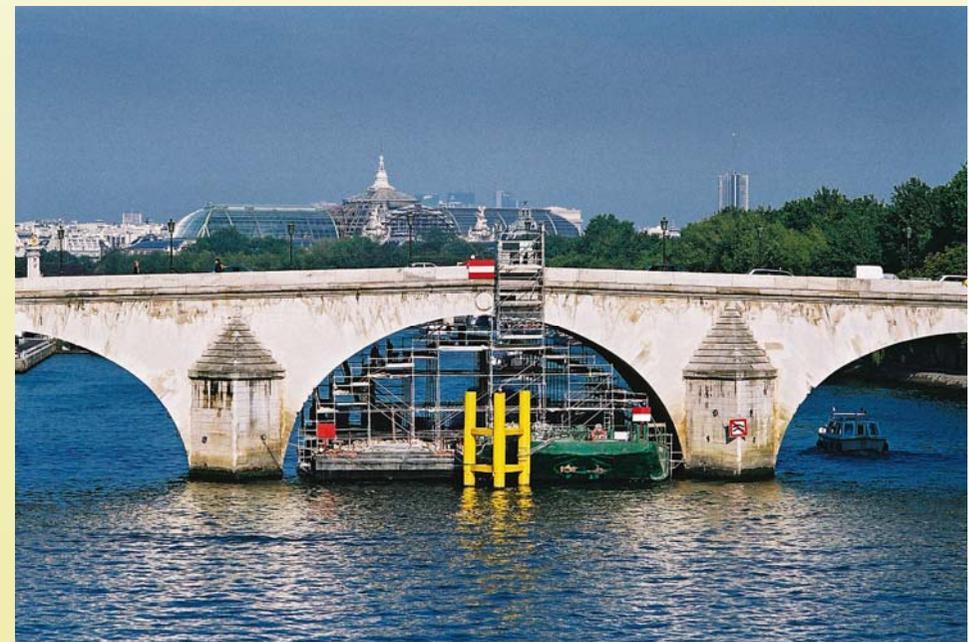
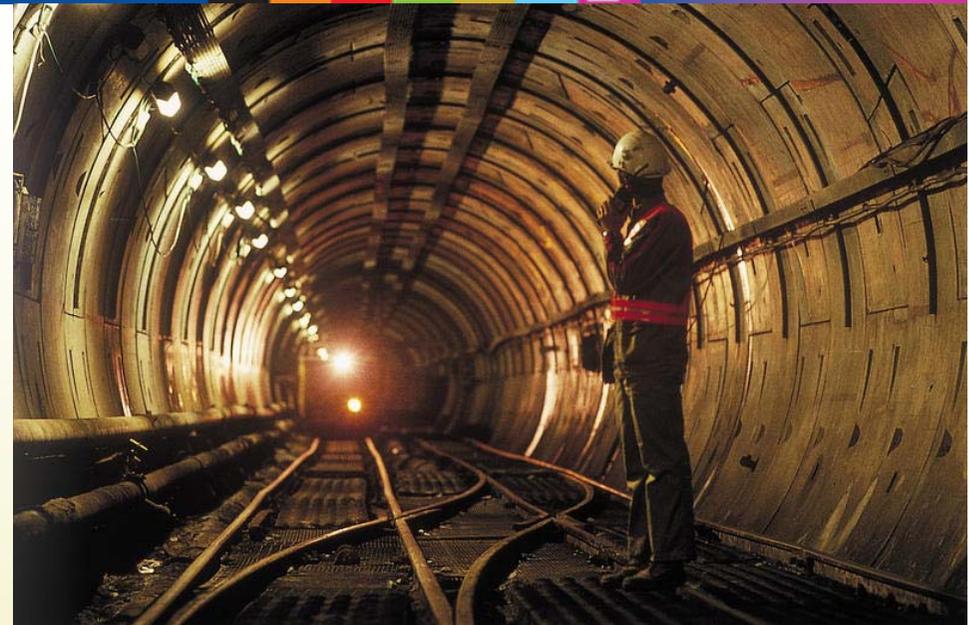
□ Artery system of our society

