(INstruments and NEtworks for developing logistics towards Sustainable Territorial Objectives)

Contract n° EVG1-CT-2001-00054

Local Context Analysis (LCA) of

"The Northern Brabant case study"

Contents

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1 EXECUTIVE SUMMARY

The Local Context Area (LCA) in question covers the Brabant study case. This LCA contains a SWOT analysis identifying the Strengths, Weaknesses, Opportunities and Threats of the Brabant area. Based on these findings, two hypotheses of innovative actions have been identified, namely:

1. The development of a (ICT-based and virtual) network between independent transport companies will increase the efficiency of transport operations and thus will decrease the (financial and social) costs of, for instance, trips with not fully loaded trucks. Exchanging freights will therefore be a sustainable development in the Brabant road freight transport sector.
2. The growing percentage of elderly employees is a big problem in the whole of the Netherlands and in particular in the province of Northern Brabant. Young people are moving to or have chosen to work in other provinces like for example Zuid-Holland. In the western provinces there is a greater choice of educational institutions and there are more interesting jobs available especially for younger, well-educated people. To keep or to regain the position of being a 'young' province, Northern-Brabant has to become a sustainable area where there are enough opportunities for young people to develop themselves.

The hypotheses of innovative action are the starting points for further actions in the District Logistics Analysis (DLA).

Based on the questionnaires, publicly accessible publications and NEA's own data, the main indicators of the SDL-SQM framework on the Brabant case have been completed.

Not all the SDL-SQM framework parameters have been used this due to the fact that not all these parameters are relevant or appropriate for the area of Northern-Brabant. The final selection of the criteria is based on results of the communication with the project partners.

1.1 Regional profile

Strengths, weaknesses, opportunities and threats of Northern-Brabant can be observed from the perspective of Sustainable District Logistics, which provides an indication using the regional profile. This regional profile is presented in Table 1.1. The regional profile contains 32 different components, which reflect the different aspects of the SDL. These 32 components are divided into strengths, weaknesses, opportunities and threats. The so-called SWOT analysis provides a better understanding of the environment.

Table 1.1 *SDL-profile of the Brabant case study.*

			S Strengths	**W Weaknesses**	**O Opportunities**	**T Threats**
O	**1**	Environment	●●●●	●●●	●●●●●	●●
O	**2**	Economy	●●●	●●●●	●●●●	●●●●●
O	**3**	Socio-culture	●●●●	●●●	●●●●	●●●
O	**4**	Equity between individuals	●●●	●●●	●●	●●
O	**5**	Equity between territories	●●●●	●●●	●●●	●●●●
O	**6**	Equity between generations	●●●	●●●	●●●	●●
O	**7**	Diversity	●●	●●●	●●●	●●●
O	**8**	Subsidiarity	●●●	●●●●	●●●	●●●●
O	**9**	Networking and partnership	●●●●●	●●●●	●●●●	●●●
O	**10**	Participation	●●●●	●●●	●●●	●●●●
P	**1**	Perception of a variety of development approaches	●●●●	●●●●	●●●	●●●
P	**2**	Creativity and innovation in an entrepreneurial culture	●●●	●●●●	●●●	●●●
P	**3**	Capacity to cope with complexity and ambiguity and to anticipate change	●●●	●●●●	●●	●●●
P	**4**	Openness to enrich ones own culture and enhance multicultural cohesion	●●●	●●●	●●●●	●●●
P	**5**	Discovery and re-encoding of territorial specificities and local knowledge	●●	●●●●	●●●●	●●●
P	**6**	Ability to reach own optimal level of attainment and fulfillment	●●●●●	●●●	●●	●●●
P	**7**	Fractal distribution of competence using the counter flow principle	●●●	●●●	●	●●●
P	**8**	Autonomy of strategic decision making within a facilitating infrastructure	●●●●	●●●	●●	●●
P	**9**	Primary reliance on own resources without compromising those of others	●	●●●	●●●●	●●
P	**10**	Shared value system taking into account environmental, socio-cultural and economic interdependencies	●●●	●●●	●●	●●●
P	**11**	Social cohesion	●●●	●●●	●	●●●●
P	**12**	Opportunities and room for equitable interaction	●●●	●●●	●	●
P	**13**	Capacity for creating shared visions	●●	●	●	●●

