SEPTEMBER 3, 2015

BORROWED SIZE



PROGRAMME	4
NUVIT	5
BORROWED SIZE	9
NUVIT CASE STUDIES	13
01 RAIL BALTIC CORRIDOR	14
02 T.OP LIMBURG	18
03 LINKÖPING HIGH SPEED RAIL LINK	22
EUROPEAN METROPOLITAN AREAS	27
04 SCANDINAVIAN 8 MILLION CITY	28
05 CDT GRAND PARIS EST NOISY-CHAMPS	32
06 COURTINE CONFLUENCE	36
PARTICIPANTS	41

The NUVit community welcomes you to this Brussels seminar. In this seminar we will delve into the theme of Borrowed Size with several presentations and a reflection on the NUVit case studies.

The initiative 'Networking for Urban Vitality' (NUVit) brings together European case studies and practical experience from integrated infrastructure and spatial development. The NUVit goal is to deliver a proven toolbox for authorities to use in order to optimize economic, social and environmental vitality of urban regions from the perspective of multimodal transport infrastructures. More information about NUVit is available at: http://nuvit.eu/



Morning programme (closed session)

09.30	Registration and coffee
09.50	Welcome and introduction on NUVit by Jos Arts (Rijkswaterstaat)
10.00	NUVit Roadmap: path and strategy for the coming 2 years
10.45	NUVit in Practice: presentation of the progress and achieved results of the cases studies: - Rail Baltic Corridor (Estland) - T.OP Limburg (Flanders) - Linköping High Speed Rail Link (Sweden)
12.00	Questions and discussion
-	
Afternoon pro	ogramme (open session)
12.30	Informal lunch
13.30	Welcome by Jos Arts
13.40	Synthesis on the NUVit case studies by Ton Venhoeven
13.50	Presentation: In Tandem for Competiveness: Borrowed Size for the Eurodelta by Henri de Groot, Frank van Oort, Martijn Smit
14.20	Presentation: Borrowed Size for European Metropolitan Areas by Paul Gerretsen Areas: - Scandinavian 8 million city (Sweden) - CDT Grand Paris Est Noisy-Champs (Île de France) - Courtine Confluence (Avignon)
14.50	Coffee break
15.00	Reflections and conclusions on borrowed size from the case study representatives
16.20	General conclusions by Ton Venhoeven

NUVit

NETWORKING FOR URBAN VITALITY

NETWORKING FOR URBAN VITALITY (NUVIT)

The NUVit initiative will deliver a proven toolbox for authorities to optimize economic, social and environmental vitality of urban regions from the perspective of multimodal transport infrastructures. In addition, it will sustain the developed knowledge through a network of experts and practitioners that apply the NUVit concept in cases.

CHALLENGE

Achieving a smart green and integrated transport system is key to sustaining and further developing the economic, social and environmental vitality of urban Europe ("urban vitality"). Within this context the challenge for transport infrastructure and spatial planning authorities is to deliver the next generation of infrastructure and mobility governance, design, management and operation that would enable optimal accessibility, liveability and vitality across the geographical scales: from the local daily urban system to the wider EU regions that cluster metropolitan areas.

The Networking for Urban Vitality concept concerns the integration of multi-modal mobility, infrastructure- and spatial planning. This enables the synergetic integration of spatial development with investments in infrastructure (across all relevant scale levels: local, regional and corridor) in order to achieve the highest added (asset) value. Best practices across Europe show that by implementing this integrated NUVit approach significant benefits can be achieved in accelerating infrastructure delivery, environmental and spatial quality, investment climate, mobility network resilience and stakeholder commitment.

These best-practices, however, are scattered across the Member States and have had little knowledge exchange between each other. For this reason, a network has been established in 2010 around a selected number of cases, as an inkind effort of various transport infrastructure & spatial planning agencies together with research organisations. This network has delivered a clear innovation roadmap as well as a first case inventory, in which a selection of them has been deconstructed following the conceptual NUVit model.

