

Amsterdam Metropolitan Area

Introduction

The new Spatial Planning Act (Wet ruimtelijke ordening, or Wro) comes into effect in 2008, marking the adoption of a new approach to spatial planning in the Netherlands. From 1 July 2008, the various tiers of Dutch government will set out their spatial intentions in so-called structural visions. Unlike earlier planning instruments, such as regional plans, these structural visions are binding only on the body that institutes it. Implementation of these visions self-evidently affects others, including citizens and other tiers of government. Legal instruments such as provincial orders are binding on other parties.

Over the coming years each tier of government will devise a structural vision that will form the basis for the delineation of their 'own' interests (national, provincial or municipal) in order to set out a vision for the physical layout and use of space. In order to embark on this new era of plan-making properly prepared, the core governmental working party for the North Wing (Noordvleugel) of the Randstad decided on 6 December 2006 to devise a shared development scenario for the North Wing region. This development scenario had to be ratified before the end of 2007, based on what the region aspires to become and how it can achieve this.

The North Wing is the densely urbanized area in the northern half of the Randstad agglomeration and the powerhouse of the national economy. In order to retain or even strengthen the current international competitive position, the North Wing platform posed a question: 'How can the North Wing network region develop into an internationally competitive European metropolis by 2040?' To be successful, the further development of the North Wing of the Randstad must focus on establishing a high-quality, sustainable

living and working environment where businesses, residents and visitors are keen to base their operations, establish a home or spend leisure time.

The 'North Wing Development Scenario 2040' ('Ontwikkelingsbeeld Noordvleugel 2040') presents the answer to this question and the corresponding preconditions.

This book opens with 'We, the Metropolis' ('Wij metropool') – a *cri de coeur* from Maarten van Poelgeest and Ton Hooijmaijers, chairman and vice-chairman of the Noordvleugel's core governmental working party. In it they make a passionate appeal for collaboration within the North Wing and for spatial planning that is weighed up carefully in broad consultation, thus capturing the essence of the Development Scenario 2040.

The first chapter is the 'North Wing Development Scenario 2040' as ratified at the 7th North Wing Conference on 14 December 2007 in Hilversum. The conference report, including amendments and resolutions, is presented in full in Chapter 1.

This chapter is therefore the point of departure for the structural visions to be formulated by the various tiers of government in the North Wing region. The chapter opens with the resolutions passed at the conference. One of these resolutions was to rename the North Wing of the Randstad (Noordvleugel Randstad) as the Amsterdam Metropolitan Area (Metropoolregio Amsterdam).

The 'North Wing Development Scenario 2040' is followed by two chapters presenting the background material employed in its formulation. This begins with a profile of metropolises and a comparison of the Amsterdam Metropolitan Area with other



metropolises, followed by a survey of trends and developments. The Amsterdam Metropolitan Area is the most economically diverse region in the Netherlands and boasts a strong international position in the financial and business services sectors, in ICT, media, the creative sector, tourism, congresses (MICE), the knowledge sector and logistical services. In many spheres the Amsterdam Metropolitan Area participates successfully among the European first or second ranks. Amsterdam is distinct from the three other big cities in the Netherlands because of its amenities befitting a capital city, a wealth of cultural facilities and a cosmopolitan social climate. There are also weak points that need improving through extra efforts, such as the tackling of problem neighbourhoods, the provision of sufficient and attractive living and working environments, the improvement of public transport and the improvement of air quality and nature. The region's competitive position and distinctive identity must be bolstered by means of clustering and the bundling, rather than spreading, of investments.

The Amsterdam Metropolitan Area has a total population of 2 million, making it one of the 'small fry' among international 'global cities', albeit one that enjoys a great name and reputation. The reason for the region still being considered among these 'global cities' is the combination of a trade and financial centre with a robust creative sector and a broad spectrum of other sectors. With its modern seaport, an airport that is an intercontinental hub and one of the world's biggest internet exchange points (AMS-IX), the region's physical and virtual communications with the rest of the world are superlative. Amsterdam has a tradition of openness and an esteemed track record in the fields of art and design. Together with the unique green-and-blue surroundings, the assortment of residential milieus and the city's highly differentiated population this makes the Amsterdam Metropolitan Area a highly attractive place of residence or of business. It is highly likely that small metropolises will in future prove more successful in their development and liveability than mega-cities. At the launch conference on

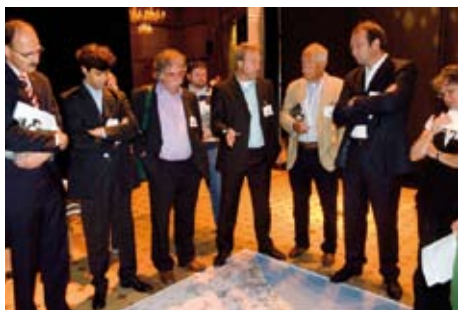
7 February 2007, Peter Newman noted reassuringly that 'the Amsterdam region will still be here in 2040'.