P	**14**	Integration of social and technical skills into the innovation process	○	○	●●●●	○
P	**15**	Access to information and to the arena of dialogue and debate	●●●	●	○	●
P	**16**	Multiplicity of interactions, enhanced by local actors	●●●	●●●	●●	●●●
D	**1**	Enhancing problem understanding	●●●	●●●●	●	●
D	**2**	Open collective learning	●●●●	●●●●	●	●
D	**3**	Negotiation and co-decision	●●●	●●●	●●	●●●
D	**4**	Creation of a shared vision	●●●●	●●●●●	●	●●
D	**5**	Client orientation	●●	○	●●●●	○
D	**6**	Result orientation	○	●●●	●●	●●

1.2 Regional perspective

Section 3 sums up essential elements of the Brabant region. For each dimension a number of recommendations have been made and possible ideas suggested for a regional strategy of innovative action in the field of sustainable district logistics. Based on the INNESTO SDL/SWOT-analysis and these elements, a selection has been made based on their importance in each dimension of Orientations, Social Potential and Dynamics. This is listed below.

Selected aspects of Orientation

⇒ *01 Environment*

- Multimodal transport hubs
- Large rural areas
- Presence of inland waterways
- Presence of natural reserves

⇒ *02 Economy*

- Good use of labour
- Good climate for investing
- Much export
- Strong transport & logistics sector
- Good accessibility of Brabant from Rotterdam and Antwerp

⇒ *04 Social equity (between individuals)*

- Good public transportation network

⇒ *05 Inter-local equity (between territories)*

- Good location with harbors Rotterdam and Antwerp and hinterland Germany
- Fair distribution of industry activities in Brabant
- Cooperation with other provinces in IncoDelta

Selected aspects of Social Potentials

- Good public transportation network

⇒ *P1 Perception of a variety of development approaches*

- Interaction/cooperation between province, branche organizations and municipalities in spatial policy
- High level of entrepreneurship
- Innovative entrepreneurship is stimulated when sustainable and space-saving
- International perspective on economical ecology
- Emphasis on sustainability in new infrastructure

⇒ *P2 creativity and innovation in an entrepreneurial culture*

- High level of entrepreneurship
- Increased mobility in small country-municipalities by innovative small-scale modes of public transport
- International perspective and border-crossing economical and ecological relations
- Ritts-programme Brabant: stimulates innovation

⇒ *P4 Openness to enrich own culture and enhance multicultural cohesion*

- Social engagement
- Equal share of foreign migration absorbed by the Netherlands
- Dynamic and competitive environment
- Ambition to preserve diversity, identities of landscape and culture-historical values

⇒ *P11 Social cohesion*

- Strong social and political network
- Social engagement
- Equal share of immigration absorbed compared to NL
- Restructuring of disadvantaged areas
- Employment has grown with 11,5% in 1997-2001, in 2001 increase of 5000 jobs
- Strong engagement of business
- Unemployment in 2001 is only 2 %
- Expectation of unemployment growing slightly
- Stimulate re-integration of women, immigrants, commuters, not-working elderly and partly disabled
- Attractive living environment
- Regional co-operation

Selected aspects of Dynamics

⇒ *D1 Enhancing problem understanding*

- Well-educated population
- Excellent education and health care
- International perspective on economics ecologics
- In 2000 a regional debate was organized, 250 participants from the region
- Tradition in regional co-operation
- Existence of political networks, platforms, action programmes in regional perspective
- ICT services, knowledge and research companies account for 2% of total employment
- "Social Economic Co-operation" (SES)/ Centre of commerce research in efficient spatial planning
- Creation of Index centre Mid- and West-Brabant in order to bring together knowledge and business

⇒ *D3 Negotiation and co-decision*

- Interaction/cooperation between province, branch organizations and municipalities in spatial policy
- Strong political and social network
- In 2000 a regional debate was organized, 250 participants from the region
- Tradition in regional co-operation
- Existence of political networks, platforms, action programmes in regional perspective
- Region-wide restructuring projects for industrial areas