- Mobility of people,
- Mobility of goods distribution of vital flux
 - Freight,
 - Industrial products
 - Agricultural products (food)
 - Water, electricity, gas
- Impact on all other activities

□ Heritage of the past and

□ Infrastructure of Tomorrow's Europe

- Quality of Life
- Sustainable, Competitive Economy





Research for Future
Infrastructures in Europe
reFINE

Size of Europe's Infrastructure



Roads

- Motorways > 60,000 km
- Total network about 5 million km
- **By 2020, TEN-T will include 95,700 km of roads**

Railways:

- Railway lines : 215,000 km
- (electrified : 107.400 km)
- **By 2020, TEN-T will include 106,000 km of railway lines linking main European cities**

Waterways:

- Navigable inland waterways : 41.000 km

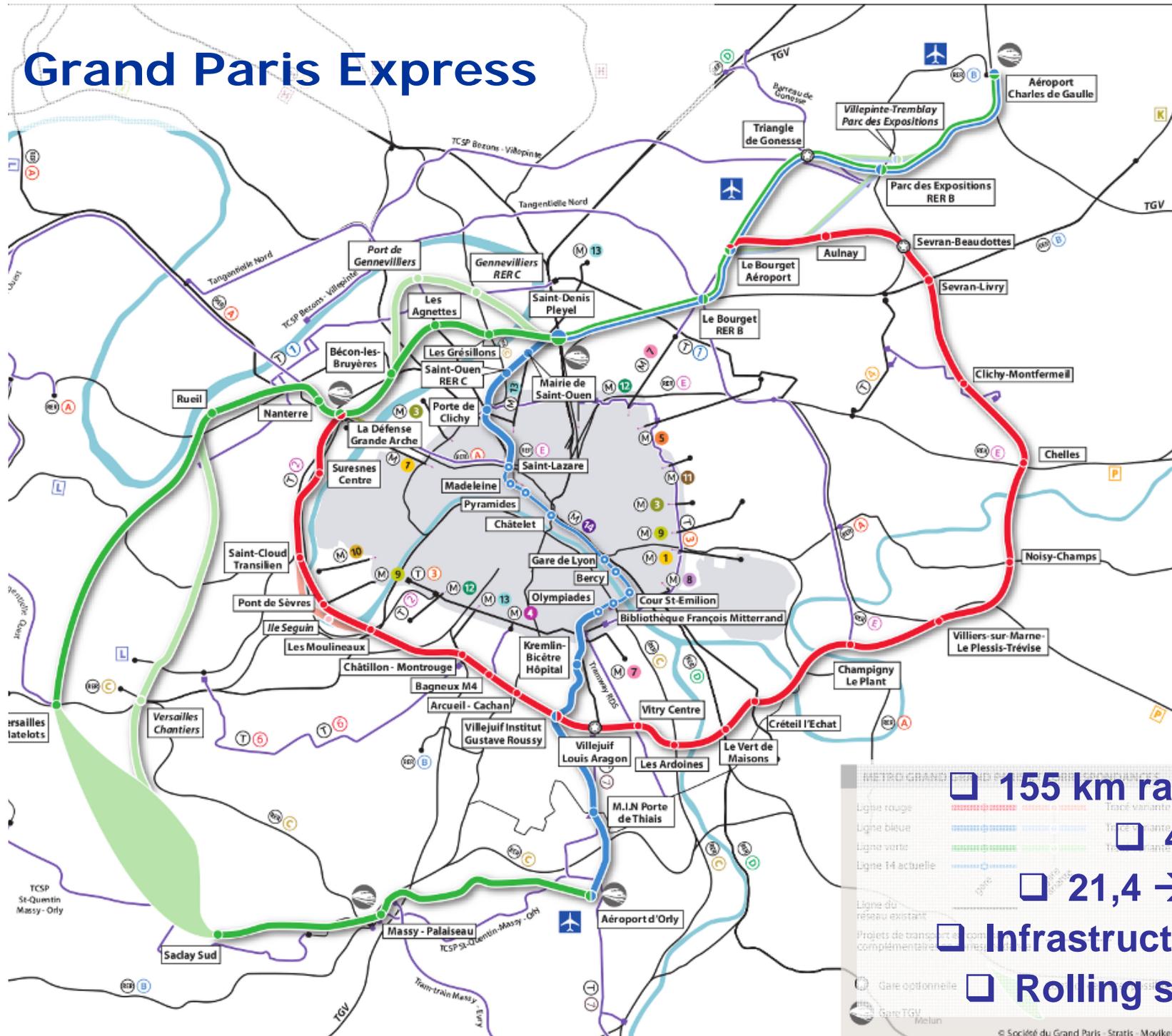
Water

- > 3.5 million km distribution pipes, > 2.5 million km waste water sewers, 70 000 treatment plants

