

NETLIPSE

Network for the dissemination of
knowledge on the management and organisation
of Large Infrastructure Projects in Europe

OMEGA Centre
for the Study of Mega Projects
in Transport and Development

London, 18 March 2009

Stuart Baker, Supervisory Board (DfT UK)
Marcel Hertogh, Programme Director (AT Osborne NL)



This presentation covers:

- What is NETLIPSE?
- Who are we?
- What are our goals?
- What are our plans?

NETLIPSE:

- **Network ...**
- for the dissemination of knowledge ...
- on the management and organisation ...
- of **Large Infrastructure Projects** in **Europe**.

Two phases:

- Phase 1: NETLIPSE Started as a 2-year research programme in the Sixth European Framework Programme, FP6 (May 2006 – May 2008).
- Phase 2: Continuation (and expansion) of the network. Establishment of an Institute. Realisation of the Infrastructure Project Assessment Tool (IPAT)

The European Union and (new) member states:

- address the need for a Trans European Transport Network (TEN-T) in the White Paper: Time to Decide (2001);
- have already invested billions in the construction of several Large Infrastructure Projects (LIPs) to create the TEN-T.

But, these organisations:

- have limited possibilities for forecasting and monitoring the effectiveness of these projects;
- face large delays and cost overruns on the supported projects and experience local opposition;
- notice that knowledge exchange between Large Infrastructure Projects (LIPs) is scarce.

NETLIPSE Initiators



Ir. Leendert Bouter, Ministry of Transport, Public Works and Water management, NL (Chairman Executive Board)



Mr. Stuart Baker, Deputy Director National Projects, Department for Transport, UK



Prof. Dr. ing. Geert Teisman, Professor of Public Management, Erasmus University Rotterdam, NL



Prof. Dr. Hans-Rudolf Schalcher, Professor of Planning and Management in Construction, ETH Zürich, CH



Prof. dr. hab. inz. Leszek Rafalski, Director of IBDiM, Warsaw, PL



António Lemonde de Macedo, Head of the Transportation Department of LNEC, Lisbon, PT



Ing. Han Kok, Director of KPC GmbH, Bern, CH



Ir.drs. Marcel Hertogh, Director AT Osborne, Utrecht, NL

NETLIPSE Goal 1



Research: Best Practises and Lessons Learnt

The projects researched



Projects (mode):

1. Betuweroute (rail)
2. Ring road Bratislava (road)
3. Gotthard Base Tunnel (rail)
4. HSL-South (rail)
5. Lezíria Bridge (road)
6. Lisbon – Porto (rail)
7. Lötschberg Base Tunnel (rail)
8. Maaswerken (water)
9. Motorway A2 (road)
10. Motorway A4 (road)
11. Motorway E18 (road)
12. Nuremberg – Ingolstadt (rail)
13. Øresund bridge (road & rail)
14. Unterinntalbahnhof (rail)
15. West Coast Mainline (rail)