The 'Facts and comparisons' ('Feiten en vergelijking') chapter presents the results of a comparative study of metropolitan regions. The 'North Wing Now' ('Noordvleugel Nu') is characterised in section 1, while in section 2 the focus is on the 'North Wing Later' ('Noordvleugel Straks'), and section 3 offers a comparison with other metropolises in Europe.

What is that metropolis, both in the general sense and in the Amsterdam Metropolitan Area specifically? Metropolises have a higher Gross Domestic Product per head, greater labour productivity and more vital economic growth than the national average. This is due to several specific qualities:

Advantages of scale: metropolises have the advantage of a great bundling and spatial clustering of activities and are therefore more economically favourable than small cities; they offer a large internal market, which is advantageous for businesses but also for cultural amenities and education institutions; they are therefore also attractive to workers; the rate of return on investment in, for example, public transport systems also benefits from this.

Specialisation: metropolises offer a highly diverse workforce, amenities, suppliers and research institutes, and accommodate more specialised business services and infrastructure; in both the services sector and in manufacturing there is additional value created by specialisation; benefit is primarily gained from clustering and the ready availability of expertise; in the most advanced metropolises large sections of the population work in the service industries, such as cleaning, maintenance, trade, security and transport.



Innovation: innovation can be achieved more easily in metropolises because the economic mix increases the likelihood of attracting and clustering together R&D activities, and the scale and structure of metropolises fosters interaction between people; the level of education in metropolises is higher than the national average because of the presence of a diversity of educational institutions and the gravitational pull of urban amenities and higher wages on young adults and the better educated; thanks to this force of attraction there is a great labour pool of students, youngsters and motivated migrants; metropolises also have a diverse supply of property with a wide selection of different buildings, amenities and infrastructure.

Besides these positive characteristics, metropolises are also distinctive in the negative sense: metropolises have relatively large proportions of 'inactives', i.e. unemployed people who are difficult to reintegrate into the workforce. Social segregation is evident to a greater degree within metropolises than elsewhere, and income gaps are widening in almost every metropolis. Accessibility is a problem in many metropolises, as is pollution, and both problems entail extra costs (largely health-related). Lastly, the great complexity (administrative or otherwise) results in high administration and planning costs, with the innate danger of rivalry, fragmentation and a lack of transparency.

In the 'Themes and tasks for the future' ('Thema's en opgaven voor de toekomst') chapter the focus turns to future developments. Which trends represent opportunities for the metropolitan area, and which are a threat to its development into a true metropolis? Which spatial developments exploit such opportunities, and how can threats be staved off? The core governmental working party has emphatically stated that the requisite expertise about trends and developments has to be 'gathered' from scientists and other experts, so various scholars were invited to give a lecture followed by a workshop on the current 'state of affairs' in a particular field.

In these workshops an attempt was made to find answers to the question of which trends are relevant for the tasks facing the Amsterdam Metropolitan Area. Administrators, municipal councilors, members of provincial councils, business leaders, civil servants, students and other concerned parties, such as representatives of various interest groups, participated in these workshops in order to explore the following themes:

- Climate and water (W. Ligtoet, Prof. N.D. van Egmond)
- The environment, energy and sustainability (Prof. N. van de Giesen)
- The economy and globalisation (Prof. R. van Engelsdorp Gastelaars)
- Airport, port, greenport (Dr. P. Rietveld, A.M.J. Rijckenberg)
- Accessibility, mobility and infrastructure (Prof. W.A. Hafkamp)
- Demographics, socio-cultural development (Prof. L van Wissen, Ö.Q.G. Gölpinar)
- Leisure and tourism (Dr. A.M.L. van Diepen)
- Metropolitan landscape (R. Uytengaak)

The trends outlined by these experts were recurrent themes at the various follow-up meetings, such as 'Surveying the Horizon' ('De horizon in beeld') conference on 29 June 2007 and the various regional round-tables (for the Gooi & Vechtstreek region, the IJmond municipalities, Zaanstad, Amstel- & Meerlanden, and Almere, as well as the housing corporations).

This generated an inventory of relevant trends and spatial tasks on the scale of the Amsterdam Metropolitan Area. Each theme is described in a separate section that concludes with a range of spatial tasks. These tasks, which are not elaborated in the development



scenario, can be employed as an agenda for the formulation of the various structural visions.

The process of establishing the development scenario was a form of governance. The North Wing 2040's core governmental working party decided to set aside the year 2007 'in order to arrive, by means of an open process, at a broadly supported long-term development perspective for the North Wing as a metropolis that can serve as a point of departure for the various structural visions that will be decided thereafter.' Amsterdam, Haarlem and Almere Municipal Councils, the Provincial Councils of North Holland and Flevoland and the Amsterdam City Region platform took the initiative to formulate a joint development scenario for the North Wing in 2040.

The drafting of the development scenario was embarked upon in earnest on 6 January 2007, the www.noordvleugel2040.nl website went online a month later, and on 7 February the public starting-shot for devising the development scenario was given at De Zwijger warehouse for media and culture. Jan Schuur of the Netherlands Institute for Spatial Research (Ruimtelijk Planbureau, or RPB) gave a presentation about the 'Prosperity and Living Environment Scenarios for 2040'. Willem Salet (University of Amsterdam, or UvA), called for strategic alliances and the stimulation of entrepreneurship in an international context, coupled with the development of differentiated, high-quality residential and working environments for all nationalities. Peter Newman (University of Westminster) sees big opportunities for historic European cities if they manage to exploit their cultural position and assume responsibility for a high-quality living environment.