Total investment on Transport infrastructure on the period 2000-2006 was €859 bn



Grand Paris Express



155 km railway lines

40 stations

21,4 → 23,5 bn €

Infrastructures : 80%

Rolling stock : 12%

Métro Grand Paris
 Ligne rouge
 Ligne bleue
 Ligne verte
 Ligne 14 actuelle
 Ligne du réseau existant
 Projets de transport complémentaires

Gare optionnelle
 Gare TGV
 Métro

© Société du Grand Paris - Stratis - Movikem



Research for Future
Infrastructures in Europe
reFINE



The challenges on Infrastructure



Social Cost of ownership

- Cumulative investment since centuries
- Higher level of requirements (quality, serviceability, sustainability)
- Today's resources for
 - New projects
 - New infrastructure
 - Interwoven with existing infrastructure
 - Existing infrastructure
 - Maintain
 - Upgrade
 - Adapt to new needs

To keep cost of infrastructure socially acceptable

Necessity to maintain funding for infrastructure at adequate level

→ *underinvestment in infrastructure is a major risk for EU*

➤ Construction must change to comply with new requirements

❑ Sustainability

- To design, build, operate, maintain in a sustainable way. To reduce environmental impact, resource and material consumption

❑ Availability and cost of energy

- To adapt to new types of rolling equipment, to develop new uses of infrastructure, new regulations;

❑ Climate change

- To cope with new and increased risks from natural hazards, including rising sea levels;

❑ Ageing Society

- To cater for users with various needs

👉 **Deliver MORE, BETTER, at LOWER COST**





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Vision - 1/3



- ❑ Infrastructure networks support the **European social and territorial cohesion**. They guarantee Europe's integration with the international and intercontinental market, while complying with the principle of sustainable development.

- ❑ Infrastructure networks are accessible and well connected. They support a high quality of life in **sustainable European cities** by ensuring a continuous and safe circulation of life, water and food and by providing the physical means for mobility to live and work.

- ❑ Infrastructure networks are integrated and efficient. They support a **competitive European economy** by providing fast means to develop European trade in a sustainable way: inside urban centres, between city centres and along major routes connecting Europe with the rest of the world.



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Vision – 2/3



- ❑ Infrastructure networks are designed and improved to have a **minimised environmental impact over their entire life cycle** from design and construction stage to service, maintenance and final recycling. Continuous, efficient and reliable quality of service makes infrastructure a major contributor to reducing consumption of energy and natural resources by the European economy.
- ❑ **Smart and resilient infrastructure** networks provide a high quality level, even ensuring a continuous and safe service throughout natural and man-made hazards and through climate change.

- ❑ **Quality of services provided by infrastructure networks is visible and recognized by users and by society. Infrastructure networks are commonly regarded as a shared heritage of great economical value; their maintenance and upgrade costs are optimised and managed as a necessity to preserve a continued quality of life for the future generations of European citizens.**





