Bridging Scales:
The Role of EIA and SEA
in Transport Corridor Planning

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Introduction

The Challenge

- Many investments in transport infrastructure.

- Central role of national authorities and EU (TEN-T).
- EIA and SEA EU-Directives
- EU Taxonomy Directive (Do No Significant Harm – if investing EU-funds)

  => Creates tensions due to goal conflicts

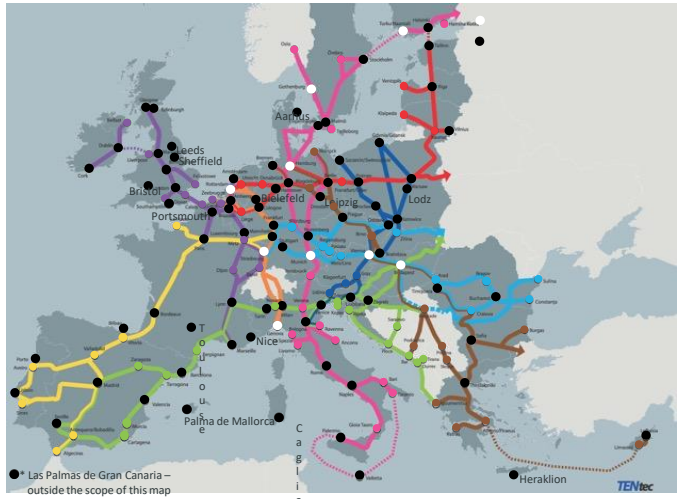
- Infrastructure prerequisite for socio-economic development by improving connectivity and accessibility of places and regions

- Usually EIA focuses on bottlenecks/linkages of congestion/capacity for separate modes

  => projects (‘dots’).

- What about SEA for the network and corridors?

  => ‘Connecting the dots’ and ‘bridging scales’.



TEN-T Network and urban nodes (EU)

Multi-modal Node development Lille

Introduction

Current project-EIA-driven infra planning

- Although most countries have (national) strategies for optimizing multi-modal infra networks and achieving sustainability and inclusiveness

  => SEA practice is limited

- Practice is dominated by large-scale projects with EIA: huge impacts on locality, benefits at higher scales

  => much local resistance

  => due to lack of SEA
  key issues later discussed on the local scale

- To address this:
  local land-use planning initiatives
  integrated in – and paid for – by large infra projects at EIA level

- Still: lack of EA effectiveness & little public support

  => Infra projects and their EIAs become contested arenas for solving local planning issues instead of systems-level connectivity and accessibility.

Tunnels for highways in cities

Transit-Oriented Development

Plans for HSR stations…

Introduction

Multiplicity of transport infrastructure

- Complex! dealing with functional interrelatedness and institutional interdependencies.
- Need for integrated planning and EA => corridor planning

Aim of the study

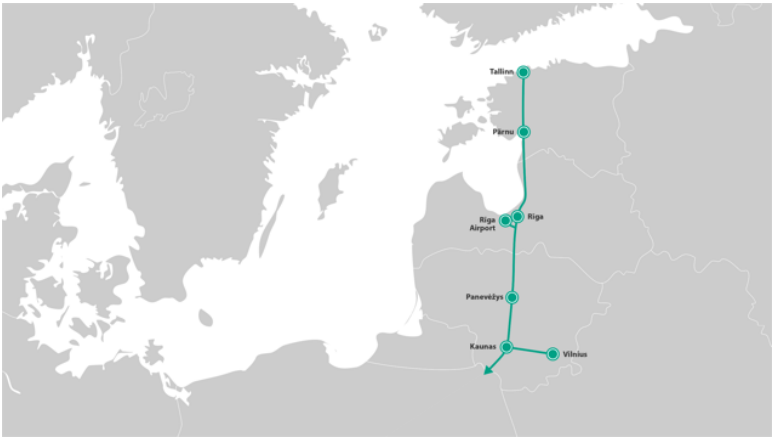
- Exploring sustainable and inclusive corridor planning and EA for large infrastructure development that connects with (local) land-use development and (cross)national transport needs.

