NUVit: European network for infrastructure and urban vitality

On 23 June 2016, the conference ‘Networking for Urban Vitality’ (NUVit) was held at Amsterdam’s Europagebouw. Rijkswaterstaat organised this seminar as part of the Dutch EU presidency, and participants attended from various countries including Sweden, Austria, France, Belgium, Italy and Germany.

To secure accessible, healthy, safe and economically strong cities with good quality of life, we need to make changes to our approach to planning and building. NUVit is in favour of an integrated approach to infrastructure and spatial development, at various levels. This represents a challenge for many urban regions. The purpose of this day was to allow representatives to meet, to exchange best practices and to share knowledge.
On the EU agenda

Day chairman Steve Phillips, Secretary General of the CEDR, the international organisation for road directors, found it fitting that this new initiative should be placed on the EU agenda during the Dutch EU presidency. “The Netherlands, Sweden and Belgium are the driving forces and founding fathers of the development of NUVit. They share the ambition to establish a robust and sustainable transport network that combines various modalities, on a European scale. This integrated strategy for spatial development and investments in infrastructure could be of real importance for a healthy process of urbanisation.”
From silo mentality to an integrated approach

The first keynote speaker was Daniela Rosca, head of the ‘Clean Transport & Sustainable Urban Mobility’ unit at the European Commission. She started by explaining that cities will have an ever greater say in new EU policy. “Sustainable mobility turns cities into flourishing and accessible places that offer good quality of life. It is only fair that cities should be challenged to contribute ideas on such issues as climate change, road safety and spatial development. They after all have a great deal to gain. Cities need to avoid the silo mentality, in other words focusing exclusively on their own specialist fields or sectors. A series of innovations mean that cities are no longer islands. Instead, their hub function makes them part of a larger area.”

Rosca continued by offering examples of programmes and projects aimed at reducing transport pollution. “We wish to achieve progress in a variety of areas, not only by promoting cleaner vehicles but also by considering the infrastructure, certainly in urban areas, where infrastructure and vehicles come together.” For such an approach, public funding alone is not enough. A great deal also depends on private investment. To ensure a smooth outcome, partnerships will have to be established between stakeholders, industry and government.

How can the EU ensure cleaner transport and sustainable urban mobility? The approach favoured by Rosca comes close to the NUVit ideal. “We should no longer view cities as disconnected elements, but as part of a greater whole. It is not easy to switch from a silo mentality to an integrated approach to urban planning with long-distance infrastructure. The TEN-T paper is an inspiration for us, and with that in mind we are closely monitoring the progress of NUVit.”
Success through cooperation

Jan Hendrik Dronkers, Director General of Rijkswaterstaat, was the second keynote speaker. He welcomed all the conference visitors to the Randstad, a densely populated urban area that is home to 9 million people. At this location, four metres below sea level, 70% of the Netherlands’ GDP is earned. “More than half of the world’s population today lives in cities. By 2030, that total will have risen to 60%; a fact that represents a clear challenge. By integrating the approach to infrastructure and urban planning at EU level, we can create a robust, sustainable and multimodal transport network. That will help us improve the quality of life in our cities.”

Dronkers emphasised the importance of using this conference to get to know one another, to make connections, to exchange knowledge and to share best practices. He personally presented examples of urban ring roads around Maastricht and Stockholm, and the Room for the River project in Nijmegen. All of these projects were based on an integrated approach to urban and infrastructure planning, combined at various spatial levels. Dronkers concluded with an appeal. “My dream is to achieve the integrated improvement of both the economy and the quality of life in the urban areas of the EU. This is possible according to the NUVit approach, but it will need support from the TEN-T clusters. At present, the two are worlds apart; let us bring them together. NUVit underlines the mental shift this development will need!”
Efficient transport and urban planning

Lena Erixon, Director General of Trafikverket, opened with a series of statistics from Sweden. “Sweden, a country that extends 2078 km from north to south, is home to ten million people, but those numbers are growing rapidly. One contributing factor is the adoption of refugees. The Stockholm agglomeration is now home to 2.2 million people, and numbers are rising each year. Stockholm is the fastest growing capital city in the EU.”

That growth also causes problems such as housing shortages. How can these difficulties be solved? Erixon’s answer is to integrate the transport system and spatial planning. “We have plenty of space, but at a whole number of levels we need to make more efficient use of the transport system.” She explained how measures have been taken in a phased approach, for example tunnels that are combined with urban projects.

Erixon warned that projects like this are initially always faced by resistance. “The Stockholm Bypass, a 21 kilometre-long tunnel, is due to pass beneath the royal palace. This caused much discussion, but by collaborating closely at different levels, we have now almost reached consensus.” The results also proved useful: the projects were completed on time, and on budget. The city has been made more accessible, even exceeding the original expectations. There are plans to further extend the underground system and to join the major cities together via a high-speed line, which will then be linked up to the European network.
Win-win situation due to integrated urban and infrastructural planning

By way of illustration, Peter Cabus, Secretary General of the Spatial Planning Department compared Flanders with Sweden. “In terms of surface area, Flanders is approximately ten times smaller. From north to south our region covers just 150 kilometres, and we have 6.4 million inhabitants. We too are facing a growing population, partly due to the influx of migrants. Flanders has a close-knit railway, road and waterway network and excellent international links such as airports and high-speed trains.”