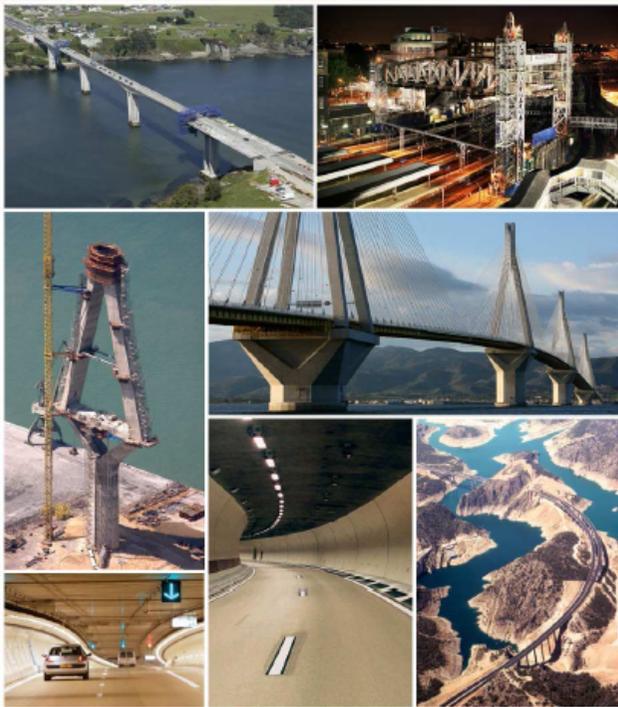
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reFINE – Vision Document



An initiative of the
European Construction
Technology Platform

Building Up Infrastructure Networks of a Sustainable Europe



From left to right:
Los Santos Bridge. Paddington Bridge. **Cádiz Bridge.**
Rion Antirion Bridge. **Tunnel in A-86.** Toulon Tunnel.
Viaducts and Tunnels in A-3

- ❑ A ‘first’ document
- ❑ Open for discussion with
 - Platforms
 - EC high level deciders
- A ‘Vision’ of future infrastructure
- Research priorities



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Construction Sector and Transport



From an infrastructure provider

- Design, build, maintain, upgrade infrastructure networks

To an infrastructure operator / concessionnaire

- New contracting forms : PPPs, BOTs, etc
- Major companies have ‘Concessions’ and ‘Operators’ branches

Civil Engineering is the 2nd market of the Construction Sector

- 23% of total Construction Sector
- Variations in EU Countries (maximum is 30%)



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An initiative of ECTP

INDUSTRY leadership

- Autostrade, Ballast Nedam, Bam, Bouygues, Dragados, Fcc Construcción, Ferrovial Agromán, Hochtief, OHL, Soletanche Bachy, Vinci, Züblin, ..

RESEARCH

- FEHRL, Ifsttar, Deltares, TNO, Danish Technological Institute, Tecnalia, ZUS (Technical and Test Institute for Construction Prague), Bundesanstalt für Wasserbau (BAW, Germany), CSIC (SP), Consorzio Tre (IT), Univ College Cork (IE), ..

Professional Associations

- ENCORD, FNTP

Linking with ERRAC, ERTRAC, WATERBORNE, WSSTP, SUSCHEM, ESTEP, ETPIS, ARTEMIS

Linking with DG Move, DG Research



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reFINE Organisation



High Level Committee

- Remi Dorval (Vinci) / HG Balthaus (Hochtief) / Jesus Rodriguez (Dragados)

Co-Leaders

- JP Hamelin (Soletanche Bachy), Elena Martin Diaz (Dragados), Claude Dumoulin (Bouygues)

Secretariat

- Luc Bourdeau (ECTP, CSTB)

SRA working group



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reFINE – overview of actions



- ❑ **05/11/2009 ECTP – HLG9 establishes a Task Force on Infra**
- ❑ **22/02/2010 First Assembly of ‘reFINE’ in Stuttgart / Hochtief**
- ❑ **02/08/2010 Vision Document issued**
- ❑ **02/11/2010 ECTP - HLG 11 decision to start an initiative**
- ❑ **18/01/2011 Second Assembly of ‘reFINE’ in Paris / Ifsttar**
 - 58 participants
 - Presentations by ERRAC, FEHRL, ETPIS
- ❑ **4/10/2011 SRA – draft version**
- ❑ **What next**
 - Finalise SRA
 - Promote to EC, to stakeholders
 - *Jan 2012 Third Assembly (to be defined)*
 - *April 2012 TRA 2012 Athens, reFINE session on infrastructure*



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From FP7 to Horizon 2020



Europe 2020 (march 2010)

DG MOVE

- White Paper - Roadmap to a single EU transport area (march 2011)
- New TEN-T Guidelines (end 2011)
- Strategic Transport Technology Plan (end 2011)

