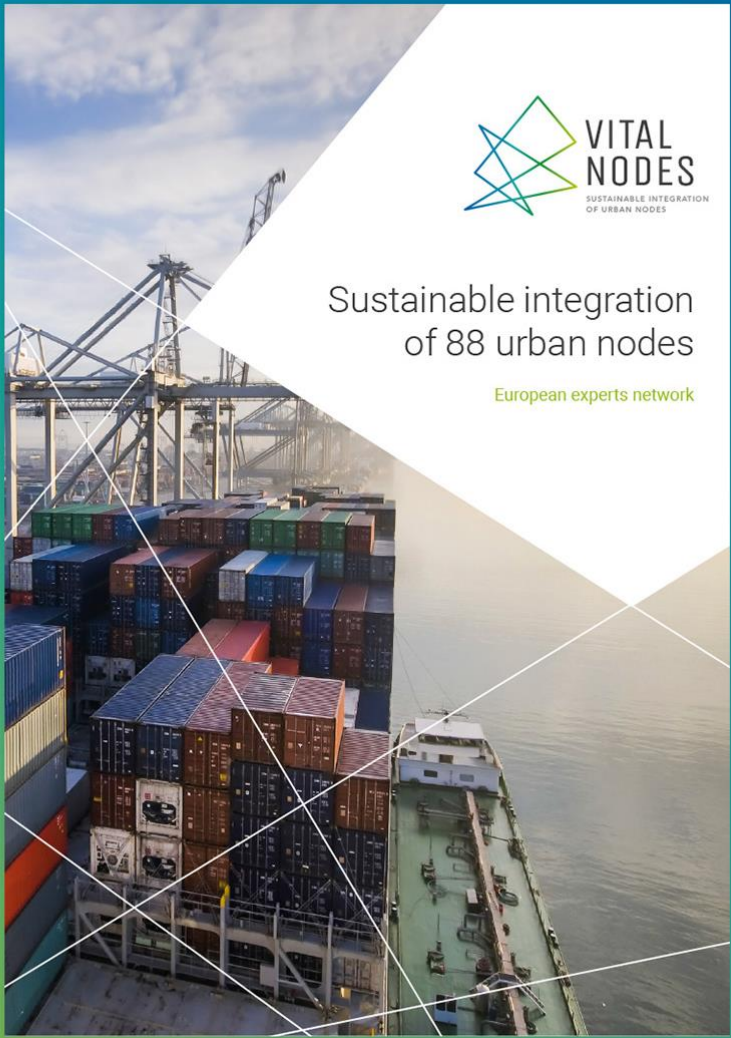




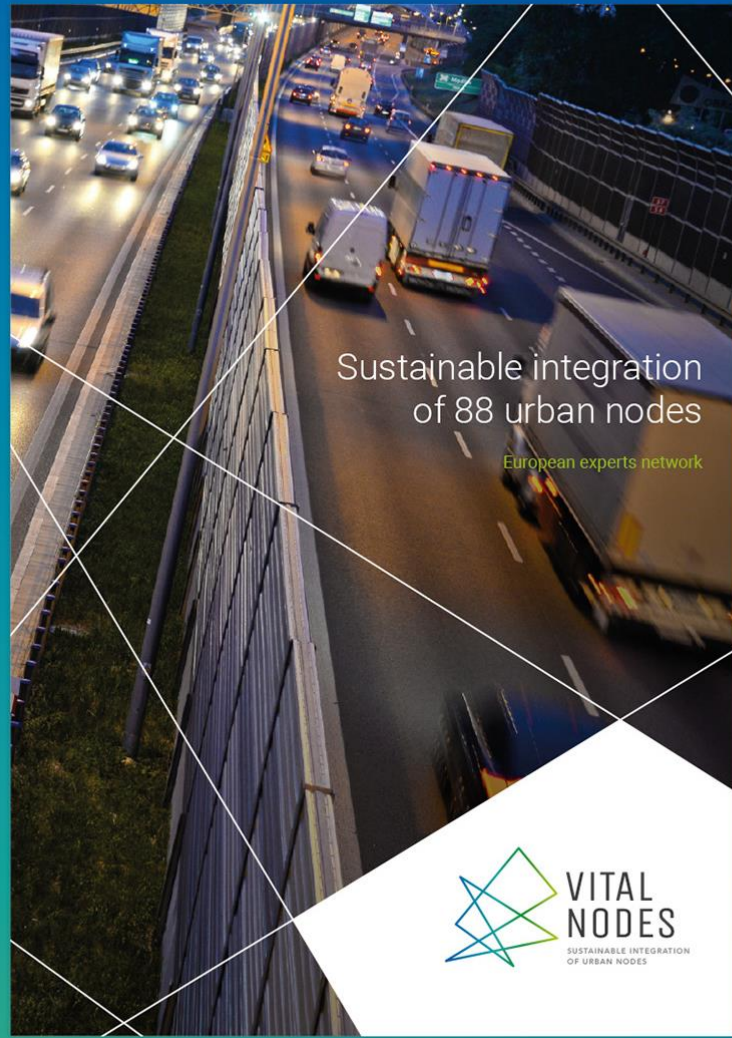
Sustainable integration of 88 urban nodes

