1 Outlook

Spatial quality

The Western Region of the Netherlands owes its thriving economic development and interesting appearance to its location in the delta of several major rivers. In the Middle Ages, trade flourished in the estuary of these rivers and the old settlements on the river banks grew to become affluent world trade cities with a wealth of art and culture. It is thanks in part to this history that the centres of the large and medium-large cities such as Amsterdam and Leiden are not only popular among foreign tourists, but also among our own population. They still comprise the most important meeting places where the citizens of the Randstad Metropolitan Region live, work, shop and recreate.

In the area between these cities, a thick, wet layer of peat developed over the course of many centuries. Construction was impossible on it due to its instability. Thus, the delta literally laid the groundwork for the creation of a ring of cities around an area of water, green and open space. The quality of this situation is all the clearer when one compares it to metropolises in other countries, with a dense, built-up centre in an extensive urban shell. To get out of the city, those residents often have to travel dozens of kilometres over congested traffic connections. In the Randstad Metropolitan Area, on the other hand, the green periphery is in the centre, so it is actually right at everyone’s doorstep.

The dynamics that this ring of cities brings with it, however, put a mark on the zones around the edge of the Green Heart. Broad ribbons of infrastructure cut through there: motorways, railways and high-voltage lines. These are the lifelines of the Randstad Metropolitan Area. They sometimes interfere with the landscape and pose difficult barriers for recreationists. On the western side of the open central area, after removing the peat and draining water, areas were created where the more stable soil now supports the development of sparse building and greenhouse horticulture. The landscape in this edge zone often looks a bit messy. That is not the case in the Westland Area, where an impressive greenhouse horticulture complex has been created: a globally unique phenomenon.

Particularly in the eastern part of the Green Heart, one can still find oases of peace and space, as in the area of the Nieuwkoop Lakes, the Vecht Lakes and in the Waarden Area around the Hollandse IJssel. One can still stroll, skate, cycle and sail and forget that one is in a global city with 6 million inhabitants.

But the delta has more to offer. For example, the coastal region and the Utrecht ridge provides a welcome contrast to the wet, open central area. These wooded, rolling sand ridges have been popular since time immemorial with those who prefer a green living environment like ’t Gooi, Wassenaar and the Kennemer dunes to the city. But thanks to their shelter and variation, they are also popular among nature-loving recreationists.

The Western Region of the Netherlands is larger than the Randstad Metropolitan Area. Outside the ring of cities, as well, there are captivating areas with high spatial quality. First of all, there are numerous large bodies of water: the North Sea, the IJsselmeer Lake and the South Holland-Zeeland inlets. Along the coast of the North Sea and along the banks of other bodies of water, the Randstad denizen can enjoy impressive views into the distance. Other outdoor areas of the Randstad Metropolitan Area are mainly characterized by an agricultural landscape, such as the “head” of North Holland and the expansive Flevo Polders.

When the Flevo Polders were created by draining submerged land in the middle of the last century, the planners demonstrated that they had an eye for spatial quality when they consciously kept peripheral lakes open between the new polders and the old land. This greatly enhanced the landscape diversity and user value (water and water-side recreation) of the wider surroundings.

Randstad Holland: An instable ground in the delta of rivers laid the groundwork for a unique metropolitan region around an area of water, green and open space.

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Looking back on all of this, it is clear how unique the Western Region of the Netherlands is – given its combination of high-density urbanization and a range of scenic delta qualities. As the Randstad expands further to become a Delta Metropolis, it is crucial to proceed from this principle in development planning for the western part of our country. For this reason, the Delta Metropolis has been designated as a “Grand Project” in the Architecture Policy Document.

Problem definition and tasks

The Western Region will be faced with quite a challenge in the decades to come: improvement of the spatial quality in the Randstad Metropolitan Area in combination with meeting a high demand for new homes, jobs, facilities and access to them. This places a great deal of pressure on spatial planning, both for the urban and green spaces. But at the same time, this dynamic is a perfect opportunity to address flaws in quality.

Can the West meet its own need for space in the future? And if so, at what price? The answer to this question not only pertains to the relationship between the Western Region of the Netherlands and the other parts of the country, it is also contingent on the position that we in the West – and indirectly, in the Netherlands – ascribe to the international economy.