OBJECTIVES

Various public and private parties involved in the cases acknowledge a clear need for practical tools and approaches to provide them with consistency across the geographical scales they are concerned with. Already the conceptual model has been applied to some cases Linköping (SE), Randstad-Rhein/ Ruhr Corridor (NL-DE), Rail Baltic Corridor (EE) and T.OP Limburg (BE) with appreciation of the authorities involved and showing great potential regarding cost-efficiency to society, social and economic revenues and achieving sustainability objectives.

This partial success deserves to be followed-up and has led to the main objectives of the initiative:

1. bring together practical experiences from integrated infrastructure and spatial development show cases (some ten cases relating to road-, railand waterways as well as slow transport modalities and spatial development) across Europe;

2. transform the conceptual NUVit model and the insights from showcases into a proven, practical toolbox for authorities to use when planning maintenance and development of their multimodal transport infrastructure networks within the relation between mobility, land use and liveability;

3. show the potential benefits (duration, budget, public support and urban vitality) for multimodal transport infrastructure planning by validating the practical toolbox in living lab environments;

4. show more effective and efficient cooperation between national, regional and local authorities and their multi-stakeholders on the optimal planning, design, construction and operation of infrastructure works (innovative governance approaches for publicprivate partnerships, public-public cooperation and stakeholder involvement);

5. build and disseminate a concrete track record of real cases across Europe;

6. raise awareness and stimulate policy dialogues within the member states and the EC about the NUVit approach regarding integrated investments for multimodal transport infrastructure and spatial development at regional, national, cross-border and European levels.

7. create a durable and self-sustaining network of practitioners that has been established during the NUVit initiative.

PROJECT CONCEPTS

The innovativeness of the NUVit conceptual model is the integration of six dimensions of mobility, land use and infrastructure planning in such a way that synergy is created. It goes beyond a local SUMP (sustainable urban mobility plan) as regional and (inter)national mobility and infrastructure networks and broader spatial opportunities are taken into account as well. The NUVit concept offers both short-term project benefits (duration, budget, and public support) and long-lasting benefits in terms of enhanced quality of infrastructure (network resilience, spatial quality of the surrounding area, investment climate). Vitality is the heart of the model as an integrated approach towards the six dimensions with the capacity to reveal synergetic aspects that may go beyond the sectorial project scope.



Spatial dimension: Spatial concepts with synergetic effects on accessibility. Examples are multi-model corridors, transitoriented development and area-oriented approaches. Critical aspects are the ability to deal with scale issues, the role of transport analysis and spatial design.

Network dimension: Multimodal network optimization at various spatial scales: corridors at (inter)national level, daily urban systems at metropolitan level and landscaping at local level.

Time dimension: This dimension aims at linking the stages in a full life-cycle of places and infrastructures (this also relates to renewal, redevelopment, circular economy/cradle-to-cradle and asset management), examining changing lifestyles and their linkages to mobility, and strategy development for transitions towards multimodality and integration with land use.

Value dimension: This dimension gives an overview of state-of the- art models and approaches to assess value - e.g. Social Cost- Benefit Analysis, Life-Cycle Assessment, Environmental Assessment - to create value and capture value in combined infrastructure and spatial development projects.

Institutional dimension: This comprises analysing existing organizational and institutional frameworks which leads to an overview of proven governance approaches – regarding public-public and public-private partnerships, stakeholder engagement – at all levels for the implementation toolbox.

Implementation dimension: Finally, a critical aspect in innovation is the deployment and implementation. Therefore, in the NUVit conceptual model explicit attention is paid to the implementation of the framework and toolbox developed. This dimension includes making an inventory of implementation issues and drivers in order to tackle implementation barriers.



EU CORRIDOR LEVEL



REGIONAL / DAILY URBAN SYSTEM (DUS) LEVEL



addressing and linking scales

BOR-ROVED SIZE

TXT

01 RAIL BALTIC CORRIDOR 02 T.OP LIMBURG 03 LINKÖPING HIGH SPEED RAIL LINK

01 RAIL BALTIC CORRIDOR

THE TRANS-EUROPEAN RAILWAY, LINKING HELSINKI – TALLINN – RIGA – KAUNAS – WARSAW AND CONTINUING ON TO BERLIN



Following the regain of independence of the Baltic States in the 90s, an idea about connecting the Baltic States to "the heart of Europe" was born. The idea intended to renew direct connections to the railway network of Europe by building a new European standard 1435 mm wide railway in the Baltic States and connecting such metropoles as Tallinn–Riga–Kaunas–Warsaw–Berlin (and prolonging the route to Venice in the future). Indirectly this route includes also Finland, since the planning incorporates an idea to build an underwater tunnel, which could connect Tallinn and Helsinki by train. Another idea is to open a rail ferry between these cities thus enlarging the impact of the project to the Scandinavian countries as well.