⇒ *D4 Creation of a shared vision*

- Interaction/cooperation between province, branch organizations and municipalities in spatial policy
- Strong social engagement
- Strong political and social network
- In 2000 a regional debate was organized, 250 participants from the region
- Existence of political networks, platforms, action programmes in regional perspective
- Professional freight transport is increasing by internationalisation, outsourcing and order-directed production
- Scale of operations and co-operation in transport is increasing
- Region-wide restructuring projects for industrial areas
- Region-wide agreements on youth-care
- Region-wide agreements on youth-care

2 MAIN HYPOTHESES OF INNOVATIVE ACTION

Hypothesis No. I

D3 Negotiation and co-decision
D4 Creation of a shared vision

O1 Environment
O2 Economy

P1 Perception of a variety of development approaches
P2 Creativity and innovation in an entrepreneurial culture

Short description
The development of a virtual network (the Virtual Transport Company; VTC) of mainly independent transport companies, including intermodal node service providers, will increase the efficiency of transport and will decrease the social costs caused, for instance, by not fully utilized loading capacity per trip. Exchanging freights will therefore be a strong support to the further sustainable development of the Brabant transport sector.

Expected results.

- Reduction of number of trips will result in:
  - Reduction of traffic noise.
  - Reduction of emission of pollutants.
  - Reduction of congestion.
  - Reduction of traffic accidents and thus of traffic casualties.
  - Demands for additional (road) infrastructure.
- Reduction of (transport) costs because of higher utilization of the loading capacity of the transport unit.
- Development of a "Virtual transport company" (VTC), in which independent transport companies (including all modes of transport and including intermodal transshipment providers) virtually merge into a single multimodal transport company. In this way, economies of scale can be reached and the mode of transport will be selected with the lowest (financial and, hopefully, environmental) cost.
  This scale of economies can be reached by the fact that, when fully loaded, the bigger (in loading capacity) the transport vehicle is, the better (= the more sustainable) the cargo will be transported. The result of this virtual company, therefore, will be that the transport sector in the province of North Brabant, has the potential to become more sustainable.
- Further utilization of the central geographical position of the North Brabant area.
- Further strengthening of the competitive position in (sustainable, multimodal and intermodal) transport solutions with respect to the new members of the EU (Latvia, Estonia, Lithuania, Poland, etc.).

Financial and organisational measures

- Setting up of a "Code of Conduct" for participants in the "Virtual Transport Company" (incl. statutory regulations).

- Investments in a supra-company logistic system by means of an Internet connection between the participating independent transport companies and thus, in fact, creating the VTC.
- In relation to, and, after the first practical experiences of the VTC, investments in infrastructure to optimize the use and the accessibility of intermodal nodes and industrial areas in Northern Brabant.
- Co-ordinations of several initiatives, partly originating from local initiatives, to follow criteria of economic and environmental sustainable development (e.g. waste management plans, reports on transport and infrastructure development, environment plans).

Hypothesis No.II

D1 Enhancing problem understanding

O1 Environment
O4 Social equity (between individuals)
O5 Inter-local equity (between territories)

P4 Openness to enrich own culture and enhance multicultural cohesion.
P11 Social cohesion.

Short description

The growing percentage of elderly (working) people is believed to be a major problem in the whole of the Netherlands and in particular in the province of Northern Brabant. Younger people are moving to or working in other provinces like for example the province of Zuid-Holland (with the city of Rotterdam, the harbor Europoort and the governmental head quarters in the city of the Hague being the main attractions). In the province of Zuid-Holland there is a greater choice in education institutions and also, with regard to leisure-time, there is much more going on for young people living in the cities. For Northern Brabant to become a sustainable area this tendency must be stopped. The growing percentage of elderly people and the number of young people leaving the Province will result in a shortage of the work force. This shortage will prevent the Brabant area to develop into a recognized Province in the transport sector in Europe or the whole world and will put a diminution into action. To prevent this from happening the position of Brabant as a 'young' province must be regained. In order to achieve this, Northern-Brabant has to upgrade her position as a sustainable area where ample opportunities are available for young people to develop themselves.

