


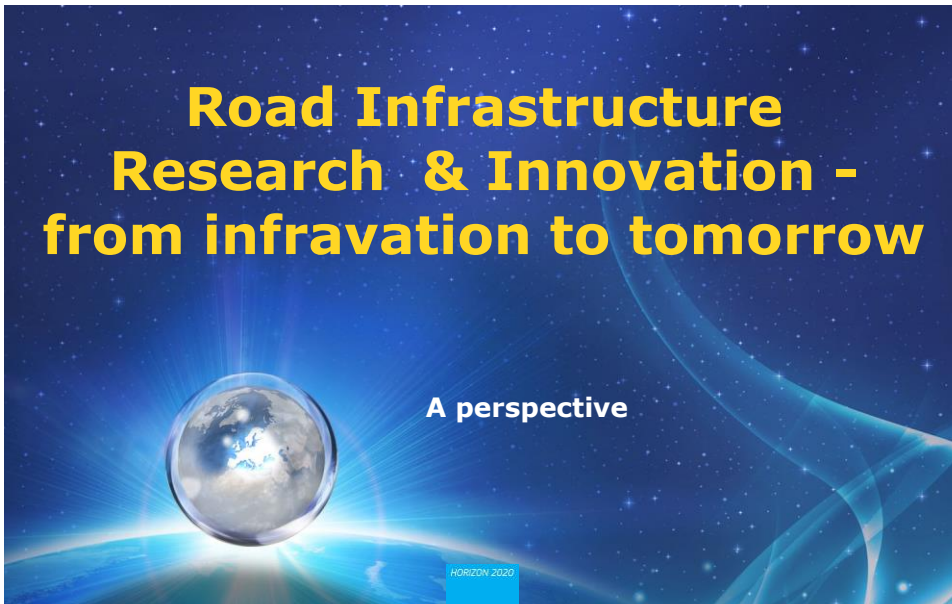
## Programme

- 10:00 **Welcome and Introduction**  
*(Peter Wilbers, RWS)*  
**A National Funding Provider's View on the Infravation Initiative**  
*(Marina Martínez-García, CDTI)*  
**EC Views on the Issue of Road Infrastructure Innovation**  
*(William Bird, EC, DG RTD/H2)*
- 10:50 **Thematic Scope of the Infravation 2014 Call**  
*(Johan Jonsson, Trafikverket, Scoping Team)*
- 11:20 **Proposal Preparation and Submission**  
*(Miriam Stephan and David Doerr, TÜV Rheinland, Infravation Call Secretariat)*
- 12:30 – 13:30 **Lunch break**
- 13:30 **Brokerage Session**
- o In cooperation with ETNA Plus (European Transport Network Alliance)
  - o Moderator David Doerr, TÜV Rheinland
  - o Instructions and details after lunch
- 16:30 **End of meeting**

**Road Infrastructure  
 Research & Innovation -  
 from infravation to tomorrow**

**A perspective**



HORIZON 2020



## Today's roadmap

- The challenges
- Where have we been?
- Infravation – why is it important?
- A little bit of policy
- Horizon 2020 – where we are now
- Where are we going?



## ROAD INFRASTRUCTURE

### EUROPE NEEDS:

- To make infrastructure more resilient
- To keep pace with the growing mobility needs and aspirations of people and businesses
- To tackle congestion and manage traffic flows more effectively
- To reduce the impact of infrastructure on the environment
- To maintain and upgrade deteriorating transport infrastructures
- To facilitate the uptake of innovation
- To address the demands of ITS systems & the challenges of connectivity
- To keep infrastructure safe





# EC Road Infrastructure Research



- A brief history

**An element of EC research from the earliest Framework Programmes**

**The Golden Age of Infrastructure Research (part 1)**

Emergence: FP6: CERTAIN, SPENS, ARCHES, Heavy Route,...  
 Consolidation: FP7 Re-road, Direct Mat, Tyrosafe, Trimm, Inroads, Durabroads, Ecolabel, Rosanne ....

- The next Golden Age?