Rail Baltica will support the wider EU goals of parity of access to services and infrastructure of EU Member States and development of sustainable modes of transportation, improved balance and interoperability between different means of transportation.

BACKGROUND INFORMATION

LOCATION

Poland, Lithuania, Latvia, Estonia, Finland, "Rail Baltica" axis (Warsaw-Kaunas-Riga-Tallinn-Helsinki), A section of the "North Sea – Baltic" Rail freight corridor No 8 (Rotterdam – Kaunas).

STATUS

The part of the railway line in the Baltic states is expected to be completed by 2024. The line between Tallinn, Riga and Kaunas is expected to be operational by 2025 with the Warsaw link to be completed in 2030.

SURFACE AREA

The total length of Rail Baltica is planned to be 729 km.

SOURCES

http://www.rail-baltica.lt http://www.rail-baltica.com http://railbaltica.info/en http://www.rbgc.eu/frontpage.html

countries.

on the long term.

COSTS

The Rail Baltica project is estimated to require an investment of €3.7bn (AECOM 2011). The project will be jointly funded by the three Baltic nations. European Union funds will account for approximately 85% of the financing.

BUDGET

AIMS

The Global Project "Rail Baltica" has two main goals:

The first goal is to develop the missing high-qual-

ity physical infrastructure and logistical railway

connections for passenger and freight transport

between Finland, the Baltic States and other EU

The second goal is the full implementation of prin-

ciples of intermodality, interoperability, reliability,

safety, security, re-balancing of transport modes in

favour of the most environmentally friendly ones

BENEFITS

The building will ensure independence to the transport system of the Baltic States and mobility of its inhabitants by using a safe, modern, fast and environmentally friendly transport mode which could in turn create a potential for new development, jobs and increased competitiveness.



Republic of Lithuania, European Parliament, Council of the European Union, Ministries responsible for Transport in Poland, Lithuania, Latvia, Estonia, Finland and former EU Vice-President, Transport Commissioner Siim Kallas.



02 T.OP LIMBURG

THE MAKING OF THE LIMBURG MULTIPRODUCTIVE LANDSCAPE PARK





RE-MINE Hub Limburg

action programmes for three core strategies

RE-MINE Park Limburg

region surrounding City of Genk



The scheduled closure of Ford Genk (BE), one of Limburg's main economic engines and Flanders' fourth largest industrial site, will drastically alter the economic and societal setting of the region. Just as happened in the 1970s after the closures of the mines.

To meet this challenge and to preserve employment levels in Limburg, a regional investment plan was drawn up. With the start of the execution phase in 2014, a territorial perspective was added: the Limburg Territorial Development Programme (T.OP Limburg). In doing so, the authorities have recognized that economic redevelopment and spatial reorganization could serve to reinforce each other, and thus create new opportunities.

AIMS

T.OP Limburg aims to develop the region into a multi-productive landscape park. The partners envision realizing this ambition at a grand scale and in its broadest sense. Action programmes are being implemented for three core strategies that foster constructive relationships between spatial design and the (future development of the) economy in the Limburg region:

The first action programme is to support the transition towards a circular economy by gradually developing the region into a multi-productive network (RE-MINE Poort Genk).

The second action programme is to upport the leisure economy by transforming and connecting the existing landscape structures into a scenic open space network at the regional scale (RE-MINE Park Limburg).

The trird action programme is to improve liveability and regional qualities by smart densification and defragmentation of the residential fabric (RE-MINE Stad Limburg).

BACKGROUND INFORMATION

LOCATION Central Limburg (Area surrounding the city of Genk).

BENEFITS

STATUS In development.