DG RESEARCH

- CSF - Common Strategic Framework (end 2011)
- Horizon 2020 (end 2012)
 - Towards a TRANSPORT Priority
 - Vertical Actions : modal transport (air, rail, road, maritime)
 - Horizontal : Intelligent Transport, Infrastructure



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reFINE – linking with EC



DG MOVE (Dir B1, B4)

- Meeting with H. Morsi, P. Collotte
- Meeting with M. Rommerts, R. Juriado, P. Dilara (STTP)
- STTP presentation meeting
- Informal discussion on CSF – STTP
- Meeting with Dir C Innovative Transport (F. Karamitsos, P Verhoef)
- Meeting with Cabinet (D. Oen, L. Chapuis)

DG RESEARCH (Dir H Transport)

- Meeting with J. Gaudin, S. Cervera, W. Bird, J. Blondelle

reFINE is encouraged / understood / considered



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reFINE - linking with Platforms



- ERRAC, ERTRAC, WATERBORNE, WSSTP**
- ESTEP, SUSCHEM, ETPIS, ARTEMIS, *GERG***

- Establish a consensus on Infrastructure SRA**
 - Optimise Modal / Co-modal / Multimodal research on infrastructure

- reFINE delegates to Platforms**
 - Identify contact persons in Platforms
 - Gather documentation (SRA, working docs)
 - Share documentation through reFINE website
 - Check relations reFINE SRA \leftrightarrow Platforms SRA
 - Discuss SRA with Platforms

- Platforms day on June 23**
- Today's session 15:30**



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reFINE – SRA Strategic Targets



❑ Infrastructure of Sustainable European Cities

- Control urban sprawl
- Densify the city within its current limits
- ➔ Develop urban transport networks : denser, deeper networks
- ➔ Road, metro, water, energy, etc

❑ Infrastructure of Long Distance Transport

- Support to unique EU market : fast / efficient / sustainable inter-city trading
- Support to global trading : export facilities
- ➔ Highways, High Speed Train, Waterways, Harbours, Airports, Energy supply



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reFINE - Research for Infrastructure (SRA)



Strategic Targets

**Focus Themes
(Europe 2020 strategy)**

	Urban Mobility (1/6)		Long Distance Transport (2/6)	
Greening (3/6)				
Smart and Resilient (4/6)				
Inclusive society (5/6)				
Health and Safety (6/6)				



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Preparation of the SRA



□ SRA work group – leaders :

- WG1 Elena Martin Diaz (Dragados) – Claude Dumoulin (Bouygues)
- WG2 Livia Pardi (Autostrade) – Raphael Steenbergen (TNO)
- WG3 Joost Bredeveld (Deltares) – Francisco Esteban (FCC)
- WG4 Karsten Menzel (UCC) – Frédéric Bourquin (IFSTTAR)
- WG5 Laura Tordera (Ferrovial) – Tomás Zamora (IBV)
- WG6 Carmine Pascale (Stres) – Maria Zalbide (Tecnalia)



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ERA-NET ROAD - Plenary 17th November 2011 - Paris

Technology platforms' vision for road research
The ERTRAC Strategic Research Agenda

Govert Sweere

ERTRAC Vice-Chairman for the Member States



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ERTRAC SRA 2010

A decisive moment for action by Europe

Societal Challenges of Road Transport:

- Decarbonization
- Reliability
- Safety & Security
- Global Competitiveness

➤ Need for a strong public private partnership





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ERTRAC SRA 2010

Setting guiding objectives for Europe

Towards a 50% more efficient road transport system by 2030

Table 1 Guiding objectives for 2030

	Indicator	Guiding objective
Decarbonization	Energy efficiency: urban passenger transport	+80% * (pkm/kWh)
	Energy efficiency: long-distance freight transport	+40% * (tkm/kWh)
	Renewables in the energy pool	Biofuels: 25% Electricity: 5%
Reliability	Reliability of transport schedules	+50% *
	Urban accessibility	Preserve Improve where possible
Safety	Fatalities and severe injuries	-60% *
	Cargo lost to theft and damage	-70% *