The theme day at WTC-Amsterdam was held on 16 May 2007. Besides the 'state of affairs' lectures by experts there was an 'expertise market' in the lobbies and corridors, where even school-children depicted their vision for the future in a colourful mural and the Amsterdam-based architecture bureau, de Architecten

Cie., gave a presentation in which they used a study about the North Sea Canal as a flywheel for the Amsterdam region. Students from Delft University of Technology (TU Delft) advocated establishing a 'landport' on the eastern flank of the North Wing, offering waterside residential development on the urban periphery and rural dwellings in the polder combined with open water (and water storage capacity). *De Volkskrant* newspaper was present with its forward-looking agenda for spatial policy in Netherlands. Sandra Rottenberg moderated a plenary discussion about pipe dreams and potential nightmares (road congestion, the environment, the family), about large-scale infrastructural interventions (e.g. a regional metro network), and about the open metropolis where the haves and have-nots, families, the creative class and ex-pats can find their respective places. The option of organising the Olympic Games or a World Expo went hand in hand with a warning about the longer- and shorter-term impact of such investments. Attention was also drawn to the strengthening of the green qualities in the region.

Various gatherings were held in May and June, meetings attended by aldermen, councillors and civil servants that zoomed in on relevant trends and spatial tasks for a specific area. These regional round-tables, involving about 300 people in all, were held in the regions of IJmond, Zuid-Kennemerland, Amstel- & Meerlanden, the Gooi- & Vechtstreek, Flevoland and the Zaanstreek. There were also meetings with representatives of organisations such as housing corporations, district water boards, chambers of commerce, and nature and environmental protection organisations, where they were able to table their own visions for the future.

For the 'Surveying the Horizon' conference on 29 June 2007, two 'essayists', Tom Hutton (University of British Columbia, Canada) and Hans Westerbeek (La Trobe University, Melbourne, Australia), received a three-day induction in the form of guided 'pressure-cooker' tour of the region. This programme included a bus excursion



sion and a helicopter ride as well as discussions and meetings with researchers and opinion-makers. At the conference they characterised Amsterdam as a robust brand that must primarily take advantage of its own historically proven strengths, one that is also blessed with a surrounding region that offers unique qualities, particularly in the form of the existing nature and water. Westerbeek believes that the Amsterdam region has a great deal of potential: 'Do not try to copy the efforts of cities from around the world. The mix of success factors and unique (brand) characteristics lead to a constellation of opportunities that allow you to further build a city that stands out from any other city around the world.'

One of Hutton's conclusions was that 'Obviously Amsterdam and its region is competing for market share, investment, skilled labour and tourism with other European cities. Amsterdam will never likely have the clout of London or Paris but is instead competing with cities like Milan, Barcelona, Stockholm, Hamburg, Munich and Copenhagen.' He closed his argument with the warning not to rest on one's laurels, but to build further on the strong points. Those present at the 'Surveying the Horizon' conference set out on an interactive exchange excursion, touring the thematic building blocks that were elaborated after the conference of 16 May. The visitors could also 'speed-date' with the assayers, could take part in a survey about expectations for the future, and could become acquainted with the results of the comparative study into 10 other European cities, including London, Frankfurt and Barcelona.

Over the summer, the findings and consultations 'garnered' in Almere in the spring were digested and processed by the administrators, civil servants and designers. Conflicting spatial claims were staked out and weighed up in a design-driven process, while data was analysed and policy proposals were formulated. In the second week of October the interim conclusions (greater focus on clustering, concentration, transformation and intensification in order to achieve climate-readiness and accessibility objectives in a respon-

sible and affordable manner) were presented to the civil servants, experts and project managers involved in the process, from the Amsterdam Metropolitan Area as well as national government, during the 'walk-in workshops' at Noorderlicht in Amsterdam-Noord. These walk-in workshops concluded on the afternoon of Friday, 12 October at the Artemis Hotel in Amsterdam in the presence of about 20 North Wing administrators, from spatial planning, traffic and transport, and economic affairs sectors.

The ultimate outcome was an initial draft of the Development Scenario: it underscored the need to continue further on the path already being followed and emphasised that the question of how we might achieve this was becoming increasingly pressing. For example, the concentration and clustering of urbanisation has proven important for a whole raft of reasons (the economy, accessibility, landscape, water management) that we must ask ourselves whether the set of instruments currently available is adequate. There was an explicit appeal for a greater focus on external accessibility (in practical terms this means a presentation map covering a wider area), that 'it seems sensible to face the future with the current road system plus expansions that are already planned, providing that expectations regarding the more efficient use of the road system actually materialise', and that there are indeed a great many tasks that demand further elaboration at the regional level.