SURFACE AREA

SOURCES

http://www.ruimtelijkeordening.be/NL/ Beleid/Beleidsontwikkeling/TOPprojecten/ CentraalLimburg

BUDGET

COSTS

PARTNERS

Spatial Development Department Flanders. RE-MINE Poort Genk: Key partners are the City of Genk, Enterprise Flanders, Public Waste Agency of Flanders, Hasselt University. Other partners are the City of Hasselt and municipality Bilzen. **RE-MINE** Park Limburg: Key partners are the Visit Flanders and Flemish government agency for nature and forestry. Other partners are the Flemish Land Company and Flanders Heritage Agency.

RE-MINE Stad Limburg: Key partners are the Provence of Limburg, Hasselt University. Other partners are the Housing Policy, City Policy and Knowledge Centre for Flemish Cities.



Korridor A - Ostlänken och Södra stambanan ovan mark och på bro över Stångån. Ostlänken fram till Steningeviadukten. Alternativ enligt järnvägsutredning.



Korridor C - Ostlänken och Södra stambanan i tunnel under staden. Ostlänken fram till Glyttinge



Korridor B - Ostlänken och Södra stambanan ovan mark och på bro över Stångån. Ostlänken fram till Glvttinge.

Korridor D - Ostlänken i tunnel under staden och Södra stambanan kvar i befintligt läge ovan mark





four alternatives (2013): high speed track through the city centre: left bridge alternatives, right tunnel alternatives



03 LINKÖPING HIGH SPEED RAIL LINK

EXPANDING AND CONNECTING THE REGION

23

Ostlänken (the East Link) is planned as a new double-track high-speed railway in the eastern part of Central Sweden and will be part of a possible future high-speed railway running between Sweden's metropolitan centres and the Scandinavian capital regions. Ostlänken will offer new travel opportunities and will follow a more direct route than the existing rail line. Along the 150 km new line in the eastern part of Central Sweden, stations with adjacent transit hubs are planned at Vagnhärad, Nyköping, Skavsta airport, Norrköping and Linköping.

Specifically for Linköping, Trafikverket (the travel. Swedish Transport Administration) currently investigates an alternative for a tunnel under the city center, allowing the high-speed track to go outside the city center and put the station in the suburb of Tallboda instead. AIMS

Ostlänken has several aims.

Shorten the travel time: it will be possible to travel from Stockholm to Linköping in one hour, for long-distance travellers, the route will cut Stockholm–Malmöjourney times by half an hour. Enlarge the capacity in the railway system Expand the region by creating greater possibilities to commute to work, studies and leisure activities. Lastly, shorter journey times and more convenient transit hubs will encourage people to leave their cars at home and choose a greener, more comfortable mode of transport for commuting and leisure travel



BACKGROUND INFORMATION

LOCATION
Region Linköping.

STATUS Study.

SURFACE AREA Ostlänken will be approximately 150 km long.

SOURCES

http://www.trafikverket.se/en/startpage/ Projects/Railway-construction-projects1/ Ostlanken---East-Link-project/ http://www.nyteknik.se/nyheter/fordon_motor/ jarnvag/article3885647.ece

BUDGET

COSTS Ostlänken will cost € 3,72 bn (2013 price level).

BENEFITS

PARTNERS

Trafikverket.

EUROPEAN METRO-POLTAN AREAS

04 SCANDINAVIAN 8 MILLION CITY 05 CDT GRAND PARIS EST NOISY-CHAMPS 06 COURTINE CONFLUENCE



04 **SCANDINAVIAN 8 MILLION CITY**

A HIGH SPEED RAIL LINK THAT WILL CONNECT 8 MILLION INHABITANTS IN ORDER TO CREATE ONE OF THE WORLD'S MOST COMPETITIVE REGIONS

freight train forecast for 2030 with

competitive globally, this is a challenge.

