

# Part 5: Recommendation

#### **Part 5: Recommendation**



#### 14 Performance, deliberation and recommendation

#### **14.1 Introduction**

In autumn 2008, the recommendations contained in the memorandum entitled 'A flywheel for Twente' [59] were adopted for the most part by the Ministerial Principals Conference of central government, the provincial executive of Overijssel and the municipal council of Enschede. VTM i.o. was given the task of working out two usage plans into spatial development strategies for the area.

The mission formulated for this redevelopment is:

#### 'To transform the present airbase into a flywheel for an economically stronger and more sustainable Twente.'

The objective is to bring about a development that responds to a new dynamic in the economy, but at the same time remains rooted in the local culture and connected to the landscape of Lonnekerland. With a balanced People, Planet and Prosperity approach, the redevelopment can truly add something to the region.

The redevelopment must create new opportunities for

- The development of new nature and the strengthening of ecosystems;
- Careful embedding of the long lines in the area and the valuable use of buildings from the cultural heritage and finding an appropriate use for them;
- Retention and where possible strengthening of the multimodal accessibility of the region by road, rail, water and air;

- The connection of housing in the towns and suburbs to new recreational networks and amenities:
- Selective expansion of new permanent and temporary forms of housing connected to the unique dividends of landscape, occupation history and infrastructure of the area;
- Providing scope to new amenities that add something to the highquality offering of amenities in the region for residents and visitors;
- Offering of space for modern hightech research, development and economic activity that in terms of the conduct business satisfy the stringent requirements for environmental quality and safety, tie in with the strong economic clusters in Twente and leverage specific conditions in the area for the establishment of businesses.

This means that pivotal aspects of our vision for the redevelopment of the Twente airport and surroundings are [59]:

- Modernisation and strengthening of the nature of Lonnekerland;
- Offering space for impulses specific and innovative to this location that reinforce the business climate and create new employment opportunities in Twente, among other things by improving infrastructure networks and mobility.

These objectives have been worked out in the following way in the two spatial development strategies (Table 14.1)

Both plans are a good fit for the defined objectives and provide a programme and spatial embodiment appropriate to the landscape and habitation history. In the northern part of the planning area, Plan A has a stronger emphasis on the re-use of existing buildings and the embedding of ecological values and the national ecological network. Brooks and recreational routes may intersect the area in the north-south direction. The plan includes a substantial housing programme.

Plan B has a stronger emphasis on economic activity and complete utilisation of the opportunities for multimodal accessibility of the region as the primary business establishment factor. The preference in this variant with an airport is a compact airport in a green environment so as to make a large part of the present airport site available for the restoration of brooks and the development of nature, including a robust expansion of the national ecological network on the southern side.

The decision that must now be taken is which of the spatial development strategies offers the best prospects for an economically stronger and more sustainable Twente. The arguments stem from the expected effects of the two plans in the environmental, economic and exploitation fields.

However, we also took into consideration at this stage the extent to which the plans contribute to fulfilling the policy goals of the stakeholders as laid down in documents including the Aviation Policy Memorandum of the Ministry of Transport, Public Works and Water Management [51], the Spatial Memorandum of the Ministry of Housing, Spatial Planning and the Environment [40], central government policy on the national ecological network and water in the 21stcentury, the area vision of the province of Overijssel [44], the policy on the Twente Area Agenda 2010-2020 [57] and the Future Vision of the municipality of Enschede [26]. An important connecting element is the embodiment of the concept of sustainability embedded in the mission of VTM i.o..

#### 14.2 Sustainability

Sustainable development meets the need of the current generation without jeopardising opportunities for meeting the needs of future generations [11]. Table 14.1 VTM i.o. goals and spatial development strategies