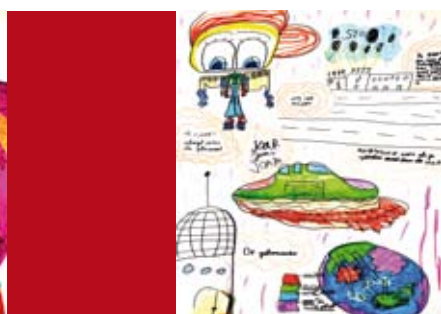
The Development Scenario and the 11 corresponding regional tasks were ratified within a year of the launch, at the 7th North Wing conference on 14 December 2007. On 22 February 2008 the Development Scenario 2040 was formally presented in Zaanstad in the presence of the councillors of municipal and provincial bodies that constitute the Amsterdam Metropolitan Area, providing a shared point of departure for the structural visions they will be formulating in the near future.



Resolutions

The following resolutions were carried at the 7th North Wing conference, 'North Wing Development Scenario 2040', on 14 December 2007:

- 1 Develop the North Wing network city into a metropolis that is competitive on the European scale by 2040.
- 2 Adopt the Amsterdam Metropolitan Area as the new name for the North Wing network city.
- 3
 - I. Position the Amsterdam Metropolitan Area within the Randstad as the powerhouse of the Dutch economy;
 - II. Make a significant contribution to the resolution of issues in the Randstad by ensuring the vitality and dynamism of the Amsterdam Metropolitan Area;
 - III. Regard the North Wing Development Scenario 2040 as the shared input of the Amsterdam Metropolitan Area for the 'Randstad 2040 Strategic Agenda' that is being drawn up by the cross-ministry Urgent Programme for the Randstad (UPR) platform.
- 4
 - I. Profile the Amsterdam Metropolitan Area on the basis of two specific aspects, namely:
 - Diversity (urban, nature/landscape, functional)
 - Sustainability (energy, climate-readiness, air quality, etc.).
 - II. In order to achieve this continue to implement the (spatial) principles of clustering, intensification and diversity within the Amsterdam Metropolitan Area, and employ these principles as the basis for further metropolitanisation.
- 5 Four crucial impulses will be delivered in order to facilitate the development of the North Wing network city into the Amsterdam Metropolitan Area:
 - I. Further concentration and transformation of areas currently being urbanised, as well as those earmarked for urbanisation through to 2030, making it possible to establish the qualities typical of a metropolis. This involves consideration for:
 - balanced progress along the various axes of development;
 - retention of jobs in urban centres;
 - maintaining an adequate stock of business locations when transforming former industrial sites for, and in combination with, other urban functions, in accordance with the Industrial Zones and Office Space Platform's Implementation Strategy (Uitvoeringsstrategie Plabeka).
 - II. Improving the region's internal and external accessibility by fully exploiting the transport system's capacities and investing in efficient public transport on the scale of the metropolitan area.
 - III. Developing the metropolitan landscape in such a manner that the green and blue qualities required by the metropolis are realised.
 - IV. Developing the Amsterdam Metropolitan Area in a sustainable and climate-ready manner.
- 6 Employ the North Wing Development Scenario 2040 as the point of departure when devising structural visions for the Amsterdam Metropolitan Area in the future, taking note of the



document 'Themes and Tasks for the future' ('Thema's en Opgaven voor de toekomst').

- 7 Acknowledge the 11 regional and supra-regional tasks outlined below as urgent and important for the basic spatial structure of the future metropolis:
 - Urban concentration and transformation (impulse 1, see 5-I)
 - Metropolitan accessibility (impulse 2, see 5-II)
 - Metropolitan landscape (impulse 3, see 5-III)
 - Sustainability/climate-readiness (impulse 4, see 5-IV)
 - Leisure time/tourism/recreation in the metropolitan area
 - The future of the port
 - The future of Schiphol Airport/Lelystad
 - The future of Greenport Aalsmeer
 - Scaling up Almere/Markermeer-IJmeer/public transport along the Schiphol-Amsterdam-Almere-Lelystad corridor (OV-SAAL)
 - Scaling up Haarlemmermeer/Bollenstreek
 - Investment agenda and financing strategy, especially for the four impulses for metropolitanisation.

These tasks are acknowledged as urgent and important for the basic spatial structure of the future metropolis and are the guidelines for the future agenda of the Amsterdam Metropolitan Area in its ongoing policy formulation.

- 8 Take action with regard to the tasks specified under resolution 7 and report on progress in this to the relevant administrative and official bodies.