European experts network



Sustainable integration of 88 urban nodes

European experts network



H2020 project Vital Nodes

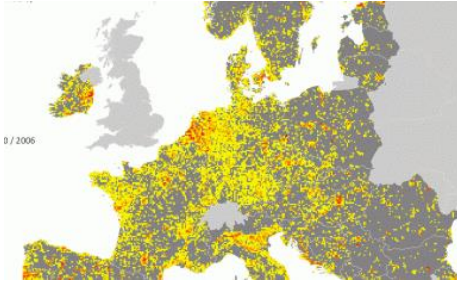
Rethinking planning for urban nodes and corridors: lessons from European practice

Sjaak van der Werf, Department of Waterways and Public
Works

Presentation MORE TEN-T Network Workshop - 14 December 2020



Trends



Urbanisation and densification



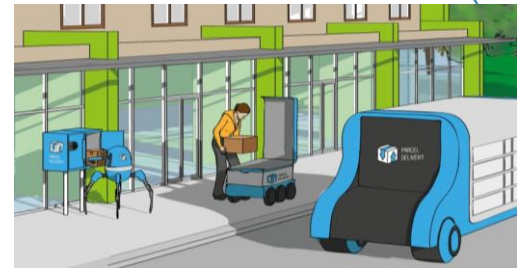
Digitalisation and e-commerce
(24/7 delivery)