	Spatial development strategy A	Spatial development strategy B
Newly developed greening	Approx. 250 ha	Approx. 230 ha
Of which national ecological network enlargement	Approx. 50 ha	Approx. 127 ha
Strengthening of ecosystems	Restoration of old brook valleys. Water leaves the area of relatively quickly. Embedding of habitats of protected species.	Longer brook courses that connect to ecologically valuable brooks with clean water. More surfacing on the northern side. Embedding of virtually all habitats and where necessary compensation by means of new growing places.
Embedding of open space	Elongated central area reminiscent of former runway and will be anchored in the landscape by means of four lines of sight and made perceptible.	Monumental open space around the runway will be anchored in the landscape by means of four lines of sight and made perceptible.
Embedding of cultural heritage buildings with appropriate usage	Careful embedding of camps. Major part of the present values will be retained and embedded.	Careful embedding of camps. Major part of the present values on the south side will be retained. In the northern part there will be large hangars used appropriately besides new effective access.
Multimodal accessibility	Airport closed. Increase capacity of Vliegveldstraat. North-South links for slow traffic.	Multimodal node, compact airport with A1 motorway and (in due course) possible new suburban railway station. Enlargement of network for slow traffic.
Linking recreational networks to suburbs	New routes to adjacent towns and villages. Length: approx. 13 km	New routes to adjacent towns and villages. Length: approx. 9 km.
Selective expansion of housing	395 homes in niches	228 homes in niches
Space for new amenities	Care, cure, wellness and leisure amenities	Space for theme parks on airport site and along the A1 motorway. Appropriate facilities on the airport site. Plan offers space for medical park.
Space for innovative economic activity	Care and cure, approx. 31 ha Innovative economic activity approx. 37 ha	Apron and aviation related activity approx. 36 ha Other innovative economic activity approx. 33 ha



The spatial development strategies include a number of spatial bearers for sustainable development of the area, such as:

- Restoration of the sources and brooks system of Lonnekerberg;
- Offering of opportunities for greater biodiversity through the creation of new, robust nature and embedding of habitats of protected species;
- Re-use and embedding of existing real estate and elements of valuable cultural heritage.

To increase the opportunities for sustainable elaboration even further, the opportunities map for sustainable area development was prepared as part of the spatial development strategy [52].

This integrally devotes attention to related aspects such as nature developments, ecosystems, water management, cultural heritage, social structures, economic development, energy supplies/energy use, construction systems and product development, soil remediation and the development of knowledge. The purpose of the opportunities map is to indicate highly promising directions for seeking a firm and cohesive sustainability concept for the two alternatives. Sustainability has been interpreted as the adding of value to the development of the area. It is about creating a living environment that is such that people will want to live, work and recreate here, now and in the longer term, and will be willing to invest in this structurally. Besides environmental quality, economic quality, spatial quality and social quality, this makes cooperation between stakeholders an important fifth dimension of sustainable development. The achievement of a sustainable development of the area hinges on the choice of sustainability as a bearer of the developments and this will literally have to be conveyed in a sustainable manner. It is important for the plans to offer sufficient flexibility to continue responding to changing social conditions and needs. A robust and

resolute process, programme and project management of the development of the area form a critical success factor for achieving the shared ambitions and for controlling the risks of both concepts.

For the spatial development strategy without airport (A), the sustainability options are concentrated mainly around energy, local food production, cradle2cradle (C2C) and nature development. The runway of approximately 135,000 ms that will be freed up has great potential for energy generation, whereby the released space is usable as experimental space for sustainable energy. This may be an important economic bearer, besides local biological food production. The nature (including new nature) will be usable nature to a significant extent, tying in with new functions for care, cure, wellness and leisure. The possible cohesion of these functions and the management and maintenance of nature might possibly be attractive, e.g. by letting people contribute to the landscape from a treatment perspective and recreationally.

In the 'Footprint Zero' concept for spatial development strategy A, there will be a self-supporting area through net sustainable energy generation, local biological food production and small-scale processing of waste and wastewater. Buildings and public works will be designed in a C2C way and produced as far as possible using local materials. Residents and users will contribute to sustainable exploitation to the best of their ability and in cooperation with each other [52].

This means that the opportunities map for spatial development strategy A will look like this: table 14.2

Sustainability in spatial development strategy B will be achieved by simultaneously strengthening the economy and ecology, in terms of mobility and in cohesion with other scales. The objective will be to create a 'Sustainable Airport Twente' to be positioned as a strong brand. The possibilities for creating a sustainable airport exist if from the outset sustainability is taken as the point of departure for its development. In this concept the airport will be a pivotal experimental garden for a sustainable mobility network/knowledge and development centre in cooperation with knowledge institutions and the business community. The goal will be to develop modernising mobility concepts centred on this multimodal node while at the same time creating links to transportation issues elsewhere. Goals will include limiting the number of car kilometres. At the airport companies will use each other's residual streams (equipment and energy). As a result of the scale of the area and the relatively large demand for energy that will be created in the area, the sustaining of energy supplies is likely to be promising. The business sites around the airport offer