There is stiff competition globally between urban regions. The role of an economy geared towards knowledge is increasing. Knowledge-intensive businesses, branches of globally operating corporations and businesses that are highly oriented towards innovation (of products and technologies, in information and communications processes and in meeting consumer demands) are seeking centres of excellence, where they are not too far removed from each other. These centres must be easily accessible from the rest of the world. The Randstad Metropolis is just such a centre.

But its position is not unthreatened. Other centres outside of our country are reinforcing their spatial qualities. They are doing so in a broad sense. The attractiveness of a place for business is connected, after all, with the living climate. That climate can deteriorate, not so much as a result of growth itself, but due to a lack of order and cohesion, creating bottlenecks, inequalities or the feeling that the limits of possibilities have been reached, even when this is actually not the case.

In many places in the Randstad Region, there is spectacular growth in the built-up area. There is a need for more cohesion between these developments, more coordination. Filling that coordination role, as well as restoring and making sustainable the balance between city and country: that is the main task of the Western Region.

Of course, such a task requires that choices be made. In the Randstad Region, much is possible, but not everything and not everything at the same time. Translating that understanding into policy choices is essential for the preservation of the national and international position of the Randstad Region and to achieve sustainability of both employment opportunities and the living climate in this part of the Netherlands.

Need for space

For the Western Region, as well, it is the plan to meet the need for space created by the growth expected in the region itself. Based on the citizen recommendations, it appears that many Randstad residents feel that the Randstad Region is full. There is a desire to accommodate some of the demand for urbanization elsewhere in the country and to create extra space for nature and recreation. A great deal of importance is also attached to accommodating extra needs for space within existing cities and villages and to make more intensive use of existing business parks, in order to preserve existing valuable green spaces such as the Green Heart.

This topic has been discussed extensively with the Randstad Region. The question was explored whether the urbanization demand could be fit in a way that could yield good spatial quality. This question was answered in the affirmative, despite several investment problems and difficult incorporation issues that will be explained in more detail below.
Map 1
Geography of the Delta Metropolis

Spatial pattern of landuse
- built up area
- wooded area
- grassland
- arable land
- non-cultivated area

Networks
- motorway
- intersection
- slip road
- main road
- high speed railway
- railway: double- and multitrack
- railway: single-track
- railway station
- international airport

Subsoil
- water
- depth
- province-boundary
- subdivision-boundary

Vijfde Nota Ruimtelijke Ordening, 2001 - © ministerie van Volkshuisvesting Ruimtelijke Ordening en Milieubeheer
Bronnen: - Kaart 14 - Rijksplanologische Dienst
2. Policy choices

Spatial view: the Delta Metropolis

The Randstad Region has set down its beginnings of a spatial view in the report “The Randstad Region on the Way to the Fourth Report. From Principles to Views” (December 1999) plus the “Conditions for a Green Delta Metropolis” (September 2000). The general starting point in this view is that, more than ever before, policy must be geared towards reinforcing the Randstad region’s function as a centre in the Northwest European economic networks and as an anchor point within the spatial / economic main structure.

The Cabinet ascribes to this view. The draft Delta Metropolis is a challenging, integral job for spatial planning, infrastructure and nature development. It is an expression of the ambition to stimulate further intertwining of the component areas of the Randstad Region, whereby they will function as more than a sum of their parts. The level of economic specialization and of all kinds of facilities in an urban area are determined to a large degree by the scope, the support. A city that is twice as large does not only have twice as many businesses, schools and shops in general, but also they are of a higher level and more specialized. The Randstad Region as a whole has adequate critical mass, when one looks at it this way, to function at the level of other major urban European regions; individual areas within the Randstad Region do not, however, have that critical mass.

Where do the greatest opportunities lie? In the international competition between regions, the environment for internationally operating businesses to set up shop plays a key role. For foreign companies and (Dutch) exporting companies, an excellent business
environment and living climate are necessary. The international strengths of the Dutch economy are: the cluster of transport and logistics, agriculture and horticulture and related agro-industry, and (petro)chemicals.

There are other business services connected with these clusters, such as banks and insurance. Both mainports link the national spatial-economic networks with the international traffic flows of people, goods and information. The Randstad Region has proved highly successful in attracting new foreign businesses, especially distribution centres and European headquarters.