Expected results

- Attraction of more business with opportunities that appeal to the interest of young people.
- Attraction of more well-educated young people by stimulating the settlement of companies with "cutting edge technology".
- Attraction of more specialized (transport) people.
- The extended use of public transport by young people
- Young people are important for the future. When the elderly people are going into retirement younger people are needed, among others, as financial resources for old-age

pensions. When the majority of the young people leave Northern Brabant the elderly people may find themselves in a position of social exclusion and isolation and, possibly even in a situation of financial distress. This conclusion may also be upheld with regard to immigrants from less developed countries and to handicapped people.

- Another important point to note is the need to reduce the growing individualization, in fact: growing social isolation of a substantial part, of the inhabitants of Northern Brabant. The purpose of this element is to reduce (the danger of) social exclusion of minorities, especially in economically less fortunes times.
- Brabant has, in relation to the more western provinces, a large agriculture sector. Many agriculture companies face, apart from difficult times economically, the problem of succession. Sons and daughters of farmers don't want to take over the farms, because they don't see much future in this business. Through a sustainable development programme staying in the agriculture sector should be stimulated, resulting in a more sustainable agriculture environment.

Financial and organizational measure.

- Investments in education programmes for the elderly and young people. For example reintegration programmes and transition training.
- Investment in social welfare for example, pension funds.
- Investments in opportunities, such as entertainment, in cities and villages for the people who live there. These investments could help to persuade people to stay in the Brabant region and not move to other provinces.
- Programmes and projects for positive action in favour of women, the elderly, immigrants and disabled. To help this people into the labour market, with education and decision-making.

3 SDL / SWOT ANALYSIS

3.1 Orientation

01 –Environment

Strengths			**4**	**Weaknesses**			**3**
Multimodal transport hubs		5	5	Relative high use of cars		5	5
Large rural areas		3	4	Little flora and fauna in urban areas		3	3
Presence of inland waterways		4	4	Too much heavy metals in the ground		3	3
Presence of natural reserves		3	4	Too much noise		1	1
				Unpleasant smells		1	1
Threats			**2**	**Opportunities**			**5**
Disappearance of flora/fauna in urban areas		2	2	Modal shift from road to water		5	5
Pollution of water		2	2				
Pollution of ground		2	2				
Decrease in livability of rural areas		2	2				

Main indicators

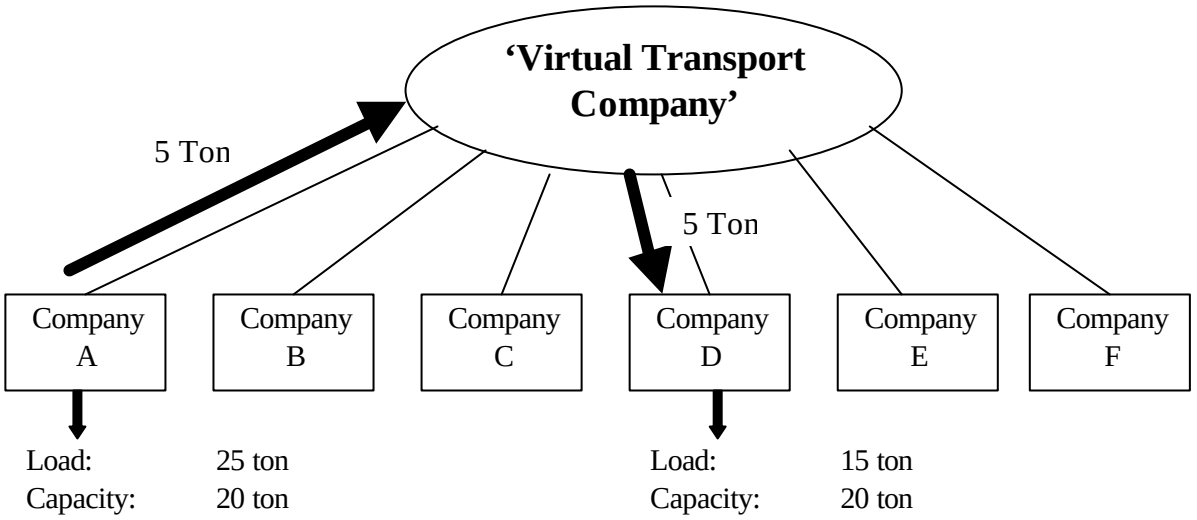
OR01. Basic indicators for SDL	
Structural statistics	*Unit of measurement*
Total area	5100,24 km²
Total inhabitants	2391123
Population density	469 / km2
Land use development	*Unit of measurement*
Agriculture area	61% over total area
Urban area	10% over total area
Area for transport purposes	3% over total area
Area used for recreation/nature	18% over total area
Water	3% over total area
Resource use development	*Unit of measurement*
Total residual household waste	1.397.000 Tonnes per year
Residual household waste per inhabitant	678 Kg / inhabitants per year
Total residual non-household waste	16.708.000 Tonnes per year
Residual non-household waste per unit GDP	0,69 kg per unit GDP current Euro in 2002
Total energy consumption and in main sectors: transport, industry and other uses	Not retrieved
Total energy consumption per unit GDP	Not retrieved
Total energy consumption per inhabitant	Not retrieved
Total energy consumption per transport mode: road, rail, water, air transport	Not retrieved
Total energy consumption per passenger transport mode: road, rail, water, air	Not retrieved
Total energy consumption per freight transport mode transport, industry and other uses	Not retrieved