The region between Oslo, Stockholm and Copenhagen is already in the world's top league when it comes to an educated and skilled workforce, and represents one of the most dynamic and innovative regions in Europe. Scandinavian cities have, however, small and rather dispersed populations, with notable concentrations only around the metropolitan areas of Oslo, Gothenburg, Malmö, Copenhagen and Stockholm. In a world where regions increase in size to attract talent and be more AIMS

The goal for 2025-not so distant future-is a high

speed rail link that will physically connect these 8 million inhabitants and contribute to making this region one of the world's most competitive. The project goals to explore the potential of cooperation, jobs can be created and innovation milieus can be enhanced. Cooperation over long distances requires an appropriate infrastructure, both for passengers and freight. Whilst Europe and the world have been expanding their green infrastructure to stimulate growth, e.g. through massive investment in High Speed Rail, such investment has progressed slowly in Scandinavia.



BACKGROUND INFORMATION

LOCATION

Norway, Sweden, Denmark

STATUS

The project is organized in three workpackages: 1. upgrading the existing network to the doubletrack standard.

2. focussing on financing models to build separate tracks for high speed rail.

 $3.\,\mathrm{external\,communications\,and\,lobbying\,activities}$

SURFACE AREA

97.600 km rail ways

SOURCES

http://www.8millioncity.com

https://ec.europa.eu/growth/tools-databases/ regional-innovation-monitor/support-measure/s%C3%B6dra-sverige/scandinavian-8-million-city-%E2%80%93-corridor-innovation-and-cooperation

BUDGET

COSTS

The cost of upgrading the entire Oslo–Hamburg route is estimated at 23 bn euro, of which 18.3 bn is included in current national plans.

BENEFITS

- Higher productivity and competitive edge
- Easier access to skills and talents
- Reduced costs in logistics
- Increased access to suppliers and customers - Greater influence due to overall increased size
- New possibilities for cooperation and innovation across a wide range of areas

PARTNERS

Lead Partner: Business Region Göteborg AB Partners: Oslokommune, Västra Götalandsregionen, Region Halland, Region Skåne, Göteborg Stad, Helsingborg stad, Trafikverket, Akershus fylkeskommune, Østfold fylkeskommune, Statens vegvesen, Københavnkommune, Region Hovedstaden



Renforcer les synergies entre les moteurs et pôles économiques de Noisy-Champs

Promouvoir le développement des moteurs économiques ...

> ... etles relier aux pôles économiques structurants, territoires privilégiés d'essaimage

Promouvoir un aménagement urbain global qui renforce la centralité Noisy-Champs dans l'Est parisien

Réaliser une gare Grand Paris emplématique

Favoriser les liens urbains entre la Cité Descartes et le Mont d'Est, et entre Noisy-le-Grand et Champs-sur-Marne surle Rû de Nesle

Renforcer l'attractivité résidentielle de Noisy-Champs

Réaliser des opérations de construction de logements sur les opportunités foncières

Densifier le tissu existant

Des espaces boisés importants à rendre accessible et à relier aux quartiers urbains

Favoriser et diversifier les liens rivière-villé

05 **CDT GRAND PARIS EST NOISY-CHAMPS**

THE SUSTAINABLE DEVELOPMENT MODEL FOR THE METROPOLIS OF GREATER PARIS



Located in the Seine-et-Marne "département", the Descartes cluster stretches across the new town of Marne-la-Vallée, from Cité Descartes to the Val d'Europe district. This cluster already benefits from a number of tangible assets helping to establish its position within Grand Paris, in spite of a limited connection between Paris and Marne-la-Vallée (RER line A) and even though the extent of its natural spaces has stifled its economic development. The Descartes cluster sprang from a Government decision to leverage the "département"s natural heritage and new urban equipment in order to motivate an international dynamic around sustainable development.

The CDT (Contrats de Développement Territorial) related to this cluster is the Grand Paris Est Noisy-Champs CDT. CDTs converts the Greater Paris project to the local level. Elaborated by local authorities and the French state, their role is to support and organise the deployment of Greater Paris transportation projects: anticipated schedule, urbanism, economic growth, sustainability and housing.

BACKGROUND INFORMATION

LOCATION

The Sustainable City Cluster around Cité Descartes (CDT related to this cluster: Grand Paris Est BENEFITS Noisy-Champs)

STATUS

in development

SURFACE AREA 20,30 km2

SOURCES

http://www.grand-paris.jll.fr/id/142 http://www.parismetropole.fr/nos-chantiers/contrat-de-developpement-territorial/12-cdt-grand-paris-est-noisy-champs-territoire-de-la-transition-energetique/article/ contrat-valide

AIMS

The CDT aims both to strengthen the position of the territory as a major economic and urban center of eastern Paris, and secondly to make this sector a demonstrator of the energy transition. The communities of the CDT support the concept of "sustainable city cluster," and show their willingness to embody a sustainable development model and enabling it for the whole of the metropolis of Greater Paris.