Space is required for the aforementioned traditionally strong economic activities, but space must also be made for activities expected to bring (profitable) growth in the future: “advanced producers services” such as specialized IT services and legal services, financial services, multimedia companies, knowledge-intensive technology and, on the consumer side, recreation and tourism.

The Randstad Region, with its international airport and seaports, is a prominent Northwestern European region, comparable with other major urban conglomerations such as the Ruhr Area and London. Here are good opportunities for consolidating the international economic position of the Netherlands.

Business services comprise many activities that value clustering in the vicinity, because face-to-face contacts are important and because the “workers” - including many double-income couples - are often oriented to urban nightlife centres and cultural facilities. That is why they often make urbanized environments their home.
For typical R&D activities, the presence of (other) knowledge institutions is decisive. They sometimes are located in urban areas (such as TU and TNO in Delft) and sometimes in an attractive landscape (ESTEC in Noordwijk). Universities and other knowledge institutions are indispensable for urban regions. The spatial scale of spin-offs from them can be expected to be very large.

The above means that the Randstad Region must offer environments for a range of internationally operating businesses to establish themselves in the future. These are: urban environments for business services and urban tourism, urban and green environments for R&D institutions, logistic hubs (International airports and international seaports) and regions adjacent to seaports for heavy (chemical) industry.

If the Randstad Region were to achieve a leading position among the urban areas of Europe, that would impact the investment climate and development of prosperity, the quality of employment, the attractiveness of facilities, and the richness of cultural programmes offered. That is very important for the quality of life in the Randstad Region, and given its function as a centre, for the rest of the country, as well.

Spatial interweaving is achieved by strengthening the relationship networks: the green-blue network and the infrastructure network. The green-blue network is about strengthening and making visible the unique delta character of the Randstad Region. Through the infrastructure network, the residents and companies in the Randstad Region can communicate with each other quickly, safely and comfortably. In this way, the metropolitan ambition can be made concrete for the Randstad Region.
The image of the spatial main structure of the western part of the country, based on the development of two more or less autonomous mainports, nine city districts and a series of regional cores and buffer zones is being replaced by one concept.

The Delta Metropolis is the new policy framework for a broad range of urban, rural and green environments in a characteristic river delta with expansive views of meadows, cows, windmills and cloudy skies. But it is also a delta with city silhouettes and landmarks as well as an Arena and a well-designed high-speed rail link (HSL) route. The Delta Metropolis also creates the framework for powerful combinations of infrastructure that can be used efficiently to strike a good balance between road and rail infrastructure. By using techniques such as superstructures over and tunnels under motorways, and by building ecoducts, the human scale can be restored and nature can be preserved within the metropolis. The places for new building investments are not chosen randomly or in an excessively decentralized manner, but in connection with and for the Delta Metropolis as a whole. By achieving both thinning and densification, promoting intensive and multifunctional land use and restructuring vulnerable parts of the urban and green space, the Randstad Region can develop to become one of the most liveable, attractive and functional metropolises in the world.

This orientation is supported by the choice of continuous concentrated urban development, on and around the urban ring. This intensification makes it possible both on and in the ring to develop the “green” qualities more strongly through a system of parks, nature areas, easily accessible agricultural areas and recreational areas on the coast and along

Map 2.4
The Delta Metropolis:
its component water
the water. This leaves space for land-bound farming around villages that maintain their own character.

In an urban network with increasing interactions, passenger transport will continue to increase, and thus mobility. Good spatial and environmental quality requires an internal public transport network that competes with automobile traffic, functioning as an underground train system that is fast, reliable, with many stops and a high frequency.

The Delta Metropolis is not an isolated area, but is connected to other areas in and outside of the Netherlands. Intensive relationships exist with the national urban networks in the Eastern Region of the Netherlands (Twente, Arnhem / Nijmegen) and in the Southern Region of the Netherlands (series of cities in Brabant Region). The relationships with both other national urban networks (Groningen / Assen and Maastricht / Heerlen / Aachen / Liège) will become more and more intensive due to European developments and new transport connections.