Development of XXL warehouses – urban and logistical sprawl



Conflicting transport flows between freight & logistics and person transport

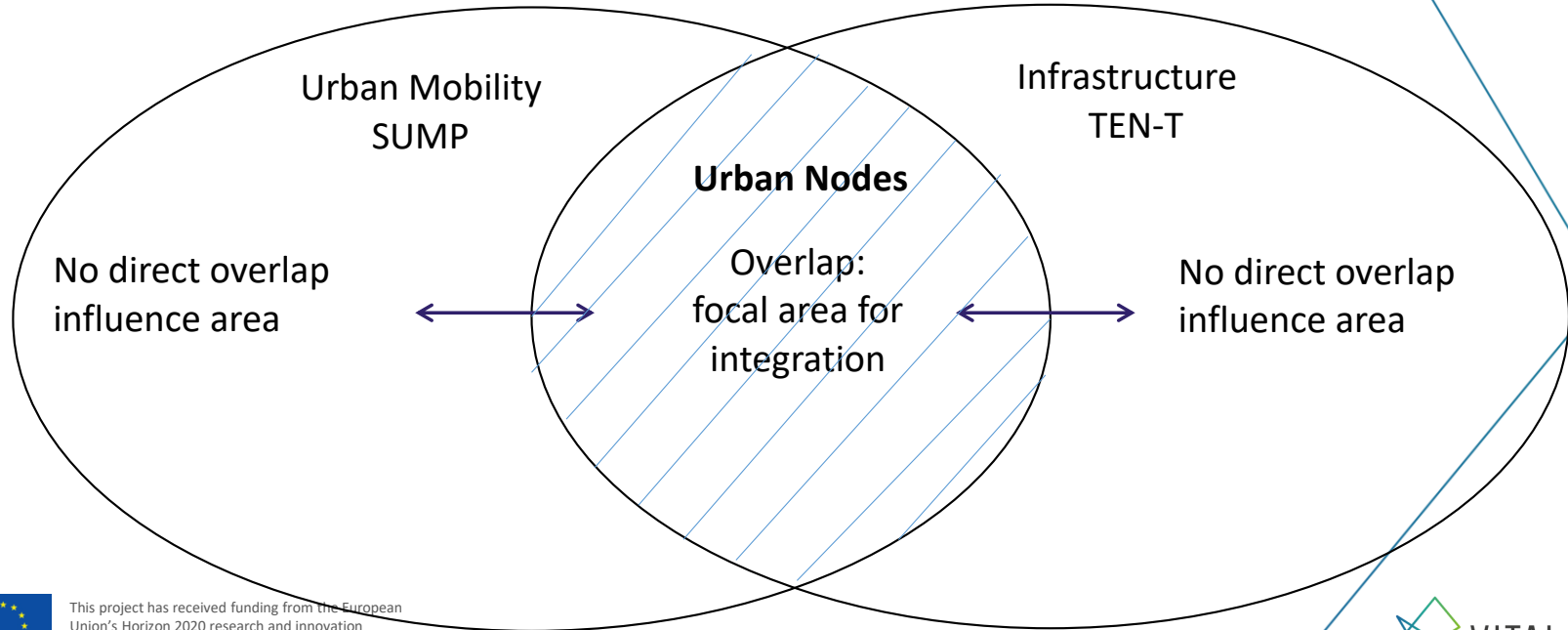


Growing demand of flexibility, development of micro and midi hubs



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 769458

Increasing complexity need for linking different worlds...



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Functional Urban Area

📍 **Strasbourg, France**

Fingerprints Vital Nodes - Facts and Figures

A) General facts and figures | B) Corridor | C) Regional (NUTS2) and functional area | D) City of Strasbourg | E) Capacity | F) Challenges

IMPORTANT CHARACTERISTICS:

The Alsace rail network is not a major rail freight corridor in terms of traffic and suffers from a weakness related to its structure, both from national and international point of view. Rail transport networks are directed towards the West and less to Germany and the South. The north-south axis is heavily used for passenger traffic, to its capacity limit, limiting the development of rail freight. In addition, the containers can not pass on the axis Mulhouse-Dijon because of the lack of gauging of the tunnels too narrow. This lack of a direct route to the south and the disappearance of marshalling yards in Alsace requires the processing of goods transported by regular shuttles within a marshalling yard located in Lorraine, Woippy.

INDICATIVE FUA



FREIGHT INFRASTRUCTURE
baseyear 2016

	Number	ha	mton	TEU
Road-Rail terminal	0 =	0	0	0
Air terminal	1 =	0	na	na
Trimodal terminal (deepsea)	5 =	22	na	na

increase ▲ neutral = decline ▼

Vital Nodes project

Main objectives

- Deliver validated recommendations for effective and sustainable integration of all 88 urban nodes into the TEN-T corridors focusing on freight logistics
- Establish a long-lasting European expert network based on existing (inter)national and regional networks for safeguarding long-term continuity in knowledge and implementation