Book, published June 2008



Book

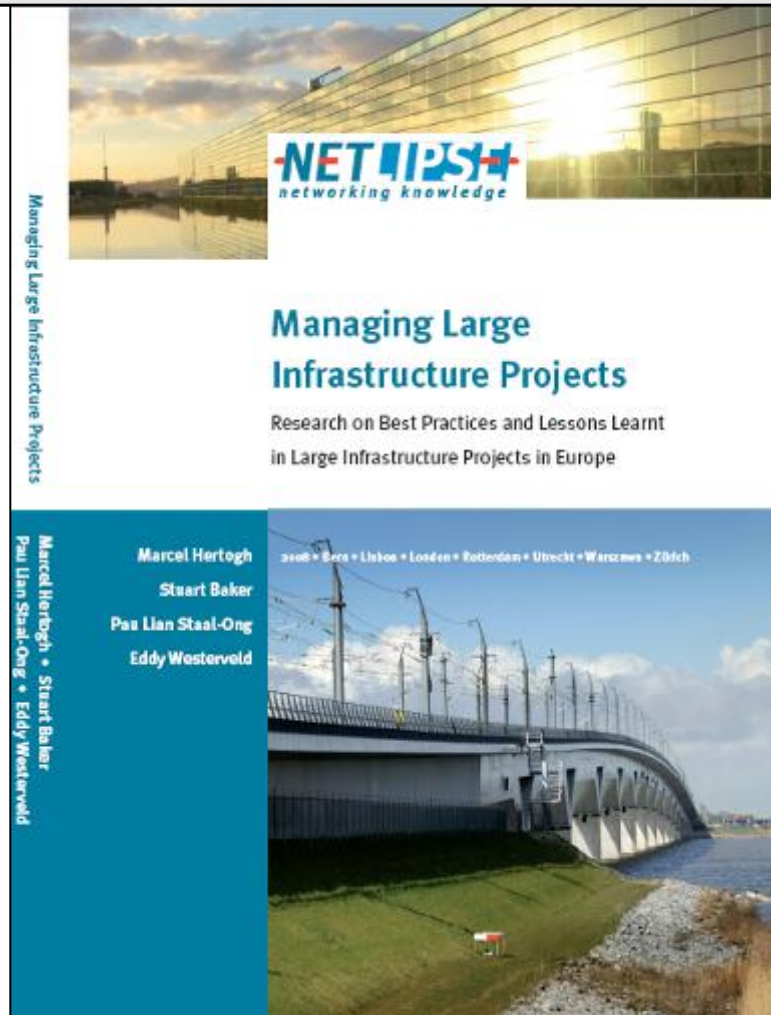
Managing Large Infrastructure Projects

'Research on best practices and lessons learnt in large infrastructure project in Europe'

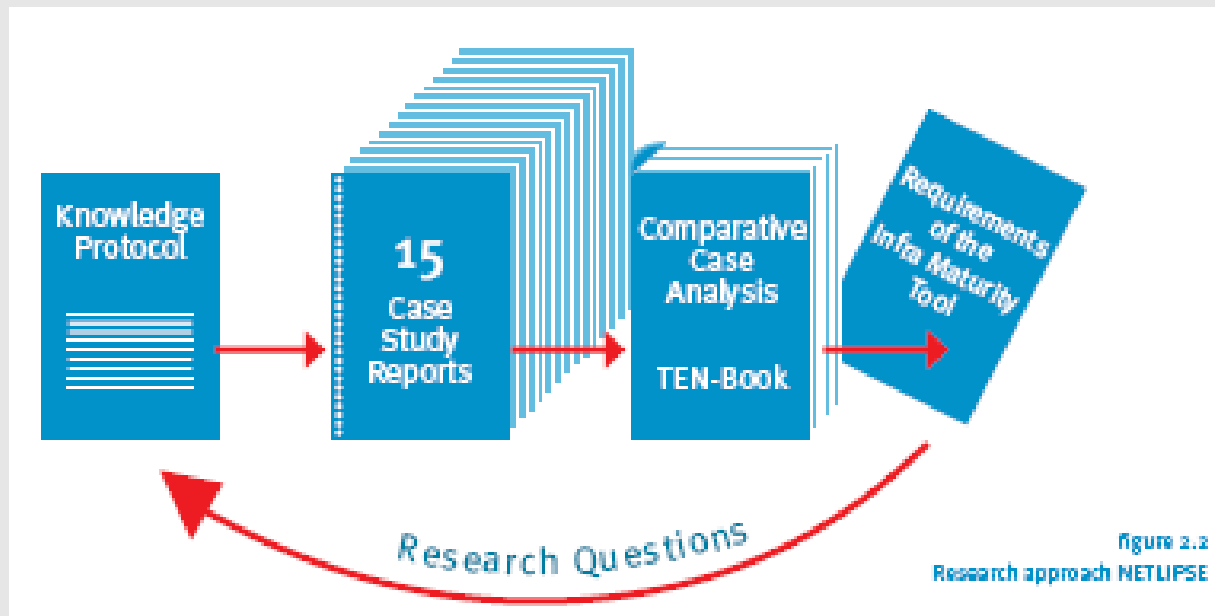
Containing:

- NETLIPSE project overview
- Main findings
- Best practises & Lessons learnt
- Future activities and goals

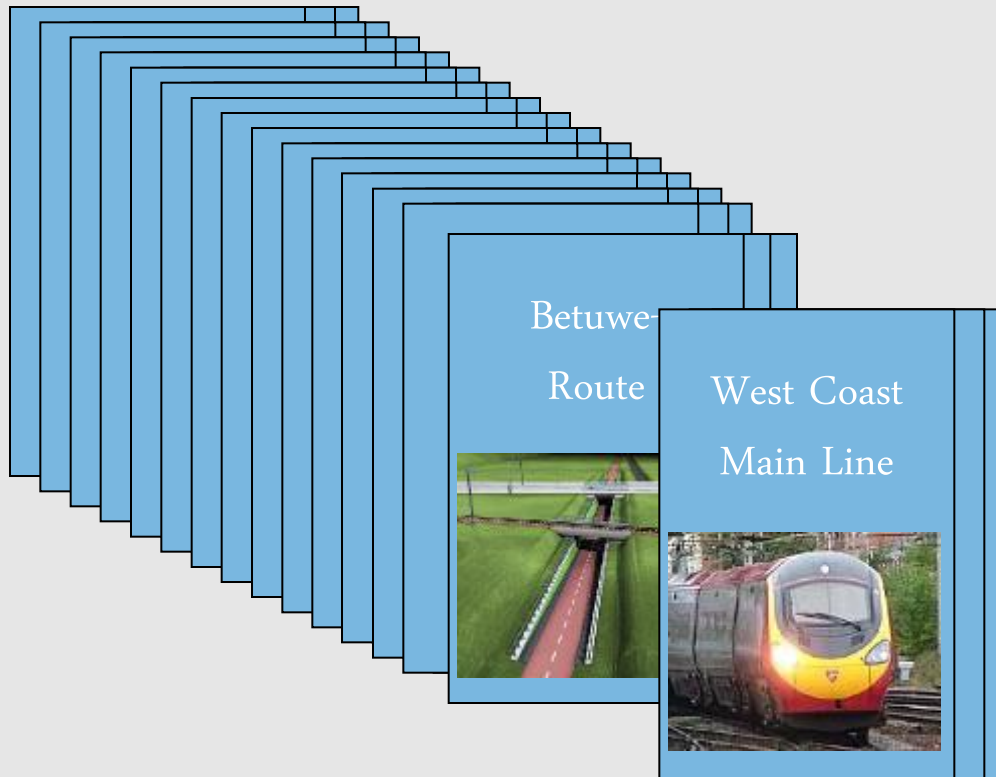
ISBN 978-90-810025-2-3 available
at www.netlipse.eu



Research: Methodology



15 projects – 15 reports



Case Study Report

Contents:

1. Preface
2. Project Facts & Figures
3. Stakeholder network
4. Project History
5. Historical Analyses
6. Best practises and lessons learnt (8 themes)
7. Summary and Conclusions

Appendix: Checklists

15 projects – 8 themes researched

8 themes:

1 Objectives and Scope

2 Stakeholders

3 Finance

4 Organisation and Management

5 Risks (Threats & Opportunities)

6 Contracting

7 Legal Consents

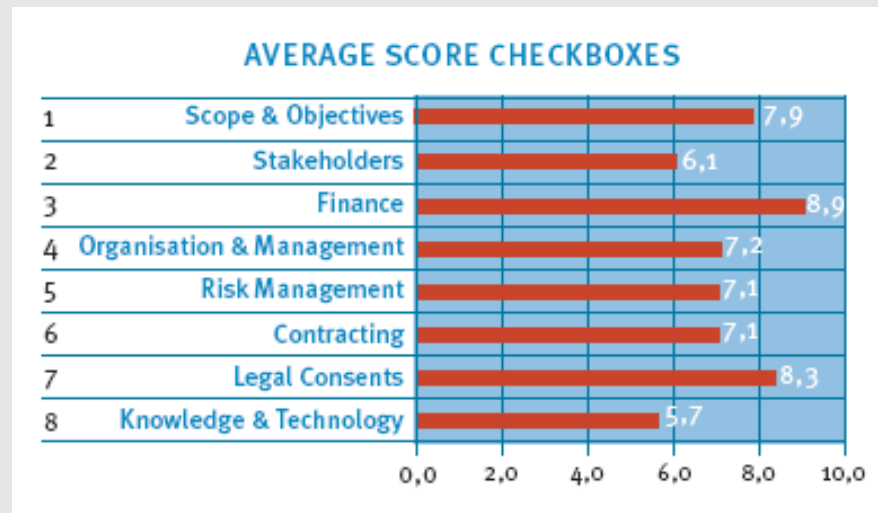
8 Knowledge & Technology

Questionnaire per theme:

1. Questions
 - appr. 15 per theme
2. Checks
 - Score: None – Partly – Fully
 - 5-8 checks per theme
3. 3 general questions
 - What is essential in the success of ... ?
 - Best practise?
 - What did you learn?

15 projects – Quantitative analysis

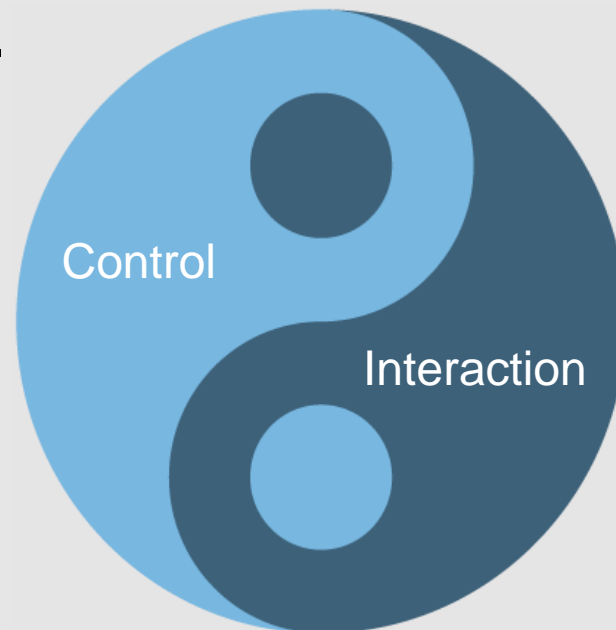
- Numerate analysis of the state of projects studied by use of the simple check boxes in the research on the 15 Projects.



- West Coast Main Line (GB)
- Betuweroute (NL)
- Øresund (DK/SE)
- Bratislava Ring Road (SK)

- Many projects did not have clear business cases and some lacked defined output requirements
- Projects need to be managed as a whole to deliver the necessary outputs
- Need for realism in the early stages that the scope and costs are ill defined
- Cost control good after scope fixed – problem is announcing costs publicly before scope of works
- Consensus of need for project critical – major projects usually last longer than governments!

- Define respective roles & responsibilities
- Need for competence in both parties
- Define cost & scope control mechanisms
- Effective management of LIPs needs a hybrid approach combining control and interaction.