Those relationships require more capacity expansion for traffic and the addition of some lacking links, such as the connection to the North by rail. In addition, several points of the ecological connections will be strengthened. At the level of the Randstad Region as a whole, it is about the ecological connections between the Wadden Sea via the IJsselmeer Lake and the Green Heart towards the Zealand Delta and the great rivers, and the links between the Coastal Region, the Green Heart and the Utrecht Ridge.

This spatial view of the Delta Metropolis is elaborated upon in the next three sections based on the green-blue network, the infrastructure and the urban network, in that order.

Outside the urban network of the Delta Metropolis, the Western Region includes urban areas such as the Northern District (Alkmaar and environs), which will accommodate their own growth on the basis of a good infrastructure link to the Delta Metropolis. Waterland, located between the Northern District and the Delta Metropolis, comprises a protected national landscape, together with Wormer, Beemster and Schermer, and will be kept free of new infrastructure and urbanization.

Finally, outside the Delta Metropolis in the Western Region, there are several rural areas with a primarily agricultural function, such as the head of North Holland, Flevoland and the South Holland islands. Of these areas, de Hoekse Waard is to be developed as a national landscape. Large bodies of water with special nature value outside the metropolis include the IJsselmeer Lake and its peripheral Randmeren Lakes, the Wadden Sea, the inlets and parts of the coastal region (including Texel and Voorne).

The Green-Blue Network

The central guideline for the spatial development of the metropolis is the delta character. This requires the restoration and reinforcement of cohesion in the green-blue network of ecological connection zones, water systems and gradients, and continuity in recreational routes.

The Green-Blue Network begins at the doorstep of the urban area. In order to actually live up to this, quite a few barriers must yet be eliminated, such as cluttered city outskirts and combinations of infrastructure. The network includes both inner-city green areas and regional green zones (formerly buffer zones) as well as the Green Heart as a national landscape. So it includes both traditional parks and complete landscapes in which numerous agricultural companies handle management jointly. The target is to create an extra 5,000 or so hectares of water surface and an equivalent surface area of green area (in addition to existing agreements). Green-blue connections between the city and country are to be restored or improved. The focus of this programme is the development of regional green zones (former buffer zones) and the western peripheral zone of the Green Heart.

The heights of all kinds of urban buildings in the Delta Metropolis are increasing. This fits in a highly urbanized area, but also impacts the perception of the green open spaces. The situations in which building heights should be restricted in order to prevent deterioration of the view of the typical delta qualities are being examined. It is important for these buildings to be attractive, too, not just shoeboxes, and that construction maintains a human scale for the passer-by on the street.
The Green Heart

The Green Heart offers the possibility of lavishly experiencing contrasting qualities such as peace, quiet and green, in a dynamic metropolis. An explicit choice has been made for the fen meadow area to maintain the historic cultivation and to continue agricultural land use. Large-scale swamp development is to be abated. Soil subsidence, greatly increased due to lowering of the water table since World War II, must be checked. An expansion of the regional water storage capacity is targeted by strategically utilizing level fluctuations (high in winter, low in summer), greatly reducing the need for letting water in and out. In addition, extra storage capacity is needed for emergencies, which capacity will be achieved to a great extent by 2030.

As a result of this water challenge and global market developments, the land-bound dairy farms will be put under pressure. A sustainable future for this industry requires restructuring and a transition to quality production with a regional sales market, expansion of business activities, extensification and spatial scale expansion. That requires major investments.

In the western part of the Green Heart, where the majority of the land is comprised of claimed lakes, the water-storing capacity is to be increased by expanding existing and creating new polder pools, ponds and lakes.

The Green Heart is not one uniform entity, but consists of component parts with considerable differences in spatial quality, opportunities and threats. In order to achieve the development and investment plan in an effective way, a differentiated approach is necessary. A distinction is to be made between landscape units, transformation zones and expansion areas. For each of these categories, the assignment is entirely unique, but this difference in approach must not lead to a dissection of the Green Heart into isolated component areas. On the contrary, creating relationships with adjacent component areas continues to be the explicit assignment.

Landscape units are areas with a relatively uniform, not very urbanized landscape, where (land-bound) agriculture, nature, water management and recreation are joined in a recognizable cultural and historical context. These oases of peace and space are located in fen meadow areas and in the pond areas, such as Venen, Waarden and the Holland Lake Area.