The North Wing in 2030

Baseline and impulses

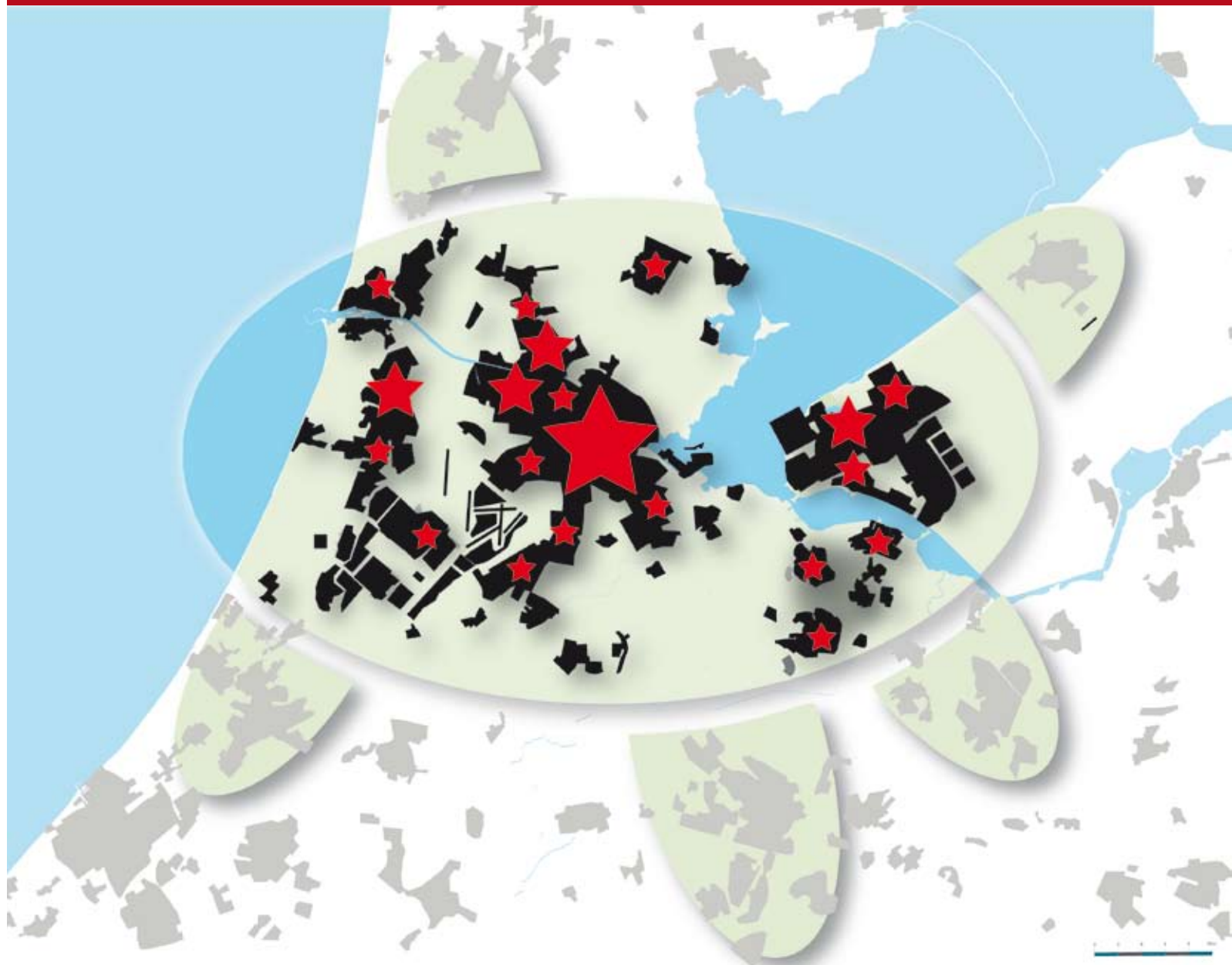
Section 3.2 'The North Wing in 2030' ('De Noordvleugel in 2030') makes it evident that a substantial part of the metropolitan ambition can be achieved over the coming decades by continuing the North Wing strategy that is currently being pursued, with its government accords and ongoing projects in combination with 'cast-iron trends' in the fields of demographic shifts, globalisation, environmental policy and technology. In other words, the North Wing is well on track already! That is hardly surprising, as it has been demonstrated that metropolitanisation in the North Wing's specific situation primarily calls for the amplification of existing qualities.

Over and above these planned developments through 2030 (i.e. **the baseline**), four additional and substantive efforts – '**impulses**' – are crucial to the successful metropolitanisation of the North Wing:

- Continued urban concentration and transformation
- Realisation of a unified metropolitan public transport network
- Development of the metropolitan landscape
- Ensuring the metropolis is climate-proof

In addition, regional and supra-regional follow-up tasks have been defined for the various sub-sectors and for the financing of each of the components.





Impulse 1: Urban transformation

Impulse 1: Urban transformation

Continuing clustering and concentration of urbanisation in the North Wing within the 2030 contours ('the compact metropolis') necessitates further intensification of the use of urban land, by means of modernisation and transformation of inner-city areas. Besides being relevant to urbanised areas, this task also pertains to the port, the airport and the expanses of greenhouse horticulture. The public space (including greenery and water) must also be made ready for more intensive use. The central city boroughs in particular will have to reduce motorised traffic in order to meet air-quality standards.