**Infravation  
 H2020**



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# The emergence of ERANET(+) programmes

- ERANET(+)
  - means to stimulate trans-national research on areas of mutual interest
  - first launched FP6
- In (road) transport area
  - ERANET Transport
  - ERANET Road
  - Electromobility+
- Now Infravation



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## Ambitions of Infravation ERANET+

- Included in the FP7 2013 Sustainable Surface Transport call
- 'Advanced systems, materials and techniques for next generation infrastructure'
- the development of sophisticated modelling techniques or the testing and monitoring of novel techniques with regard to its impacts on reliability, safety and environment
- techniques using advanced materials, including those from other industries or from using conventional materials in an innovative way.
- *Improving coordination and reduce overlap in research and innovation in the field of affordable green materials and technologies for reliable road infrastructure.*

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## What's special about Infravation?

- First time transnational funding programme (ERANET+) has had a 'real common pot'
- Involves the participation and funding from the US (FHWA)
- Will target research & innovation on novel materials, processes and techniques
- Should act as a catalyst to promote further infrastructure research spend on national and international level

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## Transport White Paper 2011

### *Roadmap to a Single European Transport Area: Towards a competitive and resource efficient transport system*

- Reduce greenhouse gas emissions by at least 60%
- Halve the use of conventional cars in urban transport by 2030
- **Increase the efficiency & capacity of the transport system**
- Move close to zero fatalities in road transport by 2050



Research  
and  
Innovation



## Horizon 2020 'Smart, green and integrated Transport'

### **The challenge: achieve a transport system that is...**

- Resource efficient
- Environmentally friendly
- Safe and seamless
- Beneficial for the citizens, the economy and society

### **and promote globally competitive transport industries**

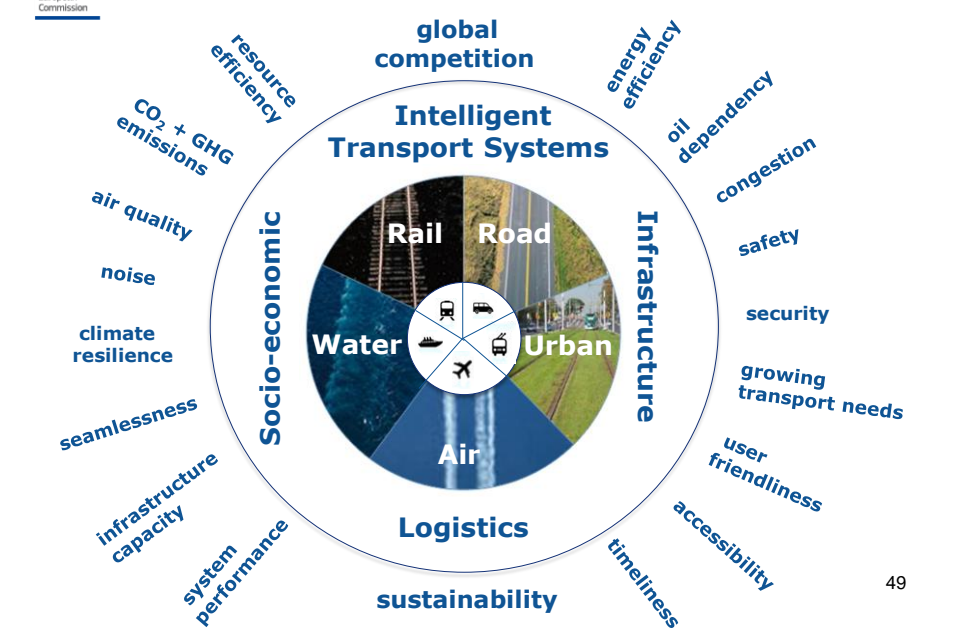
### **The logic: a holistic approach which...**

- Recognises modal specificities
- Responds to policy requirements
- Is focused on the societal challenges
- Reconciles competitiveness and sustainability

Research  
and  
Innovation

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**Transport means, modes, systems, policy goals and societal challenges**



**'Resource efficient transport that respects the environment'**

4 sections/1

- **cleaner, quieter aircraft, vehicles, vessels:**
  - cleaner propulsion technologies
  - use of low emission alternative energies
  - lighter materials, leaner structures, innovative designs
- **smart equipment, infrastructures and services**
- **improved transport and mobility in urban areas**