Table 14.2 Opportunities map for sustainability of spatial development strategy A [52]

Economic	Social
Self-supporting Local organic food production Development of care, cure and leisure	Sustainable social structures: 'Twents Noaberschap' (Twente neighbourliness) Multiple private clientship
Environmental	Spatial
Net sustainable energy generation Regional C2C development Closed mass balance	Strengthening green structures Development of public green spaces

opportunities for reallocation of companies that adversely affect liveability elsewhere because of matters like their noise profile. Around the compact airport there will be a lot of space for robust nature development and for strengthening the ecological quality of woods and nature. The effects of the extra CO2 emissions could be counterbalanced by leveraging possibilities offered by the connection of the airport to the DPO (Defence Pipeline Organisation) [15]. The inward supply of Jet A1 fuel for the airport by pipeline is not only approximately €300,000 cheaper per year compared with the use of tanker trucks, it is also extremely reliable and will reduce emissions by approximately 25% or approximately 70,000 tonnes per year. If this system were also to be used to meet the regional need for other fuels, it would be possible, under certain conditions, to reduce CO2 emissions by up to 670,000 tonnes [15].

The opportunities map for spatial development strategy B looks like this: table 14.3.

### 14.3 Environmental performance

An Environmental Impact Assessment (EIA) was produced for both plans [6]. This planning EIA is appropriate to the present spatial development strategy level of the plans. If a number of elements are worked out in more detail, the EIA Decision will follow at a later stage. These studies will give environmental interests a fully-fledged place in deliberations and decision-making on the plans.

If we examine the overview of the environmental effects, we can see that the two spatial development strategies get predominantly positive to very positive scores. In respect of ten items in the EIA, both plans get equal environmental scores. Across the board plan A is the one with the most favourable environmental impact through better effects in the fields of water and soil, cultural heritage, recreation and agriculture, with less disruption through the disappearance of the airport.

Plan B gets better scores in some respects because of the development of nature on the southern side of the compact airport and the opportunities for (regional) public transport offered by the passenger streams around the airport.

The negative impact of the plans stems from the increased burden on the road network caused by the programmes in both plans. It will result in more noise load and emissions. Plan A has 384 fewer homes within the 56 dB contour than plan B. The EIA shows that the total emissions of the airport come to 2% of the total emissions of spatial development strategy B [44, p. 84].

For further information on the environmental effects, see the complete environmental impact assessment and summary [6].

An important consideration is that both plans offer great opportunities for strengthening nature and the environment particularly through a lot of brook restoration and the related ecological connections. Both spatial development strategies offer opportunities for disconnecting rainwater and restoring the groundwater system. For local residents and visitors, the area will (in due course) be more easily reachable, providing positive impulses for strengthening the tourism and recreational profile of Twente. Numerous characteristic elements in landscape and buildings will be embedded. (Table 14.4)

#### Safety Impact Assessment (SIA)

The Environmental Impact Assessment includes a Safety Impact Assessment for both spatial development strategies. It provides a toolkit for controlling safety risks in the follow-on phases of the plans. Important matters include making two-sided access possible for emergencies, while the importance is underscored of having good public transport accessibility and sufficient parking space. The transport of fuels by pipeline will contribute to greater safety and reliability.

#### **14.4 Economic performance**

Jobs were lost in the region when the decision to close the Twente airbase was taken in 2003. Besides employment opportunities at the bottom end of the labour market, it is important to offer sufficient opportunities and challenges by means of innovative economic activity to graduates of institutions of higher education in Twente. Therefore, the number of additional new jobs in Twente for people

Table 14.3 Opportunities map for sustainability of spatial development strategy B [52]

Economic	Social
<ul> <li>Airport as economic driving force</li> <li>Sustainable mobility knowledge centre</li> </ul>	Improvement of liveability elsewhere
Environmental	Spatial
Preservation of ecological values     CO <sub>2</sub> compensation/green airport     C2C building development     Industrial ecology	<ul> <li>Sustainable mobility system</li> <li>Clear separation of functions</li> </ul>