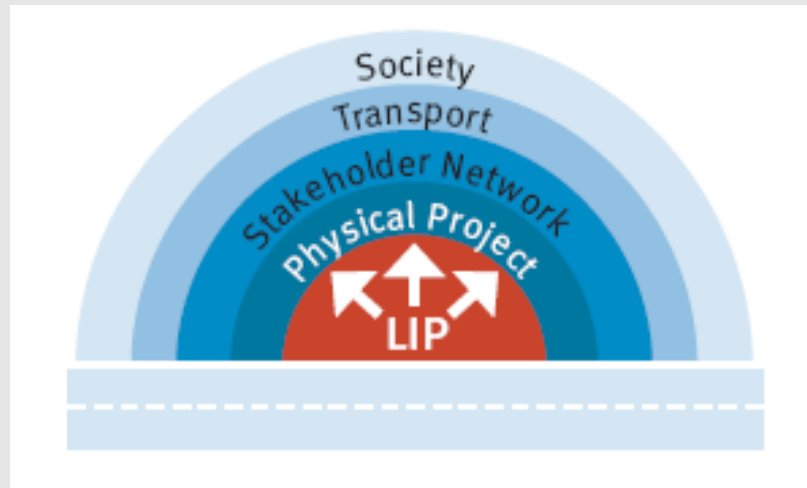


- Define between Client and Project Delivery Organisation (PDO)
- Clear and timely reporting
- PDO to assess, manage and report
- Good Reporting - no shocks, no surprises
- Allocate risks to party best able to manage them
- Remember that the client/sponsor always holds the output risk – cannot, in the ultimate, delegate this to PDO or others.

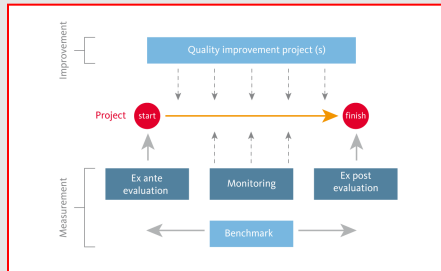
- Internal communications and HR issues frequently neglected
- External stakeholder communications usually allocated good resources
- Knowledge exchange often very weak – both learning from others and passing lessons on to other projects
- But – lessons and best practices cannot be passed on without understanding the context
- Poor availability of specific training for LIPs

- PDO and designer to take whole life effects into account in specification and design
- Operator(s) and maintainer(s) need to be linked to project at an early date
- Careful handover essential from project to operation and maintenance
- Most projects over achieved against their demand forecasts
- Step changes in connectivity are very hard to model.