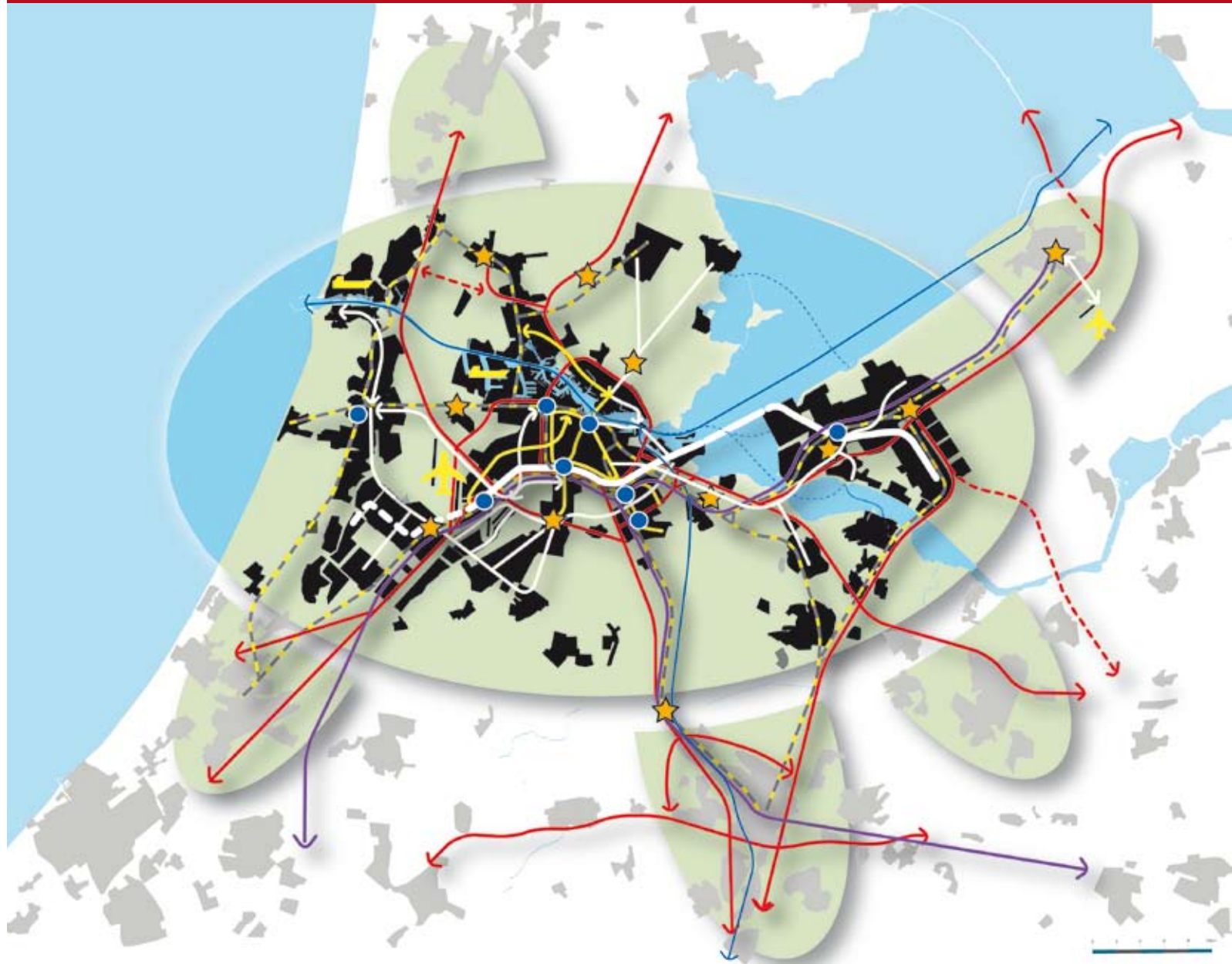
The transformation of inner-city business zones into sustainable hybrid forms of living and working environments represents an opportunity to inject quality and vitality. The urban region has many kilometres of urban periphery, presenting opportunities to make better use of the recreational function of the surrounding countryside.

Reducing environmental nuisance and increasing water storage capacity are prerequisites for maximising the 'loading capacity' of urban areas. In combination with the soil sanitation that is often required and the adaptations to infrastructure this requires substantial investments, for which the backing of central government is indispensable.

'Densification' is secondary to the prime objective of using space more efficiently, transforming outdated areas into modern, specialised or mixed-use zones, integrating the entire 2030-2040 urbanisation programme, preserving the social and cultural mix in urban areas, adding new urban milieus, inserting top-quality amenities, ensuring there is an adequate user base for metropolitan public transport, and concentrating regional amenities, public services and economic functions at regional public transport hubs. The greatest surge of dynamism will be along the Haarlemmermeer-Amsterdam-Almere axis, where the greater part of the North Wing's economic development and housing construction programme will be realised. This does not detract from the sum of

sub-regions and development axes that constitute the backbone of balanced metropolitanisation.





Impulse 2: Metropolitan accessibility

Impulse 2: Metropolitan accessibility

The continuing development of the North Wing network city into a European metropolis calls for the safeguarding of international and inter-regional accessibility, by air, by water (most especially for goods, but also for ocean and river cruises), via the HSL international high-speed railway network (to the south and the east, with the HSL-South possibly being extended to Lelystad), via the inter-city railway network and the major roads, especially the hinterland connections. Improved connections between Almere and the middle of the country could be achieved with the laying of the A30 motorway (Almere-Amersfoort) and the reintroduction and extension of the 'Stichtse Lijn' rail link (Almere-Hilversum-Utrecht), thus capitalising on ever-greater cohesion in the Amsterdam-Almere-Utrecht triangle. A car-ferry link between Almere and Volendam might also deserve consideration.