Environmental aspect	Criterion	Reference situation	Spatial development strategy A	Spatial development strategy B
Load capacity of road network (intensity/road capacity)		0	-	-
Traffic	Road safety	0	-	-
	Opportunities for public transport	0	+	++
Noise	Surface area within 56 dB Lden contour	0	+++	+
Noise	Number of homes within 56 dB Lden contour	0	+	0
Air	N02	0	0	0
	РМ10	0	0	0
External safety	Surface area within 10-6 PR contour	0	+++	++
External safety	Number of homes within 10-6 PR contour	0	+++	+++
	Destruction (space seized from nature)	0	++	+++
Nature	Fragmentation (ecological cohesion)	0	++	++
Nature	Disruption (of protected species and habitats)	0	++	-
Drying (changes in groundwater and surface water)		0	++	++
	Effect on landscape values (structures, patterns, elements)	0	++	+
Landscape, cultural	Effect on landscape experience (cohesion, recognisability, orientation, accessibility, bricking)	0	++	+
heritage	Effect on cultural heritage values (structures, patterns, elements)	0	++	-
	Effect on valuable buildings	0	0	-
	Located on or near a site on the Archaeological Monuments Map (AMK) and/or observation or reporting of finds stated in Archis II		0	0
Archaeology	Located in an area with a medium or high probability of finding valuable archaeological items based on desk research, IKAW and/or municipal expectation map.	0		
Changed environmental health quality because of remediation measures for the rearrangement of land		0	++	+
	Effects of future usage on the environmental health soil quality	0	++	+
	Influencing of water management/opportunities	0	++	+
	Intersection of water courses	0	0	0
Water	Disconnection of rainwater into water courses	0	++	+
	Influencing of water quality (groundwater and surface water)	0	+	+
Influencing of groundwater quantity		0	++	+
	Influence on recreation	0	+++	++
Spatial planning	Influence on agriculture	0	++	-

Table 14.4 EIA scores of spatial development strategies A and B [6]

with lower and higher levels of education is the most important factor for assessing the economic performance of the two spatial development strategies. The employment opportunities effects were measured by Ecorys in the cost/benefit analysis (CBA) by providing a transparent picture of the labour market benefits (indirect effect). Another factor of importance when measuring prosperity effects is the travelling time effect (direct effect). It represents the travelling time gains for goods and people expressed as a monetary amount. Based on the results of these two effects, we will weigh up the economic performance of the two spatial development strategies.

The total number of jobs that will be created, i.e. the gross employment opportunities, varies from 1,500 FTEs in spatial development strategy A to 3,440 FTEs in spatial development strategy B. If we examine the additional employment opportunities in Twente for people with low and high levels of education, corrected for relocating employment opportunities within Twente, spatial development strategy A provides 1,300 FTEs in structurally new employment opportunities and spatial development strategy B provides 2,770 FTEs [16]. (Table 14.5)

The CBA makes clear the effects on travelling time of spatial development strategies A and B on a regional and national scale. In the case of spatial development strategy A, it is expected that the travelling time effect will be very small and that the value will approach nil, with a limited negative or positive variance. It is assumed that, given the offering of Care and Cure, patients would otherwise go to the normal healthcare institutions in the region and that there would therefore be no travelling time effects [16]. For spatial development strategy B, the total benefits will come to €15.2 million at regional level and €35.8 million at national level as regards the prosperity effects of travelling time, especially by putting the airport into operation. (Table 14.6)

#### Table 14.5 Additional employment opportunities for Twente [16]

Additional employment opportunities Twente*	Spatial development strategy A	Spatial development strategy B
Direct (100%)	1,090	2,100
Indirect (50%)	210	670
Total	1,300	2,770

\*These values are used for the MCA and they differ from those used for the calculation of labour benefits in the CBA.

Table 14.6 Travelling time effects for spatial development strategies A and B [16]

Travel time effects	Spatial development strategy A	Spatial development strategy B*
Travel time effects (in euro millions)	PM (0)	15.2 (35.8)
Total	PM (0)	15.2 (35.8)

\*tussen haakjes de effecten op nationaal niveau

Table 14.7 Financial performance for spatial development strategies A and B

	Spatial development strategy A	Spatial development strategy B
Land values	25.8 million	30.4 million
Risk reservations	19.7 million	15.1 million
Total scale of investment	81.2 million (NCV)	77.2 million (NCV)

Table 14.8 Regional prosperity effects of spatial development strategies A and B [16]