Main Findings - The level of shared perceptions



NETLIPSE Goal 2

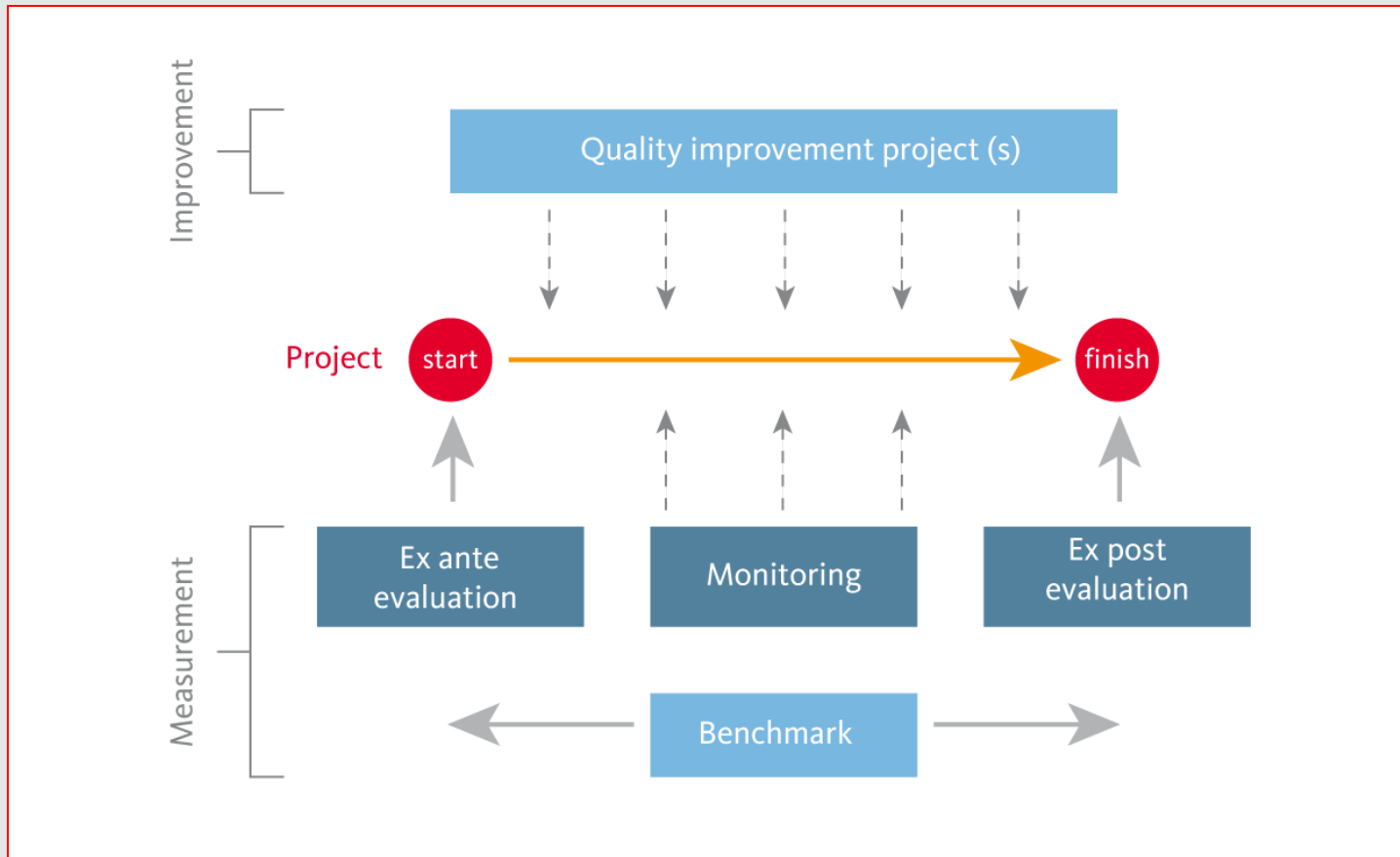


IPAT

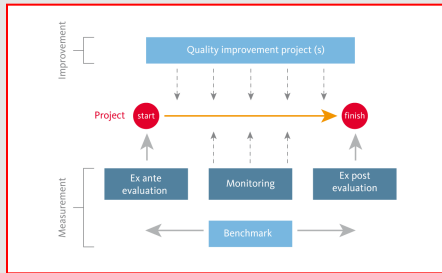


Research: Best Practises and Lessons Learnt

IPAT: Infrastructure Project Assessment Tool



NETLIPSE Goal 3



IPAT



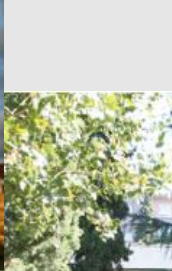
Dissemination

Network



Research: Best Practises and Lessons Learnt

Network Meetings and Newsletters




Newsletter #1: why this newsletter?

In this newsletter you will find a short overview of the first research report as presented during the second network meeting in Warsaw, hosted by the Polish Road and Bridge Research Institute in Warsaw.

December issue #1

CONTENT

- Network News
- What is NETIPSPH?
- Objectives, roles and responsibilities
- Who is NETIPSPH?
- Well, it stands for the "Network for the Dissemination of knowledge on the management and organization of Large Infrastructure Projects in Europe."
- What is NETIPSPH?
- Well, it stands for the "Network for the Dissemination of knowledge on the management and organization of Large Infrastructure Projects in Europe."



Newsletter #2: the first research results presented

In this newsletter you will find a short overview of the first research report as presented during the second network meeting in Warsaw, hosted by the Polish Road and Bridge Research Institute in Warsaw.

July 2007 issue #2

CONTENT

- Network News
- Network Meeting Warsaw, progress
- Network Meeting Warsaw, results
- Results from the pilot project
- Well, it stands for the "Network for the Dissemination of knowledge on the management and organization of Large Infrastructure Projects in Europe."

Interview with Leader Board, Ministry of Transport, Public Works and Water Management Netherlands (RWS)

António Leonardo de Macedo



Newsletter #3: emergency results

In this newsletter you will find a short overview of the first research report as presented during the second network meeting in Warsaw, hosted by the Polish Road and Bridge Research Institute in Warsaw.

January 2008 issue #3

CONTENT

- Network News
- Network Meeting Warsaw, progress
- Network Meeting Warsaw, results
- Results from the pilot project

Interview with António Leonardo de Macedo



Newsletter #4: the start of a new beginning

In this newsletter you will find a short overview of the first research report as presented during the second network meeting in Warsaw, hosted by the Polish Road and Bridge Research Institute in Warsaw.