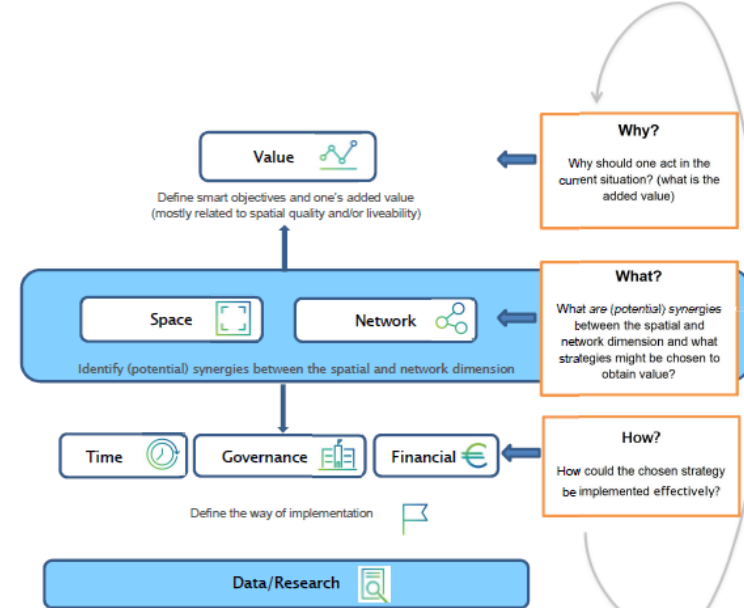
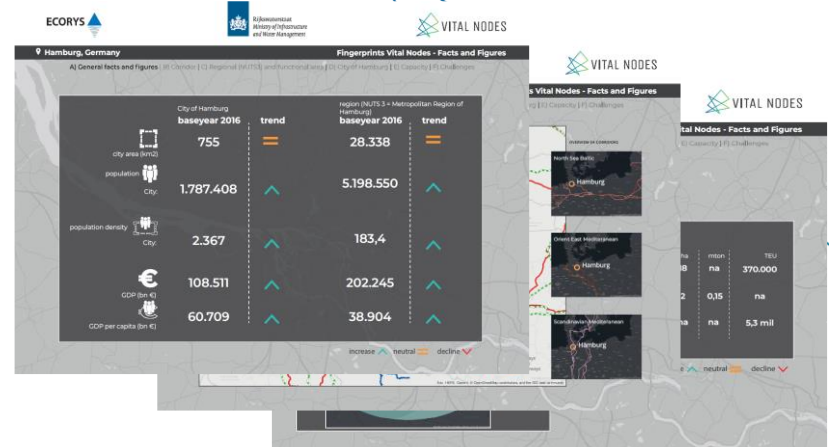