	Net current value, in euro millions	
	Spatial development strategy A	Spatial development strategy B *
Land exploitation	6,6	9,4
Direct effects	0	15,2 (35,8)
Travel time effects	PM	15,2
Indirect effects	20,3 (21,8)	34,2 (41,5)
Labour market benefits, housing	0,7 (1,0)	0,3 (0,6)
Labour market benefits, work	18,4 (19,6)	12,5 (13,2)
Labour market benefits, leisure	1,2	0,8
Labour market benefits, airport	0	18,7 (25)
Real estate and land value increase	0	1,9
External effects	-9,7 (-9,7)	-31,6 (-28,3)
Emissions of road traffic	-1,7	-2,5 (0,8)
Emissions of air traffic	0	-2,5
Emissions of company-related sources	-11,5	-19,7
Noise	0	-8,6
External safety	0	0
Road safety	PM (-)	PM (-)
Nature and landscape	3,5 +PM (++)	1,7 +PM (+)
Total	17,2 + PM (+) (18,7)	27,2 + PM (0) (58,4)

\*The national prosperity that differ from the regional effects are stated in brackets.



#### Table 14.9 Vision and weighting factors for MCA [2]

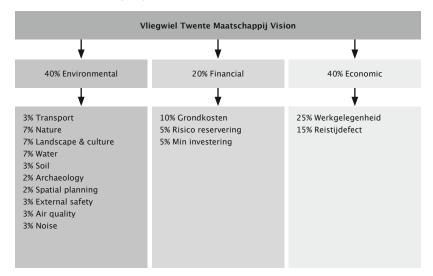
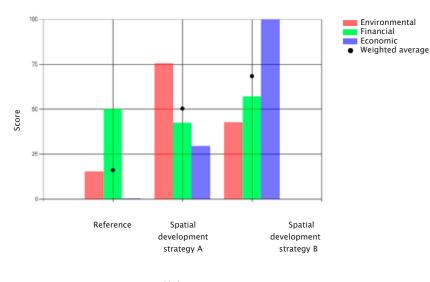


Table 14.10 The variant scores and cluster scores for each variant [2]



MCA: Variant scores

Variant

## For further information on the costs and benefits analysis, see the complete KBA report [16].

#### **14.5 Financial performance**

The financial performance of both plans was computed. This was done based on the land exploitation calculations that identify all costs and revenues of the development of the area over time, fleshed out with other relevant exploitation data.

The main parameters for the financial performance on the (residual) land values, the risk profiles and the total level of investment (total volume in investments required for fulfilment of the spatial development strategies).

### Spatial development strategy A

From a financial point of view spatial development strategy B performs better than spatial development strategy A, not only in terms of the result, but also in terms of the risk profile. This is due mainly to the greater the mediation and sales risk for housing construction..

#### **14.6 Integral deliberation**

Two instruments were used for the integral deliberation of the plans in quantitative terms. Firstly, the multi-criteria analysis was used because it is a method that allows comparison of the results with regard to the economy, environment and finance, viewed from the angle of consistency of the process as a whole.

Secondly, a costs/benefits analysis was performed. A CBA identifies the prosperity effects (indirect, direct and external) of spatial plans at national and regional level, and expresses the effects as far as possible in monetary units. For this purpose it measures, for example, the effects on employment opportunities and travelling times, but the costs and benefits of the impact on nature and landscape are also translated as far as possible into monetary terms. This means that a CBA, like an MCA, can be considered an instrument for integrally weighing up plans. The MCA and CBA were both guiding factors for this recommendation in addition to the qualitative analysis.

#### Multi-criteria analysis (MCA)

Just as in June 2008, a multi-criteria analysis (MCA) was performed [2]. The weighting applied in the MCA follows from VTM i.o.'s mission in which sustainability and the economy are guiding factors. This produced the following outcome: the economic performance and environmental performance have a 40% weighting in the deliberation process and the financial performance of both spatial development strategies each have a weighting of the remaining 20%. This ties in with the weightings used in 'A flywheel for Twente' [59]. (Table 14.9)

If spatial development strategies A and B are compared, it is noticeable that spatial development strategy A scores better on the environmental cluster, while spatial development strategy B scores substantially better on the economy cluster. The financial cluster shows only minor differences between the two spatial development strategies. The weighting produces a clear final score: 50 for spatial development strategy A and 68 for spatial development strategy B [2].