Method and cases

- Comparative analysis of planning, EA and decision-making
  a) functional interrelatedness and
  b) institutional interdependencies
- 3 cases, recent experiences: Estonia, Sweden, The Netherlands
- Building upon earlier studies about integrated planning of infra and spatial development (‘Collaborative Planning’ and EA)

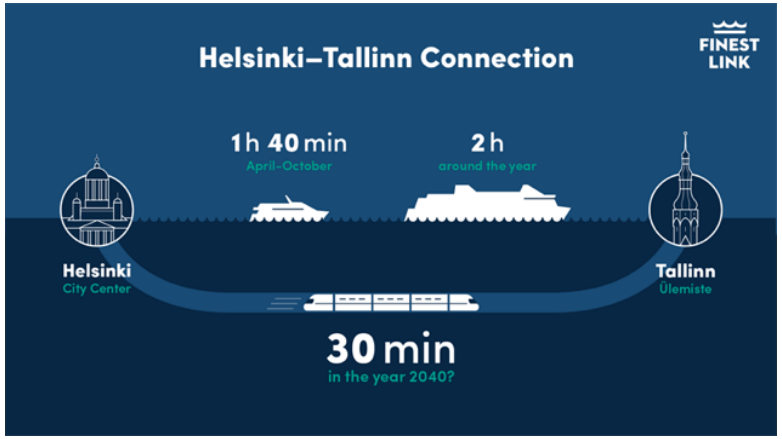
Rail Baltic Programme Estonia (RBE)

- High Speed Railway system (HSR) across Baltic States,
  here focus on Estonian part.
- Programme with planning in parallel processes at different tiers
  (also multi-national, RBE).
  Both SEA and EIA
- Much attention public participation.
- Focus on detailed design railway, stations.
- Discussions at county and urban level about potential/opportunities,
  function of HSR, new infra projects (Tallinn-Helsinki Tunnel).



Lessons:

- Initially seen as a coordination exercise of 3 Baltic countries
  now replaced by corridor level discussions (regions, cities).
- Need for involvement of transport *and* planning institutes from start
  for goal- and agenda-setting at multiple tiers.



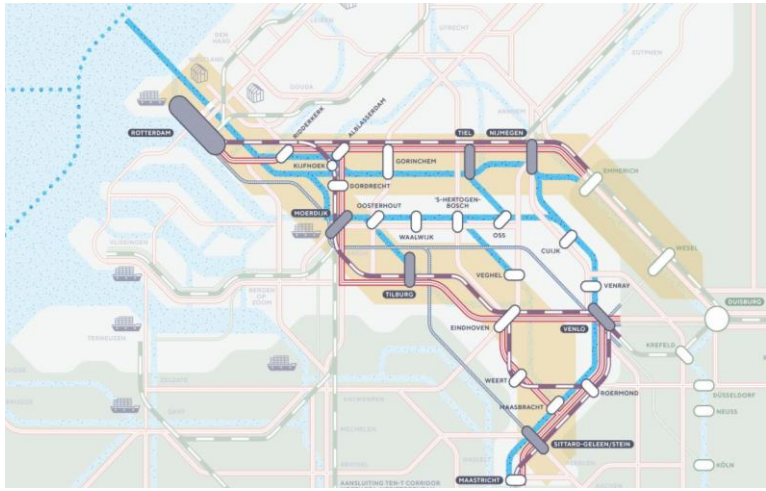
High Speed Rail Programme Sweden

- High Speed Railway system Stockholm – Malmö/Gothenburg (HSR).
- Focus on 2 parts of system, Jönköping-Malmö and Linköping-Borås:
  2 studies 'Strategic Choice of Measures'
  on the HSR potential, focusing on travel time passenger transport.
  Little discussion about role HSR for cities on the corridor.
  Voluntary SEA
- Simultaneously to corridor planning, separate planning process of
  'National Negotiation on Housing and Infrastructure',
  resulting in competition between cities, little cooperation at corridor level.
  No EA
- Two parallel planning processes with limited coordination.

