

# ERA-NET ROAD

ECTP Conference  
24 November 2009, Brussels

- The ERA-NET ROAD project (ENR1 and ENR2)
- Projects financed through ENR
- Practical benefit analysis
- ENR as a team player
- Conclusions

# The ERA-NET ROAD project (ENR1 and ENR2)

- European National Road Administrations (NRAs) each have their research programmes
- NRA road research: 150 M€ annually in total
- ERA-NET ROAD (ENR1):
  - A three year project part of the 6th EU Framework Programme
  - June 2005 - March 2009
  - €2.5m FP6 funding from the European Commission
- ENR1's 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
- ENR1's focus is on research procurement

# ENR1: 11 participants



Department for Transport (**Highways Agency**)  
with the support of TRL



Finnish Road Administration (**FinnRA**)



Directorate-General of Public Works and Water Management  
(**Rijkswaterstaat**)



Swedish Roads Administration (**SRA**)



Federal Ministry of Transport, Building and Urban Affairs (**BAST**)



Norwegian Public Roads Administration (**NPRA**)



Federal Department for Environment, Transport, Energy & Communication (**ASTRA**)



Austrian Federal Ministry of Transport, Innovation and Technology (**BMVIT**) supported by FSV



General Directorate of National Roads and Motorways (**GDDKiA**)



Directorate of the Republic of Slovenia for Roads(**DRSC**) supported by ZAG



Danish Road Directorate (**DRD**)

- ENR1 worked and led to ENR2
- ERA-NET ROAD “Toolkit” developed
- 2 Fast Track Pilots (FTPs) completed successfully
- 3 further Trans-National Research Projects ongoing
- 7 Strategic Research Opportunities (SROs) identified
- 2 Cross-border funded Joint Programmes running, the next one is being prepared
- Future of ENR under discussion with CEDR

- ERA-NET ROAD II (ENR2) is a new project
  - €1.5m FP7 funding over 2 years
- Project's aims in short:
  - Intensify cooperation, by launching two joint calls of 3M€ and 6M€
  - Assess outcomes and benefits of collaborative research
  - Strengthen dissemination of road research results on finished, ongoing and planned projects
  - Encourage and facilitate transnational road research in Europe, and embed the culture of collaborative research within NRAs
  - Help establish a permanent structure to continue after ENR2 (CEDR probably)
  - Align with all transport research, be it publicly or privately funded
  - Broaden the geographical scope of the ERA-NET ROAD
  - Take part in ERA-NET Learning Platform and other efforts

- ENR2 consortium consists of 21 partners:
  - Austria, Belgium-Flanders, Denmark, France, Finland, Germany, Hungary, Ireland, Lithuania, Netherlands, Norway, Poland, Slovenia, Sweden, Switzerland, United Kingdom
  - Some countries have >1 partner for administrative reasons






















- CEDR is an associate partner and the champion of the project
  - CEDR: Conference of European Directors of Road
  - Will take part in the steering of the project, without funding
  - Likely vehicle for the future of ENR after the end of ENR2
- Others :
  - Some additional contacts, they may join the consortium later
  - Belgium-Wallonia, Malta, Latvia ... as well as the USA



# PROJECTS FINANCED THROUGH ENR

- These research programmes and projects are funded by NRA financial contributions
- ENR facilitates the processes through which NRAs proceed with:
  - Identification of topics for transnational research
  - Writing of call specifications
  - Management of the call itself and of the projects

## 3 initial projects

- These are initial trans-national project calls that aimed at making sure ENR procedures work.
  - Overall: they show that ENR procedures DO work
  - And enable trans-nationally defined and financed calls
- Optimisation of Thin-Asphalt Layers
  - €110,000 --      
- Maintenance Backlog
  - €126,000 --       
- Performance-Based Contracting
  - €204,000 –      