May 2008 issue #4

CONTENT

- Network News
- Network Meeting Warsaw, progress
- Network Meeting Warsaw, results
- Results from the pilot project

A future for NETIPSPH?



Newsletter #5: after having done the NETIPSPH in April 2008 as well, the NETIPSPH initiative has continued to develop and knowledge on the management and organization of Large Infrastructure Projects in Europe.

September 2008 issue #5

CONTENT

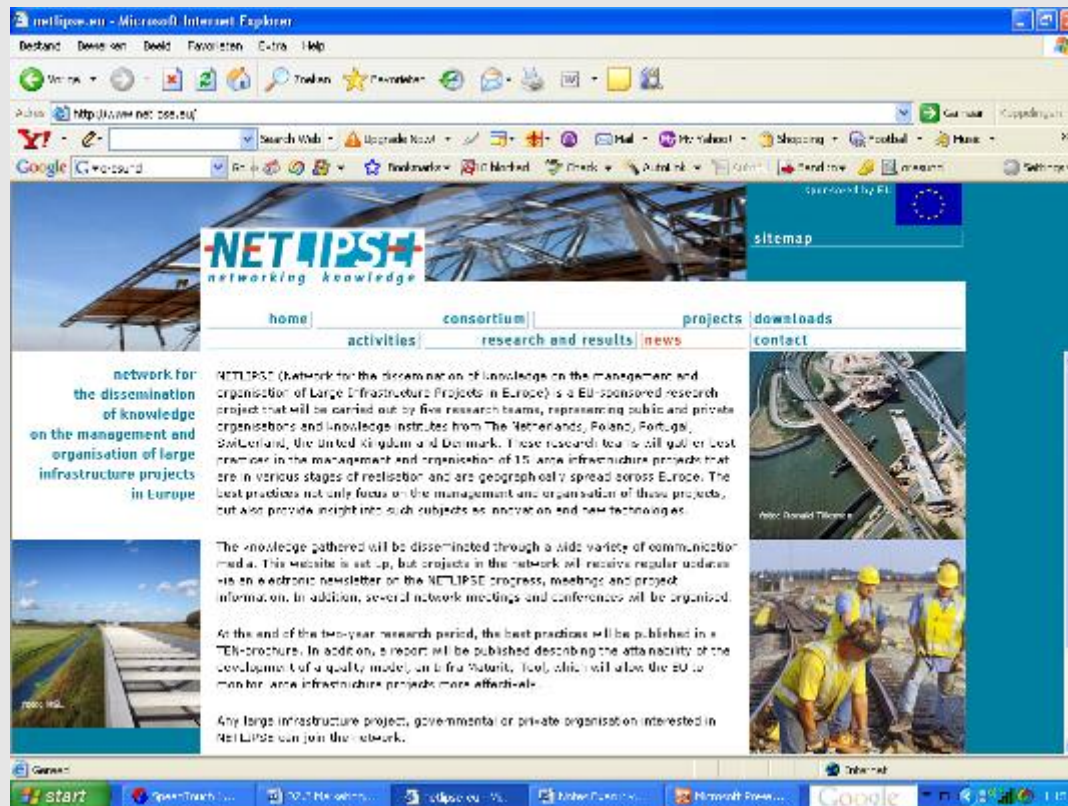
- Network News
- Network Meeting Warsaw, progress
- Network Meeting Warsaw, results
- Results from the pilot project

Reflections on the Network Meeting NETIPSPH in March 2008

Next Network Meeting

- Join us at the next Network Meeting:
Amsterdam, April 20 & 21 2009.