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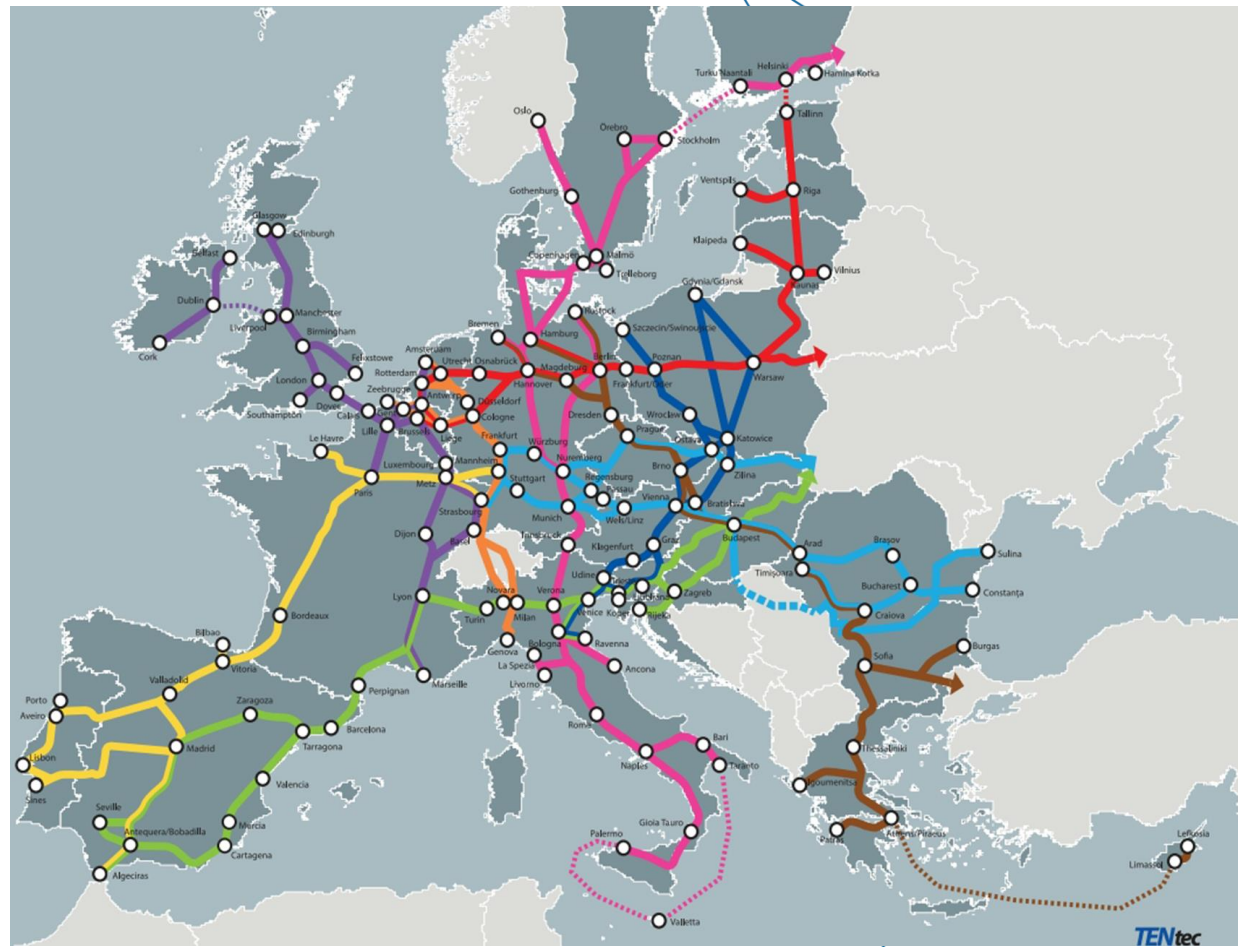


Approach

- Maps on three levels (local, region / Functional Urban Area, TEN-T corridor)
- 'Fingerprint' of the urban node – trends, facts and figures
- Discussing challenges, solutions, impacts, good practices and added value for Europe
- Focussing on different dimensions and topics (spatial planning, infrastructure, passenger and freight transport)
- Value as the central dimension to define functionality
- SUMP Practitioners Briefing Vital Nodes