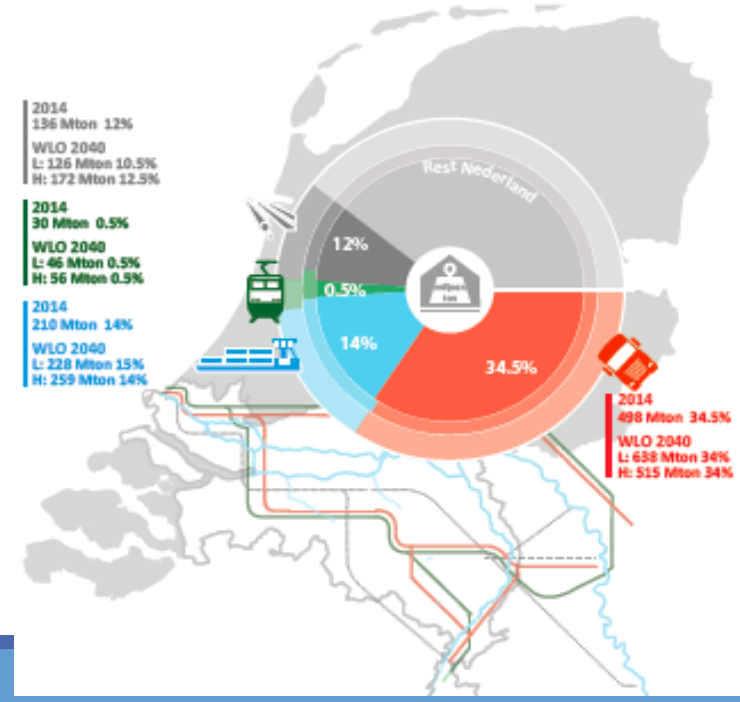
Lessons:

- interaction between spatial planning (land use) and transport initiatives were not properly addressed in any of the two planning processes.
- Parallel transport and land use planning has to take into consideration several spatial scales, institutional arrangements of planning approaches.
- However, politics interfered…

East/South-East Freight Corridor programme NL



- Rotterdam-Rhein-Ruhr corridor (Germany), cross-national corridor highly-developed network of highways, railways, waterways, pipelines vital for NL transport system and economy (and EU).
- Freight Corridor Programme to strengthen a multimodal ‘top-corridor’.
- Package of measures focusing on optimization 6 major nodes: intermodal connectivity, solving bottlenecks, service + reliability end-users, economic specialization of nodes.
- No EA but attention for environmental issues.



Lessons:

- Multi-level governance for corridor-level ambitions proves complex: difficult to make: local/regional authorities think about corridor level (not competition), national government thinks about local spatial-economic development.
- Difficult to create multi-modality, to balance freight/passengers transport, to raise attention for cross-border issues.
- Programmatic approach enhances awareness of importance of corridor.

	Estonia	Sweden	The Netherlands
Type of EA	County plan SEA and several EIAs	Voluntary SEA – no formal requirements on EA. But requirements to address the environment on a regional scale. Formal EIA requirements in later stages.	No SEA/EIA done. Environmental issues addressed. Later stages likely project EIAs conducted because of formal requirements.
Spatial scales	Start on EU corridor level developing new rail, later attention for local (land use) issues, and environmental impacts (SEA/EIA)	Start focus on travel time HSR, later on land use in the National Negotiation: (housing) issues for city-regions (only SEA for SCM)	Optimizing the overall corridor (for transport) and focusing on 6 specific urban-regional nodes (spatial-economic development). (no SEA/EIA)
Planning process	No existence of a formal transport planning system. Planning was based on County plans and detailed plans for stations.	No formal planning system for transport corridors. Planning had to be based on SCM. Local implementation still to be done via detailed rail planning. In parallel, a National Negotiation for railway was going on.	Informal process. Specific national program, linking up with the existing Planning, Programming Budgeting process for infrastructure. Regional and local implementation still to be done via land-use plans.
Main objectives	(Geopolitical) connectivity as central aim, room for integration (LUTI) locally.	No common objective in this period. Separate tracks: municipalities focus on land use, Trafik-verket (national) on transport.	At program level central policy goals, and alignment with regional/local authorities. Alignment with businesses missing