* Versus 2010 baseline

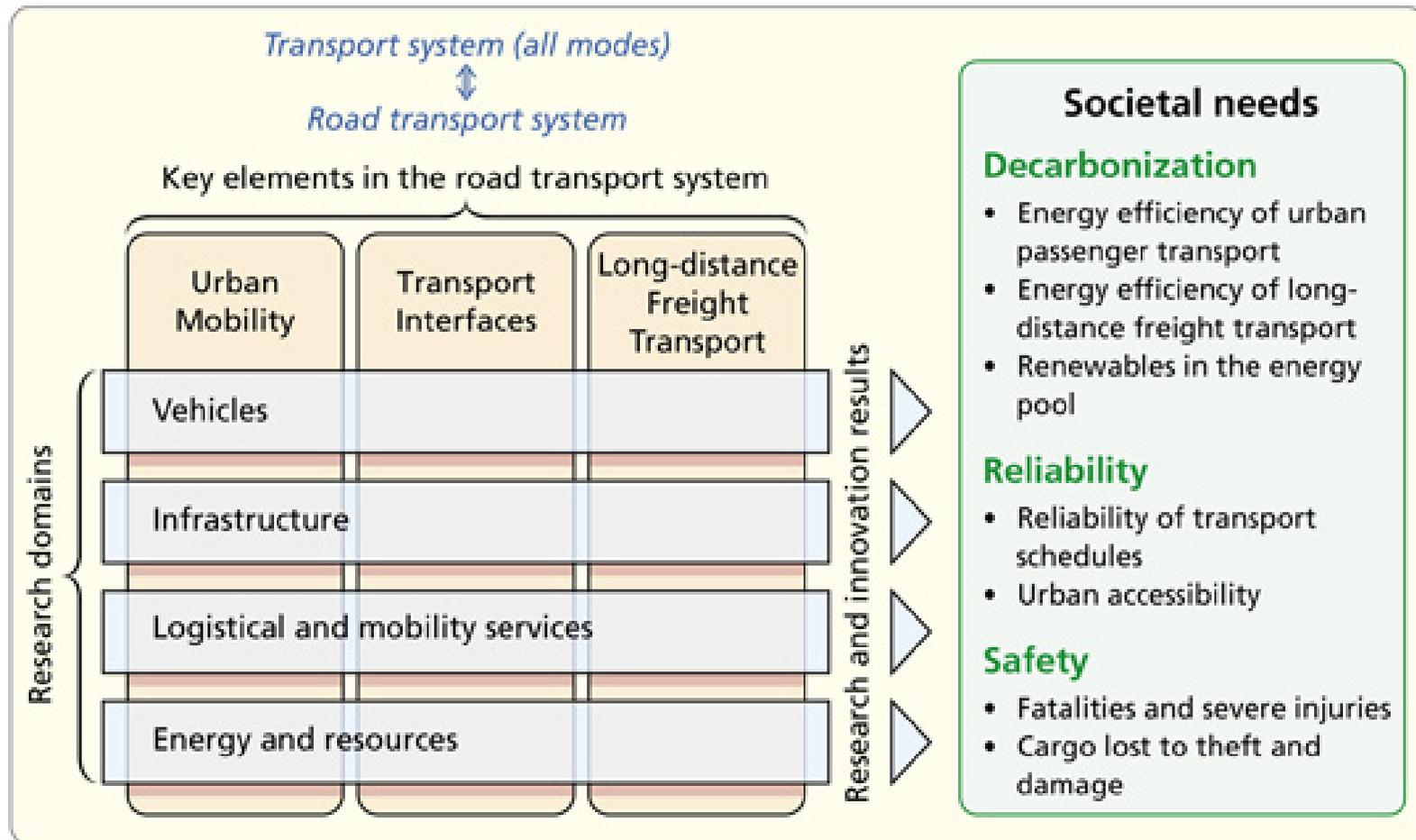


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ERTRAC SRA 2010

The need for a system approach

Figure 2 A systems approach to achieving a 50% more efficient road transport system

