Climate Change Adaptation in the Transport Sector

Experience from Project Preparation and Network Management

6 December Brussels







Agenda



- 9:00 Opening and Welcome, plus Introductions
- 09:15 Session 1 Analysis of Climate Vulnerabilities on Transport Networks
- 12:00 *Lunch*
- 13:00 Session 2 Assessment of Climate Risks for New Projects
- 15:15 *Break*
- 15:30 Session 3 Awareness Raising and Information Sharing Within and Between Countries
- 16:30 Conclusions
- 16:45 *Close*

(approx.)



JASPERS



Joint Assistance to Support Projects in **European Regions**

- Technical assistance partnership between the European Commission (EC) and the European Investment Bank (EIB).
- JASPERS helps EU and Candidate Countries prepare top-quality investment projects to benefit from European funds.
- Around 130 experts providing support to projects in a range of sectors (Transport, Water and Wastewater, Energy and Solid Waste and Smart Development).
- Provide advice at all stages of the project development cycle, including advice on climate change, to support the development of sustainable, low carbon and climate resilient projects and programmes.



Introductions



Tour de table



Session 1 – Analysis of Climate Vulnerabilities on Transport Networks



Best Practice Case Studies



 Identifying the climate change hotspots in the Spanish State-owned inland transport network

Albert Compte Anguela – CEDEX, Spain

- Mapping climate vulnerabilities on existing national road network in Poland
 Grzegorz Łutczyk GDDKiA, Poland
- Adapting Transport Authorities to Climate Change Adaptation
 Rui Velasco Martins -Instituto de Movilidade e dos Transportes, Portugal
- Assessment of risks for highways in the Netherlands due to Climate Change
 Kees van Muiswinkel Ministry of Infrastructure and Water Management, Netherlands





Lessons Learnt and Important Considerations

- Weather and climate change is impacting transport infrastructure: need to understand how to deal with this impact
- Identify relevant climate hazards and existing networks vulnerabilities (e.g. hotspots) in GIS system
- Monitoring and data collection of related events
- Climate projections: data available, trends analysis...
- Draw action plans: identify actions, milestones, responsible parties...





Questions for Discussion

- Countries prepared CC Adaptation Strategies (generally including analysis on transport sector), and further sector specific steps...?
 - What type of more detailed assessments (e.g. vulnerability analysis of networks)
 have been undertaken in the different countries?
 - Which entity undertook initiative for those studies? And why?
 - What are the difficulties to undertake those analyses?
- Initial results of those sector specific analyses and way forward
 - What has been the value of those studies?
 - What are the biggest threats/hazards to which the respective transport networks are vulnerable to?
 - Is there any kind of systematic register/monitoring of extreme weather events and their effects on the transport infrastructure? How does it work?
 - What type of actions are planned? How are the results of those studies used?
 - Cooperation with other authorities (rail/road, energy, telecom...)



Session 2 – Assessment of Climate Risks for New Projects

Best Practice Case Studies



- Climate Change and the Norwegian Road Network
 Martine Holm Frekhaug NPRA, Norwegian road authority, Norway
- Increasing Transport Resilience: The ROADADAPT framework in practice
 Mike Woning Deltares
- Climate change vulnerability and risk assessment on Gradiška Bridge
 Boris Majić –Hrvatske ceste, Croatian Roads, Croatia





Lessons Learnt and Important Considerations

- Take climate change impacts into account as early as possible in the project development (though not easy to integrate it into normal process)
- Follow climate change adaptation vulnerability and risk assessment principles at any project stage
- Adaptation measures can be considered from design stage to operation stage:
 cost effectiveness and asset management considerations
- Awareness and cooperation are key for successful adaptation action/measures





Questions for discussion

- Is climate change adaptation factored in to planning, building, and/or operating the infrastructure?
- Is a vulnerability and risk assessment carried out for all new projects? At what stage(s)?
- Which are the main hazards considered?
- What are the steps and how is it used/integrated into the project development?
- How do you ensure this covers climate change and not just climate?
- How do you deal with uncertainty (especially in risk assessment)?
- How do you make sure that the adaptation measures are effective and implemented?