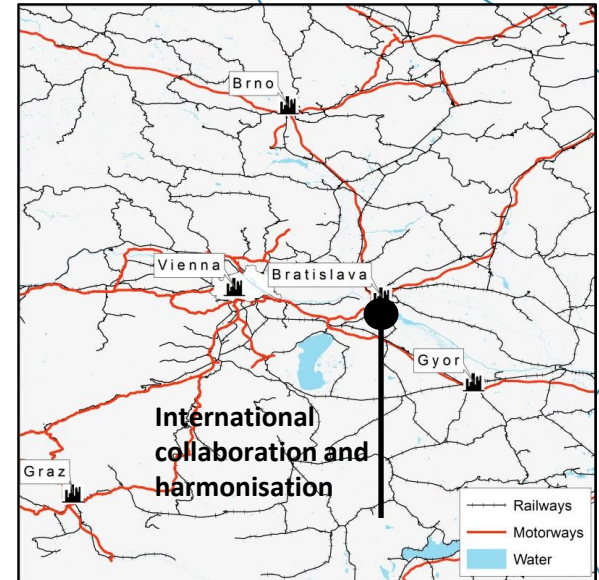
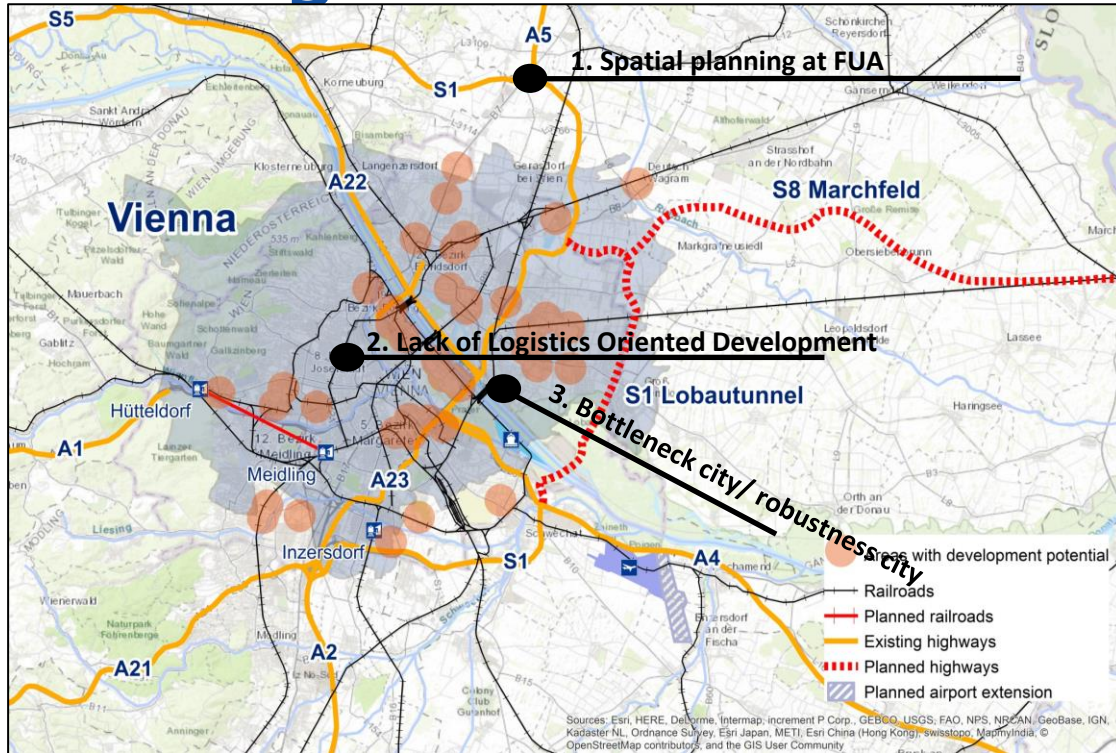


Approach (2)



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Challenges: case of Vienna



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Recommendations

Network dimension

- Specify Functional Urban Areas (FUA) and stimulate network resilience
- Develop a multi-modal transport planning and coordinated asset management, considering impact at local, FUA and corridor level
- Renovation and renewal of infrastructure (fitness)

Spatial dimension

- Combine TOD (Transit oriented developments) and LOD (Logistics oriented developments)
- Careful design of interfaces of trans-national network and local accessibility and support the development of consolidation centres (and midi/mini hubs)

Institutional dimension

- Raising awareness for freight/logistics in urban, regional and infrastructure planning
- Create an action program, including roadmap for implementation on how to better link their urban nodes to the respective corridor(s)
- No silver bullets, but tailor-made solutions – good practices and dimensional approach help the process
- Facilitate institutional networking by establishing a community of urban nodes/TEN-T corridor professionals



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Conclusions

- Clear understanding of the FUA is important;
- Careful mix of interventions, regarding network, spatial, institutional and funding;
- (Searching for) added value as a key component;
- Mutual understanding and awareness of stakeholders forms the basis;
- Better balance between infrastructure, sustainable mobility and liveable, economically vital urban regions asks for a multi-sector approach.
- 25 validated recommendations - see Vital Nodes brochure



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Thank you for your attention

Any questions? Please contact me: sjaak.vander.werf@rws.nl

More information
www.vitalnodes.eu
www.nuvit.eu