Establishing a unified, region-wide metropolitan public transport system is the only means of truly bringing the internal cohesion up to standard. The regional traveller must be able to travel across the metropolis without too many transfers, whether from IJmuiden to Almere or from Purmerend to Aalsmeer. The basis for this is formed by the cobweb of existing and planned regional connections: metro lines, local train services, regional bus lines (including rapid services via dedicated bus lanes known as 'HOV' lines) and fast ferries, which must start to function as a single network with efficient multimodal hubs, offering perfect transfer possibilities and connections to a fine-meshed urban public transport network (tram and/or bus). There are still a few missing links to be remedied in that regional network, perhaps an HOV western tangent (Sloterdijk-Osdorp-Schiphol Oost-Werkstad A4), an HOV northern tangent (Zaanstad-Amsterdam Noord-IJburg), an HOV link between Haarlem and IJmuiden, an HOV line on the Haarlem-Schiphol-Zuidas axis, and a western branch of the Amsterdam metro system connecting with Schiphol's prospective second terminal.

Haarlem and Zaanstad should, moreover, be linked with the Zuidas by a direct rail link. Equally decisive for attaining the metropolitan standard is the development of a high-quality regional public transport link (comparable with the RER or S-Bahn) on the Hoofd-

dorp-Schiphol-Zuidas-Almere axis, which together with the North/South Line high-speed metro link would form the backbone of the metropolitan public transport system.

Establishing such a metropolitan public transport network is beyond the powers of the existing divided organisational structures and exceeds the usual level of investment.

The ongoing and intended substantial improvements to trunk-road network (various road-widening and construction projects, the A6-A9 link, the Westrandweg, the 2nd Coen Tunnel, the A30) and remedying a few missing links (interlinking the A8 and A9 is on the agenda) will result in its completion. Laying even more asphalt does not automatically result in improved accessibility, since the urban road system and destinations within the metropolis can no longer physically assimilate such an influx of motor traffic. That is why it would be desirable to simultaneously achieve a more effective employment of the available road capacity, using a raft of measures: technology, ICT, parking policy, road pricing, traffic guidance systems, mobility information, arrangements with businesses, and Park & Ride facilities along the arterial roads from the wide surroundings. This does not preclude the future reconsideration of capacity expansion, should the measures prove inadequate. In the core areas of the metropolis, the vast majority of personal journeys must start to consist of walking, cycling and public transport, including ferries.

This presents the prospect of a unified traffic and transportation network – for individual and collective conveyance of passengers – the two systems being so closely intertwined via transferia (multimodal hubs as well as Park & Ride), that an integrated 'chain of mobility' becomes par for the course.

The anticipated growth in freight traffic outstrips that for passenger traffic. A more efficient logistical management of freight movements within the North Wing region, with a greater proportion of transportation by water and rail, is an absolute necessity. The region's main logistical actors (Schiphol Airport, the ports, Flowerport) must therefore collaborate more closely.