Session 3 – Awareness
Raising and Information
Sharing Within and Between
Countries

Some Practices



- The Working Group case in Portugal

 *Rui Velasco Martins -Instituto de Movilidade e dos Transportes, Portugal**
- The CEDR CCA Working Group
 Kees van Muiswinkel Ministry of Infrastructure and Water Management,
 Netherlands
- JASPERS disseminating guidance on CC and EU requirements
 Sarah Duff Climate Change Specialist, JASPERS



JASPERS Roles





Capacity building

Consolidation of the transfer of knowledge carried out during project assignments, with workshops and training courses.

We also publish working papers to disseminate best practices and address common issues encountered during project preparation.



IQR

Appraisal of projects submitted for EU Funding, providing opinions as to whether projects qualify for grants or not.

Review and approval process includes climate change related requirements.



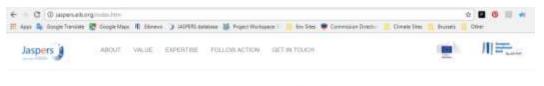
Project preparation

Hands-on advice and guidance in the preparation of projects, with upstream involvement.

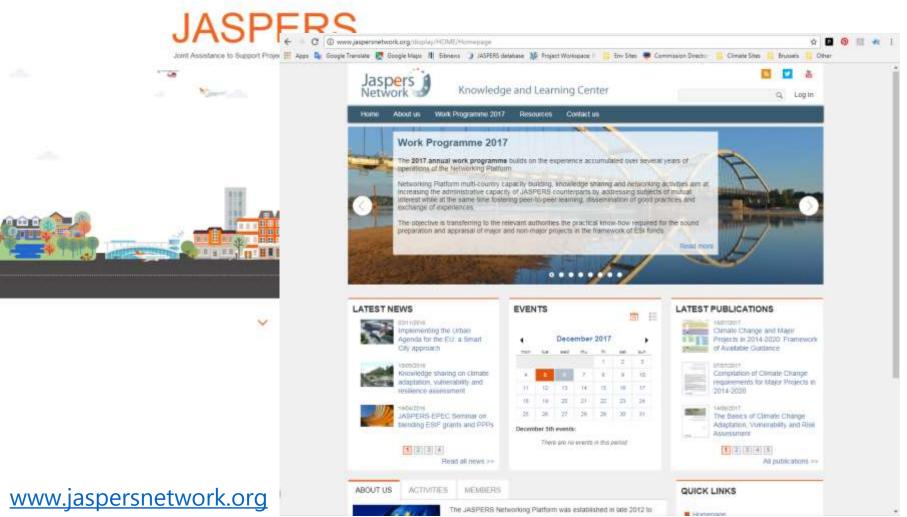
Supporting the integration of climate change considerations into project development

JASPERS Websites





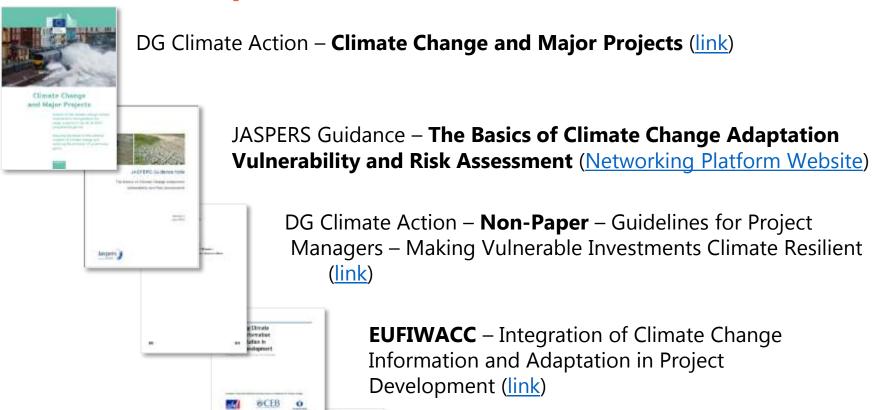
jaspers.eib.org



Guidance Documents



Relevant Adaptation Guidance



DG Regional Policy – Guide to **Cost Benefit Analysis** of Investment Projects (<u>link</u>)

More Information:



Sarah Duff

Climate Change and Sustainability Specialist

duff@eib.org

Elisabet Vila Jorda

Transport Engineer

e.vilajorda@eib.org

JASPERS Website:

jaspers.eib.org

JASPERS Networking Platform:

www.jaspersnetwork.org