Transformation zones are located both in the peripheral zones, where the Green Heart borders on the city ring, and around the infrastructure ribbons that intersect the Green Heart.

particularly on the western side of the Green Heart, several transformation zones are distinguished, such as the Zuidplas Polder and the southern part of the Haarlemmermeer Polder. These areas are under pressure both as a result of the dynamics of the adjacent urban area as well as intensification by agriculture. Robust restructuring is desired here, through a cohesive development of nature, recreation and water management, in which the green-blue qualities are to be enhanced. It is possible that some degree of high-quality urbanization will be implemented in the peripheral zones. That goes particularly for these peripheral zones but not for the transformation zones along the main infrastructure. There, the recreational and ecological relationships between the adjacent landscape units are to be restored and the vistas across the open fen meadow areas from the motorways and trains are to be visible (again). Urban developments such as “sight locations” are to be energetically opposed in these zones.

Like the transformation zones, expansion areas are found on the periphery of the Green Heart. The scope of the development task for these areas is smaller and consists mainly of adding smaller forest and recreation elements and bodies of water that are easily accessible from residential areas.

The ring of cities

In the urban network, too, the green / blue component is to be reinforced: The linking of smaller and larger green areas, where the green belt in the cities is linked by a system of regional green zones with the Green Heart and the large landscape units on the outer side of the Delta Metropolis. In connection with urban restructuring, all possibilities will be utilized to expand the capacity for water storage. There are good prospects, especially in residential districts where more green living environments are to be created through thinning. These are also to be found elsewhere through the
use of other funding mechanisms. The requirement for internal water collection always applies to urban expansions.

New polder pools, lakes and ponds are to be created between the cities, thus linking existing parks, recreational areas, nature areas and agricultural areas with each other. In connection with that, residential environments on the water – now in great demand – can be created. Motorways, railways, and channels now often pose difficult obstacles discouraging recreation in the form of short trips from home (without a car). Investments are needed for viaducts, tunnels, ecoducts and aqueducts and the restructuring of routes through the landscape.

The coastal region is a fairly contiguous, publicly accessible area with nature, recreation possibilities and an expansive view. Between Hoek van Holland and Scheveningen, the row of dunes is very narrow. In combination with the creation of the Tweede Maasvlakte Industrial Area and an extension of the harbour peer, the choice here is for dune expansion towards the sea with a highly natural character that lends itself well to expansion of the recreational possibilities (for day-trippers). In the South Wing, there is a great demand for this. In the Bulb Region, on the other hand, dune expansion is sought in an inland direction, in combination with the creation of a varied residential area and expansion of water storage. Given the hollow profile of the coast line, dune expansions from Scheveningen to Petten must move inland. All these developments fit with dynamic coast management in which increasing safety comes first, but in combination with high-quality use.

The city ring is intersected by several ecological main connections that link the Green Heart with green / blue spaces outside the Delta Metropolis. The most important ecological connection runs from the Wadden Sea, via the IJsselmeer Lake and the Green Heart, to the South Holland-Zealand Delta: the “Wet Axis” (Natte As). In order not to disrupt this ecological relationship, four open zones are to be kept free of urbanization in the Randstad Region ring.

The infrastructure network

In order to function as one urban whole, the Delta Metropolis has to have a good infrastructure network. This connects the different parts of the Delta Metropolis quickly, safely and comfortably with each other and other parts of our country.

Excellent overland connections are also needed with nearby metropolises, i.e. the Flemish Diamond Area, the Rhine / Ruhr Area and Frankfurt and – a little farther away – Paris, London, Hamburg and Berlin. Particularly for business transport, it is important that one can travel back and forth in one day (a maximum of 3 hours of travel time between region peripheries). Public transport must be competitive with air and car travel when it comes to these distances. High-speed rail links are required, particularly to the three closest metropolises and to Paris and London. The HSL South Line is now under construction. As for the HSL East Line, it is being studied whether the same goal can be achieved by modifying the existing rail for higher speeds. In addition, good accessibility by (freight) lorry is required. The Delta Metropolis has sufficient motorway connections, but the utilization, capacity and traffic flows require improvement.