Impulse 3: Metropolitan landscape

Impulse 3: Metropolitan landscape

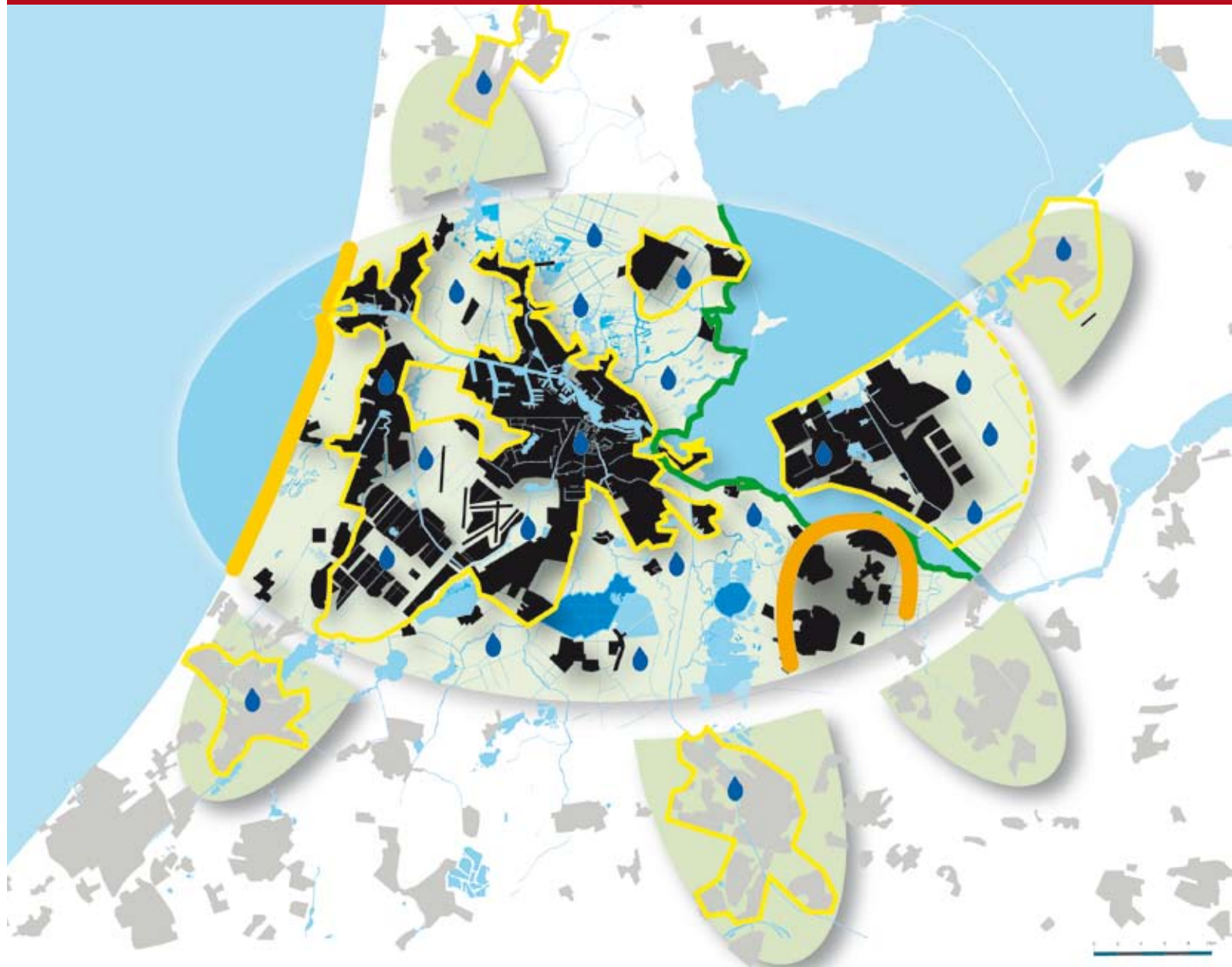
N.B. With respect to the tasks for the metropolitan landscape (see section 3.1) this impulse (text + map) is primarily intended as an 'agenda point' for the eventual development vision.

The landscape in the North Wing adds an indispensable and distinguishing quality to the Amsterdam metropolis. Situated in the delta of Holland with its typical polder landscapes (reclaimed land and peat meadows), waterways and lakes, the region is also hemmed in by the North Sea and the Markermeer, transected by the North Sea Canal, the IJ waterway and blue expanses of the IJmeer and Gooimeer, defined by the sand ridges of the Kennermer Dunes and the Gooi. It boasts robust green-blue corridors of European importance: the Markermeer/IJmeer-Green Heart wetland axis and the Oostvaardersplassen/Oostvaarderswold-Veluwe lakeland zone. This landscape must become an integral component of the metropolis: the metropolitan landscape.

The objective is mutual serviceability and support, not only for recreational purposes but also for nature development, water storage, rural living, suitable urban amenities, 'urban agriculture' and so on, which provides a means of cushioning the reduction in space for agribusiness. The landscape must be preserved from 'haphazard cluttering', which demands region-wide cooperation between all the stakeholder organisations in order to reverse it, to zone the landscape according to the functions permitted, to popularise the landscape among city-dwellers and to stimulate investment in the landscape. Within such a framework the government bodies concerned cannot sideline the agreements with respect to a shared, legally binding planning regime.

A long-term regional strategy that is able to attract considerable investment in the diverse functional and spatial qualities of the metropolitan landscape is especially necessary when it comes to the position of agricultural activity combined with the water management task and the desired nature development. Here, too, the investment required exceeds the usual level, requiring the formulation of new financial arrangements.





Impulse 4: Sustainability

Impulse 4: Sustainability

In the North Wing of the Randstad, the physical impact of climate change will primarily manifest itself in relation to water. Safety from floods, the prevention of flooding as well as water shortages, and a healthy water quality are highly important in view of continuing economic growth and a growing population. This means risk-aware development and, wherever possible, making water systems self-supporting, whether in urban or rural areas. Preparedness for climate change must be a guiding principle in the choice of location and design.

The sustainability and long-term functionality of the metropolis require being prepared for higher water levels by concentrating real-estate investments in previously urbanised polders wherever possible. In short, this task will be underpinned by the clustering of urbanisation within the development contours for 2030. The technical, spatial and financial implications of this approach, as well as the impact on extra-urban areas, require further study.

Structuring the Spatial Development Scenario

The series of map illustrates the structure employed:

- **Planned developments up to 2030:** existing agreements, ongoing projects and cast-iron trends. Following the last map in the series, this map is composed of these layers:
 - the existing foundations
 - residential construction
 - economic centres
 - regional public transport network
 - trunk roads
- **Four extra impulses:** crucial for metropolitanisation. The four impulse maps relate to:
 - continuing urban concentration and transformation
 - establishing a unified metropolitan public transport network
 - development of the metropolitan landscape
 - sustainable spatial development of the metropolis