- This is the 1st programme call facilitated by ENR.
- The topic was selected from the list of “SROs”.
- **“Getting to Grips with Climate Change”**
- 3 years - €1.5 million for contracts
- 11 funding countries (two from outside ENR1)
  - Programme Executive Board (PEB): AT (chair), DE, DK, ES, FI, IE, NL, NO, PL, SE (programme leader), UK
- Covers:
  - Climate impact on road infrastructure
  - Road capacity for climate change
  - Risk Management Options
- Call open from 22.03 to 12.05.2008, 19 proposals were submitted
- 4 projects were awarded in late 2008

- **IRWIN** - awarded to Foreca Consulting Oy - €320.000
  - Improved local Road Winter Index to assess maintenance needs adaptation costs in climate
  - Adapting design rules and specifications
- **RIMAROCC** – awarded to Swedish Geotechnical Institute - €366,000
  - „Risk Management for Roads in Climate Change“
  - Develop common method of risk management with regard to climate change
- **SWAMP** - awarded to Danish Road Institute – €289,000
  - „Storm Water prevention“
  - Methods to predict damage from the water stream in and near road pavements in lowland areas
- **P2R2C2** – awarded to U. of Nottingham - €214,000
  - „Pavement Performance and Remediation Requirements following Climate Change“
  - Climate Impact on Road Infrastructure advice tool for road owners

- This is the 2nd programme call facilitated by ENR.
- “ **Safety at the Heart of Road Design** ”
- The call closed on 27 April 2009
- 3 years - €1.6 million budget
  - €1.485 available for research, €165 000 admin. costs
- 11 funding countries (3 from outside ENR1)
  - Programme Executive Board (PEB): AT (programme leader), BE, DE, FI, IE, HU, NL, NO, SI, SE, UK
- Covers:
  - Development of evaluation tools
  - Assessment of forgiving road safety measures
  - Comparison and Implementation of approaches of self-explaining roads

- Five projects were awarded September 2009
- **ERASER** – awarded to SWOV - €287 000
  - Evaluations to Realise a common Approach to Self-explaining European Roads
  - Common approach to SER
- **RISMET** – awarded to SWOV - €334 000
  - Road Infrastructure Safety Management Evaluation Tools
  - Evaluation tool for SER
- **SPACE** – awarded to VTI - €315 000
  - Speed Adaption Control by Self Explaining Roads
  - Focus on speed adaptation
- **IRDES** – awarded to U. of Florence - €268 000
  - Improving Roadside Design to Forgive Human Errors
  - Evaluation tool and guidelines for forgiving roadsides (“FR”)
- **EuRSI** – awarded to NUI Maynooth - €288 000
  - European Road Safety Inspection
  - Automated roadside mapping for forgiving roadsides (“FR”)

- To be launched in January 2010
- “**asset management**” topic decided in July 2010 (SRO4) with 4 objectives:
  - Meeting stakeholders requirements and expectations
  - Understanding asset performance
  - Development of suitable KPI
  - Framework for optimised asset management
- €3M total budget confirmed
- DRD (Denmark) has agreed to lead the programme
- Next steps
  - December: participating NRAs meet to confirm call specifications and administrative procedures
  - Mid January 2010: Call is published in the OJUE
  - End March: Call is closed



- To be launched in January 2011
  - Called „2011 Call“
- Aim at €6M
  - to be funded by NRAs as usual
- Topic to be decided in Spring 2010
  - Together with CEDR technical group research and CEDR groups
  - There may be a few topics and not just 1

- Results from these projects have to be known and used!
- All reports from projects are freely available from ENR website
- Presentations at TRA conferences, among others
  - TRA2010 in Brussels, 7-10 June 2010
- Climate change:
  - Joint meeting at Climate Change conference in Oslo on 31.3./1.4.2009: Presentations and alignment of test sections
  - Joint presentation of results at a conference in November 2010
  - Final programme report in March 2011
- Road safety:
  - Joint meeting at CEDR TG Road Safety meeting in Budapest 4.3.2010
  - Presentations of the projects and alignment with CEDR TG RS
  - Final programme report end 2011/beginning 2012