Sensitivity analyses were performed to determine the robustness of the results of the final scores. This involves looking at the extent to which the outcomes would be influenced by choosing a different weighting over the clusters or over the different effects within a cluster. These analyses show that the final result can be considered robust [2]. (Table 14.10)

# For further information on the multicriteria analysis, see the complete MCA report [2]

**Costs/benefits analysis** The programmes of the spatial development strategy and the land exploitations were the basis for the CBAs for both spatial development strategies. Additionally, the economic effects were calculated of the business exploitations of the care & cure facilities in plan A and the airport in plan B. Overall this results in a total picture of prosperity effects, as shown in the accompanying table.

On balance both spatial development strategies have a positive effect on prosperity. Plan B has a substantially more positive effect in terms of the regional prosperity effects. At national level it is as much as three times greater, mainly thanks to the differences in travelling time effects. The compact airport placed in a green setting with 1.2 million passengers and the anticipated development opportunities is the best plan based on the outcomes of the CBA. The national and regional prosperity effects of plan B may increase sharply if more than 1.2 million passengers are transported via Twente. (table 14.8)

#### 14.7 Proposed decision

The development of the airport area, in the middle of the region and close to the infrastructure of the A1 motorway and railway line, offers great opportunities for the economy, welfare and nature.

The task now is to utilise the best opportunities for Twente and choose the plan that will form the best flywheel for strengthening the regional economy and ecology.

VTM i.o. explored numerous possibilities in a highly interactive process with all



stakeholders. Research, drawing and calculating went hand-in-hand at all stages.

There was a careful search for niches in the market that add to the potential present in Twente in terms of housing, work landscapes, amenities, leisure possibilities and connections.

In particular, there was an examination of development opportunities in the longer term. When the economy revives Twente must be ready to accommodate appropriate investments and to respond to structural socio-economic and socio-cultural trends.

Against this background, VTM i.o. suggests adopting the spatial development strategy based on a compact airport placed in a green setting. By concentrating the airport in the northern area in due course, close to the A1 motorway and railway line, there will be space on the southern side for approximately 130 ha of new natural areas with the option of strengthening the national ecological network. The airport is of national significance, supports multimodal accessibility of the region and strengthens the business establishment climate in Twente for national and international companies and institutions.

It offers the Twente business community and Twente citizens their own window to the world in a structural perspective of permanently growing global trade and mobility. An airport in Twente may be typified as a mid-sized regional airport so this is comfortably compatible with the interests of liveability and nature development for the local town residents and visitors. The spatial reservations and associated restrictions can be reduced considerably, as regards the military noise space, which means that Oldenzaal in particular will again get space for urban development. As a result, an airport will be created that, in terms of size and scale, fits in the landscape of Twente. As the airport must be developed from scratch, it will be possible from the outset to devote a lot of attention to maximising

sustainability. The explicit naming and developing of the sustainability opportunities map offers opportunities, in cooperation with the University of Twente, Saxion University and the business community, for developing innovative research, education and economic activity. The costs/benefits analysis that was performed shows that this spatial development strategy will make the greatest contribution to prosperity effects for Twente, offers the most additional employment opportunities and has the highest yield in terms of the business case.

The plan further offers attractive opportunities for attracting new affluent residents in the highest segment by providing new residential environments.

From a provincial perspective, plan B fits in well with the objectives of the Local Vision. The plan offers all possible opportunities for a strong economy in a beautiful landscape. Viewed from central government objectives, too, the compact airport in a green setting is an excellent fit.

A highly usable and strategic part of the air infrastructure with a major option value will be retained and will be usable in the years ahead, for instance when Schiphol approaches the limits of its growth and the overflow cannot be accommodated entirely by Eindhoven and Lelystad airports. The suggested development of the souther area with ca 130 ha of new natural area in plan B ties in well with the policy goals of the Ministry of Agriculture, Nature and Food Quality. For the Ministry of Housing, Spatial Planning and Environment and the Ministry of Transport, Public Works and Water Management, the airport development at Twente can stand as an example of harmonised infrastructure and spatial development within a sustainable area development. The innovation triangle (Hart van Zuid / Twente Central Station, Kennispark and the airport) will be a truly synergetic triangle only if plan B is chosen, which fits in well with the East Netherlands

Area Agenda and the Twente Area Agenda. This mutual synergy provides good opportunities for the further development of top technology and innovative economic activity at and around the airport, or for programmes of Kennispark and Hart van Zuid/Twente Central Station.

Space for incidental shared military use will remain present at Twente. The proceeds of the government-owned land can be determined based on jointly developed plans and settled with regional and local authorities in Twente.