Population growth is having an impact on spatial developments. Mobility and new houses are needed but there must be no negative effect on the quality of life. This can be achieved through integrated urban and infrastructure planning. One of the examples he gave was the Antwerp ring road. This road is within the city itself, and is highly susceptible to congestion. “Based on past experience, we would now tackle things differently,” admitted Cabus. “Firstly, everything was planned entirely top-down, and that led to considerable resistance. To ensure support, we have since started working alongside the population. As a result, a planned bridge has now become a tunnel. The tunnel roof offers living space for the city. The second error related to context. Right from the start we should have integrated our approach with the wider environment. That is something that has now been done, and at various levels and scales we are now making use of transport hubs.”

Cabus concluded by recommending use of the NUVit approach. “Look how you implement the infrastructure in new urban developments. Look across borders at the TEN-T clusters, and make sure you promote cooperation at different levels.”
More focus on water

According to Ton Venhoeven, Internationally renown urban architect, we need to rediscover the planning of our infrastructure, on the basis of our major trading routes along the Rhine. “The Multiyear Programme Infrastructure, Space and Transport (MIrT) has been a huge success. Within this programme, central government is working alongside local government authorities on spatial projects and programmes for every region in the Netherlands. Now is the time to expand this network, and introduce cooperation across national borders. Cities are not silos; we need to focus on the overall conglomeration.”

How can we face up to these challenges at an international level? Venhoeven suggested the answer is to focus on transport hubs. “In a multimodal, logistic network, we must make sure that the infrastructure does not harm the urban agglomerations. We also need more space for nature. One solution is to make more use of water. Rivers are essential for transport. Transport hubs combine transport by water with the rail and road infrastructure. By transporting bulk goods on ships, we can reduce the pressure on the road network. That in turn will make our cities more accessible and improve the quality of life.”
Side event: Room for the River

In the Netherlands, there is an ever present risk of flooding. In a densely populated country, this is a serious problem. The greatest cause is the fact that rivers today have less room than they once took up naturally. In addition, rainfall levels are rising and all that water has to be discharged somewhere. At more than thirty different locations, we are now creating more room for the rivers. One of those locations is the Waal river near Nijmegen. Using Virtual Reality glasses, participants at the conference were literally able to take a look at the river.
Can the relationship between motorways and cities be improved, in a future with electric and autonomous vehicles? What are the effects on quality of life, accessibility and use of space? To gain new insights and to acquire new knowledge, at the initiative of the BNA and the University of Technology in Delft, design-based research is underway on ring roads in Utrecht, Amsterdam and Rotterdam.
When it comes to urban planning, a number of factors are decisive. For example, whether a decision is made top-down or bottom-up. Or in relation to energy: whether energy is generated from oil or sun makes a huge difference. Rijkswaterstaat has developed a game that presents extreme scenarios for four cities. By stepping back from their own interests, players acquire a greater insight into the consequences of other interests.
Panel discussion

At the start of the afternoon, a panel discussion was organised, under the chairmanship of Steve Phillips, Secretary General of CEDR. The panellists were Peter Carbus, Secretary General of the Spatial Planning Department; John Voppen, Operational Director at ProRail; Einar Schuch, Regional Director at Trafikverket; André van Lammeren, Director Accessibility and Infrastructure at Rijkswaterstaat.

The panellists started by talking about lessons learned so far at the conference. Voppen offered an example of how the NUVit approach was employed in the combination of trains and bicycles. “In the Netherlands, 50% of all transport movements during rush hour are by train. Thanks to excellent access and bicycle parking, the combination of bicycle and train can truly be viewed as a multimodal transport solution, in which the railway station is the hub that combines the two modalities.”

Phillips then called for feedback from the audience on the side events. Many participants were interested in the Motorways and Cities development while the Room for the River project was described as an excellent example of how different functions can be integrated in a single plan. The Rijkswaterstaat game was described as a useful tool for looking forward to the future of our cities, and as a good basis for strategic decisions.

Are there cultural differences that could stand in the way of NUVit? For Van Lammeren, the answer was a definite ‘No’. The real issue is sharing values. “The only way to move up a level is through ‘learning by doing’. By combining our values and qualities, we can achieve true progress in developing the cities of tomorrow.”
Closing session

André van Lammeren, Director Accessibility and Infrastructure at Rijkswaterstaat, closed the conference. He emphasised the importance of an integrated approach to urban spatial development and investments in infrastructure at different spatial levels. “We need to look beyond our cities. What is the effect on the overall agglomeration? What we need are corridors.” In his view, infrastructure planning must in the future be integrated with spatial development. “At present, the two are still worlds apart, and it is up to us to bring about change.” He concluded with a view on financing. “To realize our goals it’s necessary that there is sufficient funding from all levels of government (national and Europe).” Van Lammeren emphasised the importance for us all of continuing with NUWt. “This is the way of the future!”
Practical visit to the Zuidas

To experience principles in practice, the delegation paid a visit to Amsterdam’s Zuidas. This existing business district is currently being transformed into a multifunctional area for working, housing and leisure. Such a development necessarily means more commuters, residents and visitors. According to estimates, once the project is completed, the Amsterdam Zuid station will be handling three times as many passengers as is currently the case.

The solution is to build a tunnel under the – widened – A10 motorway. The space this creates will be used to expand the station and to provide more living space for local residents. This integrated project is all about combining forces (road and rail) in a collaborative process between the Ministry, provincial authorities, the local city district and the Municipality of Amsterdam. The building work is due to be carried out between 2018 and 2028.