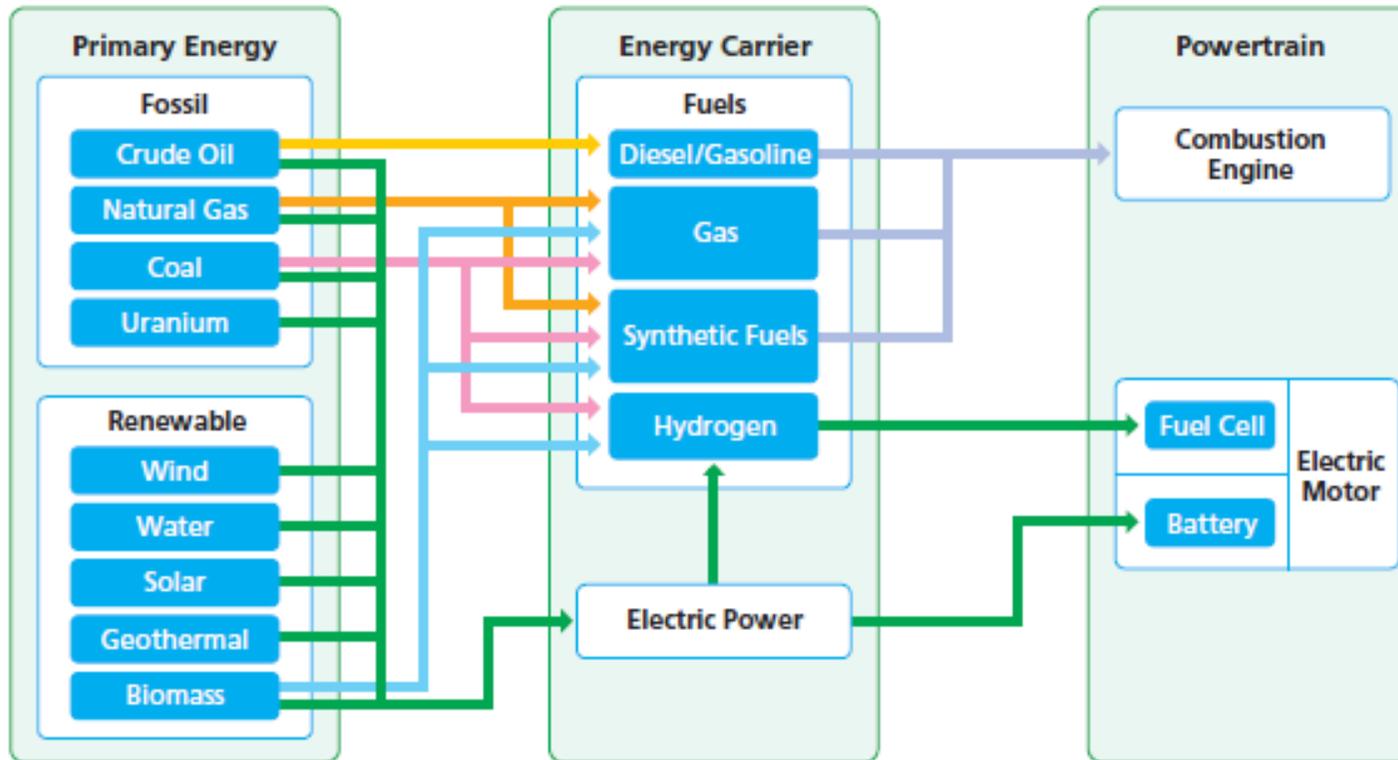




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Decarbonization

- Increase the energy efficiency
- Use renewables in the energy pool





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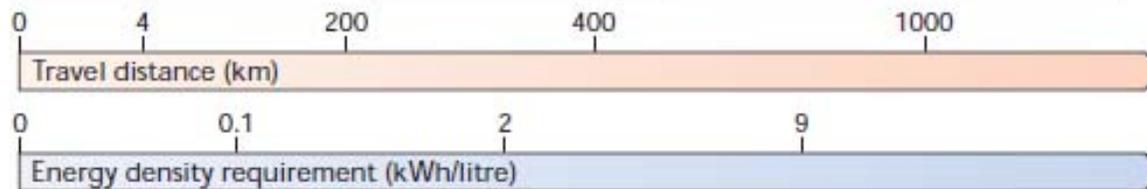
Decarbonization + Reliability

- Improve reliability of transport schedules
- Preserve and improve urban accessibility