# PRACTICAL BENEFIT ANALYSIS

- Climate change call – benefits to HA:
  - Geoff Richards – member of Programme Executive Board, ensures specifications include HA's own country-specific requirements
  - Four contracts awarded (one to a UK supplier)
  - Each aligns with HA's national road research objectives
  - UK gets €1,350,000 of research for €150,000 - for work it would have otherwise done nationally
  - This translates as **savings of €1,200,000.**

- Climate change call – benefits to HA:
  - HA would have needed to resource the management of these four projects, if procured by HA itself
  - However, Sweden/Austria are managing the programme, award of contracts and monitoring/reporting – they are funded from the programme budget pot (5%)
  - Offset against these savings are additional costs for the HA:
    - Attendance at meetings abroad – time, travel and accommodation costs
    - For four projects, assuming four overseas meetings per PB7 project leader, total additional costs ~ £20,000
  - Therefore net resource saving
- So considerable resource savings in internal HA time costs
- In addition to savings of €1,200,000 available to be spent on new road research!

# ENR proven benefits:

International  
best practice

Reduced duplication  
of research

Improved quality  
of research

Wider choice  
of suppliers

Shorter  
timescales

Exchange of  
knowledge

Better value  
for money

# ENR AS A TEAM PLAYER

- ENT: ERA-NET TRANSPORT
- Meetings as early as April 2008
- ENR took part in ENT's Plenary group meeting on Dec 1 and 2, 2008
- Very good atmosphere
- ENR-ENT Cooperation opportunities
  - Calls on road safety (ENR and ENT) ; ENT invited to attend ENR Road Safety call planning meeting – 18 Dec 2008
  - Call on road pricing (ENT) ; ENR invited to attend ENT Exploratory Road Safety Action Group meeting, London, 18-19 May 2008
  - Joint session at TRA 2010
  - Exchange of info on research databases for example
  - More to come certainly



- ENR intentions:
  - contribute to an integrated policy approach for road research, and for co-modal transport research
  - investigate the development of a common platform to coordinate publicly funded research, in terms of programming and cross-border funding
  - contribute toward aligning publicly funded research programmes with the research agendas of the European technology platforms active in transport
- NRAs intend to use transnational research as a tool towards solving joint issues
  - And thus play their part in the construction of the ERA

- ENR has a full work package dedicated to such liaison:
  - WP4, « Alignment with transport research »
  - WP leader: Richard van der Elburg (NL)
- Tasks:
  - Align with publicly funded research
  - Align with privately funded research
- Has already established significant contact with ERTRAC, for example

- ENR and ECTP share a number of concerns and interests and have reason to cooperate:
  - Strong mind to put innovation to practice
  - Energy efficiency and climate change mitigation
  - Etc.
- Links through:
  - ECTP's focus area « Networks »
  - ECTP's task force on infrastructures
  - ENR's WP4 « Alignment »
  - ENR's Plenary Group
- Input towards the January 2011 call is welcome
  - Among other cooperation activities

# CONCLUSIONS

- ENR developed Trust, Understanding and Commitment between NRAs
- ENR successfully developed cooperation models, identified research priorities
- ENR launched calls and is developing others, facilitating exciting research projects
- Transnational collaboration is now proven to be beneficial
- Now aiming at integrating collaborative research as “business as usual”
- The ENR process is open to all research providers and road administrations

- ERA-NET ROAD is fully open to stakeholders, including from countries that are not currently ENR2 partners.
- Research providers and industry:
  - Welcome to answer ENR-facilitated calls
  - These calls are funded 100% and procedures are simple
- National road administrations:
  - Participate in ENR calls (definition, funding) – free
  - Access research results from the website – free
  - Consider joining as an ENR partner – and receive COM financing to help
- Technology platforms:
  - Engage with us towards joint realization of the ERA
  - Take part in our Plenary Group, 22 April 2010 in Copenhagen

Thank you for your attention

[www.eranetroad.org](http://www.eranetroad.org)

**Patrick MALLEJACQ**

LCPC / ENR2 coordinator

patrick.mallejacq@lcpc.fr

Tel: 00 33 1 4043 5028

**Richard VAN DER ELBURG**

DVS / WP4 leader

richard.vander.elburg@rws.nl

Tel: 00 31 8879 82372