	Estonia	Sweden	The Netherlands
Land-use transport integration (LUTI)	Yes, rail (freight/persons) and local land uses (and mitigation of impacts)	No, due to separate processes. SCM focus on passenger traffic while the National negotiation focus on housing	Yes, multimodal freight transport (road, rail, waterway, pipelines), urban-regional economic development
Multi-level governance	(Supra)national level leading (EU funding), rather technical process. Much collaboration with regional and local authorities (via SEA).	Political process, national government leading, other authorities involved through the SCM (regions), and the National negotiation (municipalities).	Nationally driven process (of joint factfinding and will-shaping), with collaboration with provinces, and (major) cities + Port of Rotterdam.
Involvement of other parties in the process	All parties (in)directly involved (still court cases). Also, Latvia, Lithuania (and Finland). Businesses late in process.	Limited. Mainly national government and municipalities (National negotiation). Public and businesses not actively included.	Limited. Mainly governmental parties. Businesses and international (Germany, Belgium and EC) not included.

Challenges and lessons

Central elements for a corridor approach in transport planning and EA:

A string of 'perfect projects' ('pearls')

- Nodes and links within corridors usually dealt with as individual projects and EIAs (politicization)
- Focus on design and local specificities, rather than on role for urban region, corridor
- Low degree of tiering

Project or programme approach

- Not a scaled-up project management and EIA,
  but strategic programme management and SEA for aligning and overall goals
- Challenge of parallel planning at different levels
- Need for multi-level governance – i.e. *Tiering* of SEA and EIA

Tiering - Integration or coordination

- Fundamental multiplicity, tensions, interrelations => dealing with complexity
- Need for focus ('span of control' – SPOC)
- Integration (with tight couplings) less fruitful
  than *coordination* of land use planning and transport planning?

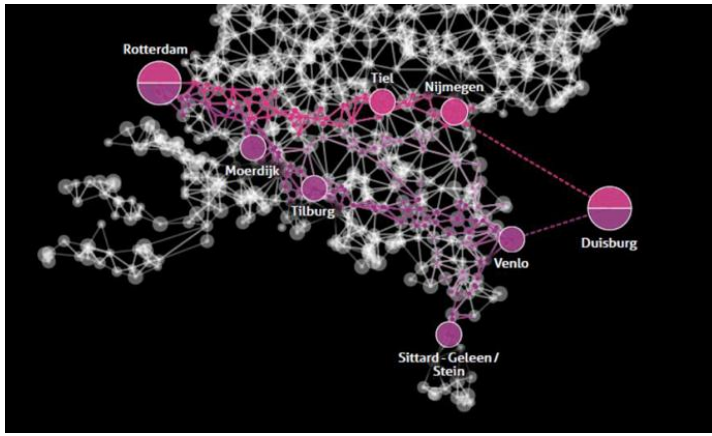
And you thought there was stress in *your* life !

Conclusions

- **Need for rethinking existing practice** of large-scale project planning and EA limited added value local and at corridor/network level.

- In practice **elements of a corridor planning and SEA approach** can be found, but not easily implemented

- For **corridor planning and EA that connect the dots and bridge scales**:
  - Programmatic approach that aligns projects in a loosely coupled way
  - Development of a clear overall vision
  - Availability of regional strategic plans (e.g., regional SUMPs)
  - Conditions set for individual projects
  - Room for adaptation to local context and development
  - Careful monitoring of values
  - Careful multi-level governance framework
    with leadership, early + on-going stakeholder involvement, joint platform for continuous learning.



Let’s continue the conversation!

Message me your questions or comments in the IAIA26 app.

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