Diversity
of Mobility
Needs



Diversity
of Mobility
Solutions





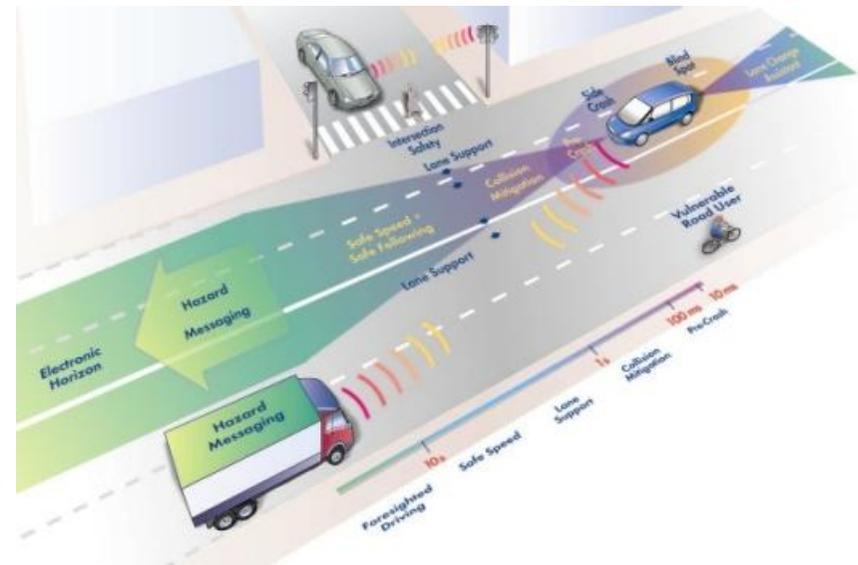
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Decarbonization + Reliability + **Safety & Security**

- Reduce fatalities and severe injuries
- Reduce cargo lost to theft and damage

All these challenges request to take a system approach:

- **Vehicle**
- **Infrastructure**
- **Services**
- **Energy & Resources**





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ERTRAC Research and Innovation Roadmaps

- Future Light-duty Powertrain Technologies and Fuels
- Hybridization of Road Transport
- **Sustainable Freight System for Europe.
Green, Safe and Efficient Corridors**
- Towards an Integrated Urban Mobility System
- **Road User Behaviour and Expectations**
- European Bus System of the Future
- **Climate Change Resilient Transport**
- **Safe Road Transport**
- European Technology and Production Concept for Electric Vehicles



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Additional roadmaps in preparation

- **Infrastructure for Green Vehicles**

Infrastructure solutions in European Road Transport for the deployment of green vehicles:

- Energy Infrastructure
- Information & Communication Infrastructure
- Services Infrastructure

- **Land Use Planning**

Interactions between transport and land use planning, in cities and in long distance.



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Conclusions

- **ERTRAC adopts a system approach for addressing road transport challenges.**
- **ERTRAC promotes cooperative and multi-stakeholders research activities.**
- **ERTRAC is supportive of ERA-NET's.**
- **ERTRAC welcomes the continuation of the ERA-NET ROAD process, as a useful instrument to promote and implement trans-national road research.**
- **Cooperation ERTRAC / ERA-NET ROAD to be continued.**



road **ERA** net



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Invitation

- **Get involved in the Road Maps process via the ERTRAC Working Groups**
- **Implementing the road owners' parts of the SRA and the Road Maps**
- **Keep liaising with us as was done during ERA-NET ROAD**



road ERA net

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Sources

Grant agreement for: Coordination and support action (coordinating), Annex I – “Description of Work” Amendment 2: 31 March 2011

Abbreviations

BAST	Federal Highway Research Institute, Germany
BMVBS	German Federal Ministry of Transport, Building and Urban Development
CEDR	Conference of European Directors of Roads
D x.y	Deliverable y by Work Package x
DRD	Danish Road Directorate
EB	Executive Board
ENR2	ERA-NET ROAD II
HA	Highway Agency (United Kingdom)
Ifsttar	French Institute of Science and Technology for Transport, Development and Networks
NSG	Network Steering Group
RRAF	Road Research Access Facility
TGR	CEDR's Technical Group Research
TRB	Transportation Research Board
TPM	Transnational Programme Meeting
WP	Work Package