In order to adequately transport large goods flows from the Rotterdam Port, the Betuwe Line is under construction. In the long term, the connection between Rotterdam (Kijfhoek) and Antwerp must be improved. There are adequate inland waterways of the highest quality, i.e. the Amsterdam-Rhine Canal, the Waal River and the Schelde-Rhine Canal.
Internal accessibility

70 per cent of traffic movements in the Randstad Region take place within the limits of a 10 to 20 kilometres radius around a big city. In the future, as well, this share will remain high. Further improvement and extension of this part of the traffic system therefore has a high priority. That also contributes to improving connections within the entire Randstad Region.

Different quality requirements apply: In addition to travel times, these include reliability, comfort and frequency. Travel times are to be reduced first of all between the international centres (the centres of the four major cities and Schiphol Airport) and then for the other centres of Randstad level located on the major intersection points of the urban network of the Randstad Region Ring and that have an Intercity railway station or for which one is planned. This includes several centres in the inner flank of the ring where the economic potentials are high given easy access by car.

In view of the urban network of the Delta Metropolis, this also means good connections with other parts of the country and adjacent metropolises are located on the outside of the Randstad Region, strategically located centres (such as Almere, Amersfoort and Dordrecht) that have an Intercity railway station and for which short travel times to other Randstad Centres are also possible. In addition to good access by public transport, these centres must also be easily accessible by car.

Map 4 shows a tentative picture of the 6 international and approximately 20 Randstad Centres that the national government regards as the most important focal points of the Delta Metropolis and where there are many possibilities for achieving combined, high-value centre-city programmes. The national government invites the region to respond to this proposal for developing Randstad Centres by mid-2001 and thus to give insight in the spatial programmes and quality criteria for accessibility (both by public transport and car). Consideration must be given to the need to develop centre environments at a lower level, too, within existing built-up areas.

Implementation of the current MIT and BOR packages, plus the NVVP plans, will result in substantial quality improvements to the public transport system of the Delta Metropolis in the next decades. Rail transport is to be doubled during rush hours and frequencies are to be increased. This results in improved travel time for each component area and the Randstad Region as a whole. In the long run, the question is the way in which the public transport system can be further expanded. In theory, there are two main directions in which to go:

• Further reinforcement of existing forms of public transport linked to intensification of urbanization of the Randstad Ring
• Addition of a new transport system linked to new urbanization in the flanks of the ring.

Since the choice is closely connected to the new urbanization directions in the Delta Metropolis as a whole, it is desirable that a decision can be made. In the short term, the national government will conduct an exploration into both the cost-effectiveness and the spatial incorporation of the most promising alternatives.
The urban network

The choice for the Delta Metropolis concept implies that each component area no longer accommodates its own growth per se. Consultation and coordination between the components of the Delta Metropolis is to take its place.

The need for extra space for urban and recreational uses is to be accommodated within the urban network of the Delta Metropolis. In this way, the good accessibility that the intensively intertwined infrastructure network offers is capitalized upon, while preserving the essential landscape qualities.

The objective here is to intensify land use and to combine uses. In certain places, densification can be achieved (e.g. in the city centres and centres of city districts), while in other places, thinning is desired.

Densification does not have to result in a reduction of the size of each home but can go hand in hand with an increase. On balance, the processes of densification and thinning together create higher quality. Through high-value planning and design, greater space around the home can be perceived. That can be achieved in part through transformation and new construction of underground parking, in any case in urban environment types. This will be encouraged in part through legislation.

Moreover, high-value, accessible public space in urban areas will be promoted. This is part of an architectural and spatial design for these living / working environments for which the review framework is finalized in regional plans and (inter) municipal land use plans.

Transformation of existing built-up areas

A substantial share (about one-third) of the growing demand for urban space can be met through intensification and by combining uses in existing built-up areas. That goes for about 190,000 homes and 300,000 jobs and a corresponding portion of urban facilities for the entire Delta Metropolis. In view of the environmental requirements and the high costs that will be incurred in certain places, it will not be easy to achieve this. A closer exploration will look at the scope of this issue and the degree to which the involved parties can achieve this.

Urban transformation proceeds from a differentiation in living and working environments. There is an increasing demand in particular for centre-city environments for which there is an inadequate supply.