Concerning energy transition:

- reduce energy consumption, by developing a low energy city. Interventions are done in thermal renovation and eco-construction of buildings, reduced motorised transport, development of public transport (focus on electrical), teleworking and teleservices;

- collect and valorise the energy exhaust by the various activities in the area: industrial or tertiary, transport, dense residential areas, sewage, etc.
- develop alternative low-carbon energy: renewable energy and longer-term capture the CO2 output of industrial plants.

BUDGET

COSTS

PARTNERS

The French Government and the local authorities are very much involved in fostering territorial development and encourage cooperation between the different stakeholders.

Partners: the State, represented by the Prefect of the Ile-de-France region, the municipality of Noisy-le-Grand, the municipality of Champssur-Marne, and the urban community of Marne- la-Vallée-Val-Maubuée.





EXPLOITER ET ENRICHI LES ACQUIS DU PLAN DE RÉFÉRENCE

the update reference plan

economic clusters in Avignon



06 COURTINE CONFLUENCE

THE NEW DEVELOPMENTS WILL MAKE COURTINE CONFLUENCE THE CENTRAL LOCATION OF THE GRAND AVIGNON REGION.

The Avignon TGV station is located in an urbanized neighbourhood Courtine Confluence about five kilometers from the city center. The station was purposefully built outside of the core to allow for the quicker passage of high speed trains through Avignon. There is a rail link from Avignon TGV to the center, a five minute ride.

The urban project Courtine Confluence has been the subject of reflections and productions from the early 90's. After the opening of the TGV station in 2001, a reference plan has been formalized and several proposed projects which were gradually abandoned. Developments have also been suspended due to the great flood of 2003. In 2012, the reference plan has been updated.

Due to the TGV station, the new development of Courtine Confluence is seen as an upcoming central location for the whole region of Grand Avignon.

BACKGROUND INFORMATION

LOCATION

Avignon, France

STATUS Station was built in 2001, the new development

SURFACE AREA 6 km2

plan: study

SOURCES

http://www.gmfus.org/blog/2013/10/31/unevengeography-france%E2%80%99s-high-speed-rail http://www.lamarseillaise.fr/vaucluse/ economie/36579-avignon-600-hectares-aamenager-pour-le-projet-courtine-confluence http://www.grandavignon.fr/travaux-et-projets/ projets/projet-courtine-confluence/

AIMS

Anxious to develop these potentials, the city of Avignon and the Grand Avignon Region wish to initiate the implementation of the ambitious urban project for the area Courtine Confluence and positioner it as a major project for the region. In addition, the ambition is to invest in this new area, which is a gateway to the river and landscape, and to create the conditions for the whole region to profit.

REGIONAL LOCAL CORRIDOR **INFRASTRUCTURE** HOUSING ECONOMY/ **KNOWLEDGE** - Urban mixed use zone (ZAC) around the station (30 hectares). - Mixed zones, 6000 inhabitants (Crillones and Gigognan, 70 hectares) SOCIAL CULTURE/ Metropolitan **NATURE** Public Park (major cultural facility, for example a theater)

everyone to express their views on the opportunities and potential of this strategic site, but also on the issues that have to be addressed collectively to ensure the success of the urban project. The projects steering committee is chaired by Jean-Marc Roubaud, president of Grand Avignon and

BUDGET

PARTNERS

The Territorial Workshop Courtine Confluence

was held on November 19, 2014 in the University

of Avignon. It brought together one hundred local

development actors: elected officials of the city and

the Grand Avignon, technicians, entrepreneurs,

heads of institutions. Organised around plenary

meetings and studio work, the workshop allowed

COSTS

BENEFITS

The projects steering committee is chaired by Jean-Marc Roubaud, president of Grand Avignon and Cécile Helle, Mayor of Avignon.