**SUSTAINABLE**





## 'Better mobility, less congestion, more safety and security'

- substantial reduction of traffic congestion
- **improved mobility of people and freight:**
  - air: traffic management, passenger and freight handling
  - waterborne: integrated planning and management
  - road and rail : **optimisation of network management**
- new concepts of freight transport and logistics
- reducing accidents and casualties, improving security

# SEAMLESS



## 'Global leadership for the European transport industry'

4 sections/3

- next generation of transport means:
  - aircraft, trains, vehicles, vessels; propulsion units, control systems
- on board, smart control systems:
  - **vehicle/infrastructure communication**
- **advanced production processes:**
  - **design and manuf. techniques: production, maintenance, recycling**
- new transport concepts:
  - innovative transport systems, including automated vehicles

# COMPETITIVE





## 'Socio-economic and behavioural research and forward looking activities for policy making'

- **data, models and scenarios:**
  - data collection, models, mobility patterns, scenarios, foresight
- **user needs and behaviour:**
  - **user behaviour**, social acceptance, accessibility, **vulnerable users**
- **transport economics:**
  - economic trends, business models, **land use**, social cohesion, skills
- **policy support:**
  - policy analysis & impact, internalisation of externalities, innovation uptake

# RESPONSIVE



## WP 2014-15 Transport main calls

### Mobility for Growth

- **MODE SPECIFIC:**  
Aviation, Rail, Road, Waterborne
- **INTEGRATED:**  
Urban, Logistics, ITS, **Infrastructure**
- **CROSS-CUTTING:**  
Socio-economic and behavioural research



**First time infrastructure has been identified as a unique area for transport research**

*Don't forget the challenges apply to all modes not just road*





## Input for the Horizon 2020 Infrastructure Challenges

- Road map for cross-modal transport infrastructure innovation developed by the Transport European Technology Platforms
- ECTP/Refine
- ERTRAC road maps on Green Corridors, Integrated Urban Mobility, Climate Resilient Road Transport
- Forever Open Road/FORx4 programmes

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## Call 'Mobility for Growth'

### INFRASTRUCTURE

#### TOPICS:

- Smarter design, construction and maintenance  
– **MG8.1** - 2014 – R&I: 2 stages; CSA: 1 stage
- Next generation transport infrastructure: resource efficient, smarter and safer – **MG8.2** - 2014 – R&I: 2 stages; CSA: 1 stage
- Facilitating market take-up of innovative transport infrastructure solutions – **MG8.3** - 2015 – *Public procurement of innovative solutions*
- Smart governance, network resilience and streamlined delivery of infrastructure innovation – **MG8.4** - 2015 – R&I: 2 stages; CSA: 1 stage

in red: topics open in 2014



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## Any overlap H2020 & Infravation?

*Concerted effort to try to make sure no overlap  
Infravation challenges are technology focussed and  
much more specific in the subjects they address  
H2020 call 8.1 identifies that some overlap may  
exist in this area  
Infravation guidance notes indicate that proposals  
should not address both H2020 and Infravation  
Close liaison between the Commission & Infravation  
to ensure no double submission*

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## Where next?



*Consolidation of H2020 programme and other  
programming from Member States  
Spin-offs from Infravation?  
ERANET cofund initiatives....*

*For sure there should be innovation in the road  
infrastructure sector...*

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## What we need....

*Continued collaboration to focus on the key challenges facing road infrastructure*

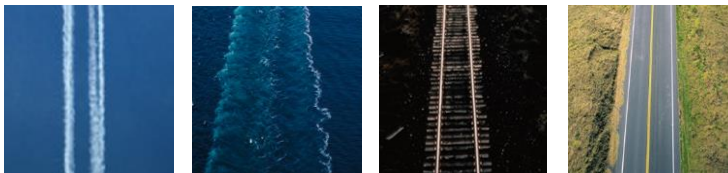
*Effective means to ensure that there can be a concerted effort address these challenges*

*Greater awareness within and outside the sector of the need for road infrastructure research*

*Pooling of knowledge, experience and resources between modes on infrastructure research*

*& your Infravation proposal – submitted in time...*

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**Thank you  
for your attention!**

**Find out more on H2020:**

[www.ec.europa.eu/research/horizon2020](http://www.ec.europa.eu/research/horizon2020)

[www.ec.europa.eu/research/participants/portal/page/home](http://www.ec.europa.eu/research/participants/portal/page/home)



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