To meet that demand, the first thought is to use the approximately 27 Randstad Centres and then other urban centres. The involved governments will develop intensive urbanisation programmes in connection with the desired level of accessibility both by public transport and by car.

Extension areas

There is not enough space in the existing built-up area for a significant portion of the space demand. Accordingly, extension of cities and villages is necessary. This extension is restricted by a red contour and offers space to meet the remaining demand for urban and village environment types for living, working and facilities.

Outside the red contours, there are no possibilities for expanding living and working. In those areas, there is only limited room, in the framework of landscape reconstruction, for construction on the basis of a “space for space” approach. This implies an on-balance reduction of the construction volume and, at the same time, a quality improvement of the landscape.

In 2001, the possibilities for living environments in very low densities (5 to 10 homes / hectare) within the Delta Metropolis by making use of the space within the red contours plus the possibilities in the landscape reconstruction areas will be explored. The priority is to accommodate the demand for urbanization on the Randstad Ring. Space can be found there for an estimated one third of the urbanization demand of the Western Region in the form of expansion locations. The regime of buffer zones is to be modified (see below) and less extra space is to be reserved for greenhouse horticulture and bulb cultivation, while the expansion possibilities of Almere are to be optimized.

In order to be able to properly achieve the accommodation task in the North Wing, the traffic connections between Almere and both Amsterdam and Hilversum / Utrecht will be improved in a way that does not
damage the most important ecological connection through the Randstad Region ("Wet Axis"). The peripheral zone of the Green Heart and the outer flanks of the ring will be explored to find space to accommodate an estimated 15 per cent of the demand.

Schiphol Airport

Schiphol National Airport is one of the most important economic growth poles of the Delta Metropolis. In the area of the airport, however, there is a “restriction area” that will correspond roughly with the current preservation zone until 2010. In theory, no new residential construction is permitted there. Space can be found here, however, for the establishment of businesses, as long as this does not entail an increase in the safety risk, particularly businesses with a small number of jobs per hectare. This offers possibilities for accommodating a portion of the demand for space from industries such as transport, logistics, greenhouse horticulture and bulb cultivating. The demand for space from these industries greatly exceeds the supply in this region.

For the period after 2010, the possibilities are being explored of a limited expansion or modification of the runway system of Schiphol (including a 6th runway) and the possible consequences this could have for the restriction area. The guideline is that further growth of Schiphol should be spatially compatible and contribute to the improvement of the spatial quality of the region. Consideration must be given to:

- Keeping important urbanization options open in the Haarlemmermeer Polder, specifically Hoofddorp-West and / or Nieuw Vennep-West as well as the area between these centres
- Reinforcing the (water) recreation function of the Holland Lake Area (Kaag, Braassem, Westeinder). By meeting the demand for increased water storage capacity here, a combination of functions (recreation, nature and water storage) will add significant value.

Relocation of the national airport to the North Sea would have major spatial benefits given the substantial extra capacity for urbanization this would create at a very well-situated place in the urban network. Although this option is under study, this will not be addressed before 2020. However, efforts will be made to prevent this option from being blocked by contrasting spatial developments.

Seaport development

A sustainable and selective development of seaports with a concentration on incoming and outgoing transport in the port of Rotterdam has been chosen. The construction of the Betuwe Line underscores this. The seaports of Amsterdam and Vlissingen / Terneuzen are primarily destination ports. Expansion of these port areas geared towards incoming and outgoing transport activities is not considered desirable. So, in terms of functions, the ports are complementary. In the framework of the Mainport Development Rotterdam Project (PMR), a solution will be found for the space problem foreseen in the long term there for containers, distribution and chemicals, in particular. In the Key National Spatial Planning Decision on the PMR, a net 1,000 hectares have been reserved for port and industrial areas, but also for a package of measures to improve liveability.

The westward development direction of the port of Rotterdam will be accompanied by restructuring and intensification of the space use in the existing port area. This offers chances for less environmentally harmful and other types of employment, residential construction and recreational green in the eastern port area, enabling the economic resilience of the Rijnmond Area to be strengthened. Waalhaven-East offers possibilities for such inner-city functions and is thus an important project in the context of the transformation of this region. It has such scope and importance to be granted the status of “national project”.