**Decision-making status** The subject of decision-making is the choice between the two spatial development strategies and the adoption of the strategy as a test framework for the elaboration into municipal zoning plans or a provincial embedding plan. The spatial development strategy map with the explanatory facet maps, proposed construction programme and written notes to maps and programmes will be adopted. Matters that will not be adopted are the trial parcels of land and the map with the plan sketch. These are purely by way of illustration of a potential elaboration of the spatial development strategies and are solely of an indicative nature. A land exploitation plan and a risk analysis were produced for the financial validation of both plans. On account of the market-sensitive nature of this information it will not be made public. The spatial development strategies deal in general terms with the financial outcomes of both plans. Information from the land exploitation plans and the risk analysis was also used as input for the costs/benefits analysis (CBA) and the multi-criteria analysis (MCA).

#### **RECOMMENDATION 1:**

Approve the choice of spatial development strategy B as the economically, financially and ecologically most desirable spatial, programmed and financial framework for redevelopment of the former Twente airbase;

#### Basic principles of airport decision

If spatial development strategy B is chosen, it will be necessary, based on Twente Airport's designation in the Aviation Policy Memorandum, to adopt an airport decision. The competent authority for adoption of the airport decision is the Minister of Transport, Public Works and Water Management. The definitive airport decision cannot be prepared until the airport operator has submitted an application with a business plan for that purpose. An environmental impact assessment will be prepared for this decision in due course. In the Aviation Policy Memorandum, the sound contour and other issues will be formally determinated.

For local residents and the municipalities involved, it is important for the basic principles to be clear as regards the choice of the spatial development strategy applicable to the envisaged regional airport. These basic principles must set clear limits on the possible growth of air traffic and associated nuisance. It is important in this respect to rule out night flights. Therefore, flights at Twente should be confined to between 06:00 and 23:00 hrs, apart from emergencies and delays.

The airport design is based on airport layout code E, with complete use of the runway of 3000 metres, which in principle will also be suitable for intercontinental air traffic (heavier aircraft). However, the decision in this matter will be up to the operator. If there is a delay until a formal aviation policy memorandum

is set down, the citizens and municipalities involved will remain for a considerable time in a state of uncertainty about the starting points. Therefore, in anticipation of the aviation policy memorandum, it is suggested that steps be taken now. To offer clarity regarding the deliberations and restricted area associated with the airport, it is necessary to weigh up the reservation of sufficient strategic noise space without imposing unnecessary restrictions on the urban environment. Market research indicates that a regional Twente airport has the prospect of handling 1.2 million passengers in 2030. In conjunction with the spatial development strategy (planning horizon 2020), it is proposed to lay down a spatial reservation (in terms of the Wro), within which the restricted area will be regulated in due course by means of an airport decision, via a designation of national importance. This means that the area for which spatial restrictions apply can be reduced from 38.71 km? to approximately 11 km?. Refer to image 13.34.

#### **RECOMMENDATION 2:**

#### Adopt the joint basic principles of central government and the region for the airport decision.

Land exploitation as a basis for central government region settlement and phasing

VTM i.o. began with the principle that the three governmental parties can best cooperate on producing a good plan with a shared mission and that from there the residual value will follow of the government owned lands. The plan is now on the table with a completely computed land exploitation. The value of the land that follows from this is at least  $\in$  30 million.

It is proposed to use this as a basis for the central government/region settlement on the sale of the government-owned land to the

region. In the elaboration of this transaction it will be necessary to agree in an administrative agreement further arrangements for such matters as a continued central government involvement in the airport this airport of national significance, the way in which a good accessibility of the site can be assured and the way in which a market party will be selected to operate the airport. Similarly, it will be necessary to agree arrangements regarding the risks of soil remediation and the clearing up of explosives with the central government in addition to the arrangements already agreed.

The plans are based on an expansion of the national ecological network and phasing whereby a start can be made not later than 1 January 2018 on work on the national ecological network in view of the prevailing agreements between the Ministry of agriculture, nature and food quality and the provincial authorities. This means that the transformation of the present airport into the impact airport must be completed within a period of between 8 and 10 years. This phasing must also form part of the agreed arrangements.

#### **RECOMMENDATION 3:**

Central government and the region will determine the value of the government-owned land on the sale to the region based on the land exploitation for spatial development strategy B and will agree in an administrative agreement further arrangements about the prevailing frameworks for the elaboration by the region of the development of the area.