

Infrastructure Networks, Climate change Adaptation & Hotspots (INCAH)

Introduction to the project

TNO | Knowledge for business



L.A.Tavasszy

1 page summary of INCAH

- Climate change: new challenges for infrastructures
 - Rising sea and ground water levels
 - Increased intensity of rain showers and drought periods
- Concern = lack of robustness: congestion, service interruption, system breakdown → Big problem? How to cope?
- Goal = new knowledge for building robust climate adaptation strategies for infrastructure networks in the Netherlands.
 - Expected impacts of climate change & adaptation measures
 - Design modifications and improved asset management
- Focus: transport, energy and water networks at the national level and in hotspot regions Rotterdam, Amsterdam
- 5 partners, 4 years, 3.5 M€



Partners

Consortium:

- TNO (Co-ordinator)
- Delft University of Technology
- VU University Amsterdam
- Deltares
- KWR Watercycle Research Institute

Co-financing stakeholders:

- Ministry of Transport, Water Management & Public works
- City of Rotterdam
- ProRail, Tennet, Waternet

International partners:

- Center for Sustainable Systems, University of Michigan, USA
- CSIRO, Australia
- Fraunhofer Institute
- FUCam, Mons, Belgium
- MIT and US Geological Survey, USA
- Purdue University School of Aeronautics & Astronautics, USA
- Southern Cross University, Tweed Heads, Australia
- Swedish Geotechnical Institute
- Tottori University and Arid Land Research Center, Japan

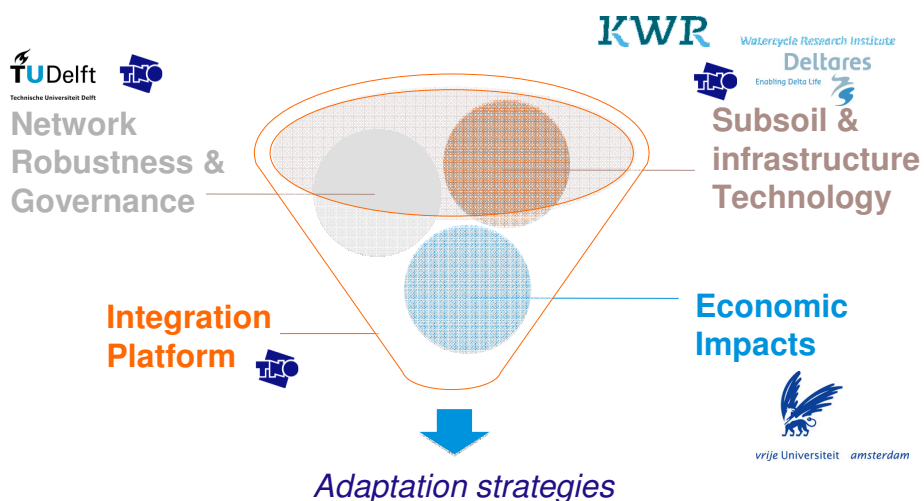
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Infrastructures and networks

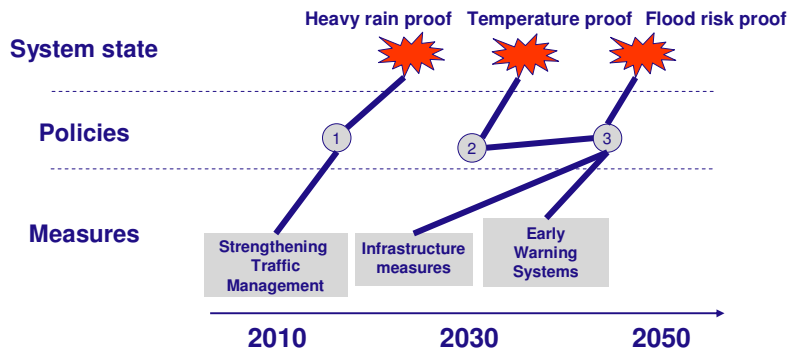
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INCAH project structure (workpackages)



Climate adaptation strategy



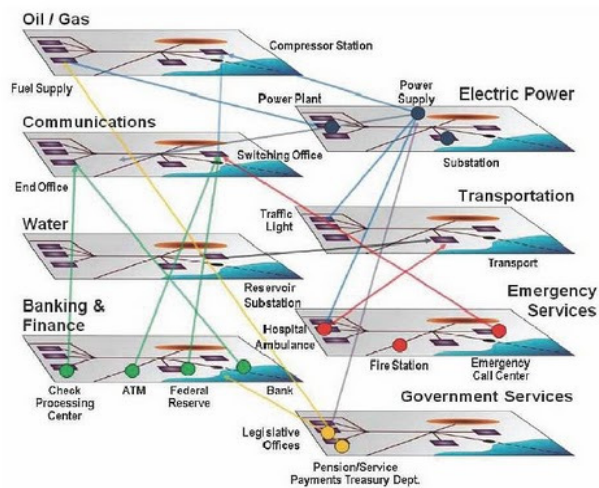
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Integrative tool: system model



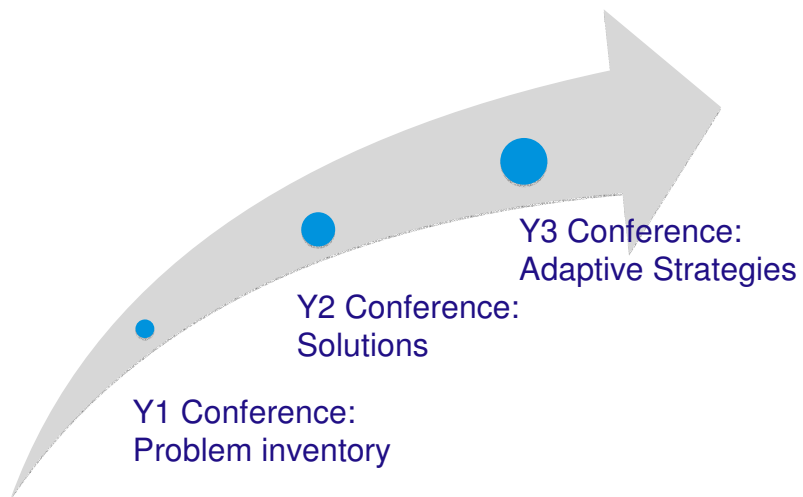
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Dialogue between research and practice



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Thank you for your attention!

Q&A

Lori.tavasszy@tno.nl

L.A.Tavasszy