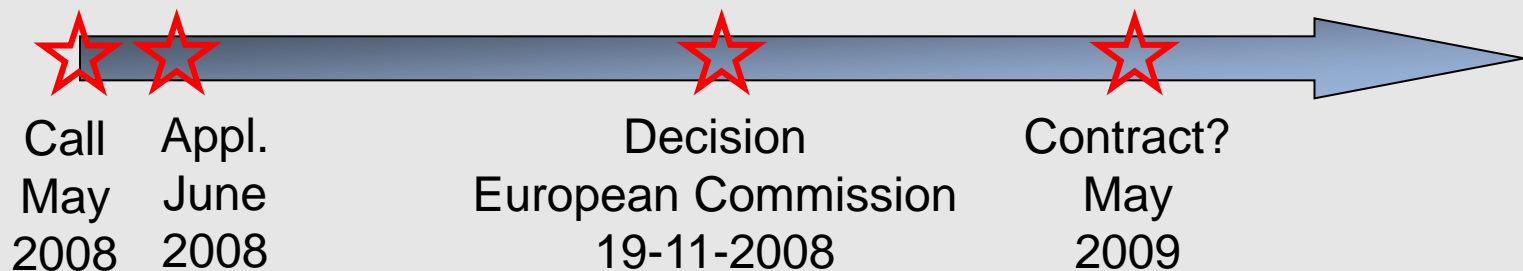
European Commission Annual Call for Proposals 2008



CALL FOR PROPOSALS 2008



EUROPEAN COMMISSION TRANS-EUROPEAN TRANSPORT NETWORK Annual Programme Multi-Annual Work Programme 2007-2013



NETLIPSE Partners (2008 annual call)



- | | | |
|-----|--|-----------------|
| 1. | Ministry of Transport | The Netherlands |
| 2. | Department for Transport | United Kingdom |
| 3. | AT Osborne B.V. | The Netherlands |
| 4. | National Laboratory for Civil Engineering | Portugal |
| 5. | Road and Bridge Research Institute | Poland |
| 6. | UNECE TEM Project | United Nations |
| 7. | Swiss Federal Institute of Technology ETH Zürich | Switzerland |
| 8. | ProRail | The Netherlands |
| 9. | Transumo | The Netherlands |
| 10. | KPC GmbH | Switzerland |
| 11. | University of Kassel | Germany |
| 12. | Erasmus University Rotterdam | The Netherlands |
| 13. | Maribor University | Slovenia |
| 14. | Politecnico di Milano | Italy |
| 15. | Femern Baelte A/S | Denmark |
| 16. | Aalborg University | Denmark |
| 17. | Rijkswaterstaat Maaswerken | The Netherlands |
| 18. | ESC Lille | France |

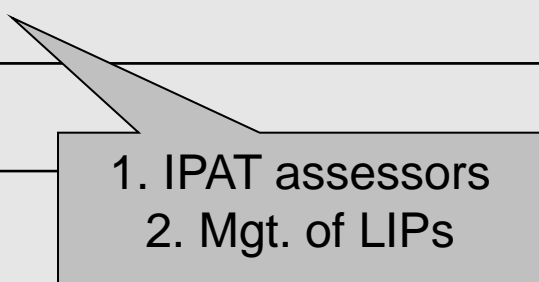
Current contacts with EIB and World Bank.

European Commission Annual Call for Proposals 2008



NETLIPSE Proposal 2008-2010:

No.	Activity title
Activity 1	Establishing the Foundation
Activity 2	Expanding the NETLIPSE network and knowledge exchange
Activity 3	Developing the Infrastructure Project Assessment Tool (IPAT)
Activity 4	Developing Training Programmes
Activity 5	Overall administration

- 
- 1. IPAT assessors
 - 2. Mgt. of LIPs

NETLIPSE Foundation

Article 2: Objectives



- The objectives of the Foundation are: to initiate, promote and encourage the successful development, delivery and operation of large infrastructure projects throughout Europe, aimed at positively influencing the living environment and economy in Europe.

Main activities forthcoming months:

- Jan. 2009 Start development of IPAT
- Febr. 2009 Newsletter #5
- April 2009 Network Meeting, The Netherlands
- May 2009 Contract EC on Annual Call (?!)
- Summer Establishment Foundation
- Autumn Testing IPAT
Newsletter #6
- April 2009 Network Meeting
- Dec. 2009 Delivery IPAT

Thank you for your attention

Questions and Discussion