Environmental impact development	*Unit of measurement*
Total CO2 production, of which due to transport sector	38.894.000 Tonnes per year and 94% due to transport sector[1]
Total CO2 production per inhabitant	2.4 Tonnes per inhabitant per year[1]
Total CO2 production due to transport modes: road, rail, water, air	36.650.000 Tonnes Road 31.428.000 (85%) Rail 113.000 (0,3%) Water 4.323.000 (12%) Air 786.000 (2%)[1]
Total CO2 production per passenger transport modes: road, rail, water, air	Not retrieved
Total CO2 production per freight transport mode: road, rail, water, air s	Not retrieved
Average peak concentration of traffic noise	Not retrieved
Total NO x transport emission	171900 Tonnes per year
Total VOC transport emission	93700 Tonnes per year
Total PM10 transport emission	7700 Tonnes per year
Total SO x transport emission	1100 Tonnes per year
Average water quality	Extended Biotic Index (I-IV); Not retrieved

Main hypotheses of innovative options

To increase the use of the environment there can be some local improvements:

- Stimulate transportation by inland waterway by way of road-water logistic chains.
- Stimulate establishment of companies near waterways or near 'Hubs[2]'.
- Increase or further development of intermodal load and unload facilities in 'Hubs'.
- Setting up of a "Virtual Transport Company", which stand above a large number of transport companies and optimize the transport flows by combining transports.



[1] Data of total Netherlands; Northern Brabant separate: not available.
[2] Hub= (intermodal) central node

02 – Economy

SDL / SWOT analysis

Strengths			**3**	**Weaknesses**			**4**
Good use of labour		3	3	Lack of space for industry		5	5
Good climate for investing		3	3	High congestion		4	4
Much export		4	4	Relatively high importance of process industry		3	3
Strong transport & logistics sector		4	4	High dependency on global economy			
Good accessibility of Brabant from Rotterdam and Antwerp		3	3				
Threats			**5**	**Opportunities**			**4**
Shortage of qualified personnel		4	4	Attraction of more business and labour		4	4
Ageing of labour market		3	3	More logistical activities through multi modal hubs		4	4
Loss of attractivity for investing		4	4	Stimulation of new businesses through developments in ICT		3	3
Decreasing growth of global economy		5	5	Stronger use of strategic position between Rotterdam, Antwerp and Germany		5	5
Move of industry to cheap-labour countries		4	4				
Bad accessibility		5	5				

Main indicators

OR02. Basic indicators for SDL	
Basic Structure	*Unit of measurement*
Total GDP	258.886 Billion Euro
Total employment in all sectors	1.053.400
Investment: Gross fixed capital formation in transport industry	1.100.000.000 Euro (Netherlands, 2000)
E-logistics	87% of total transport sector have access to the Internet
Local units in wholesale trade	Number per year; not retrieved
Local units in retail trade	Number per year; not retrieved
Total store (all trade activities) surface per inhabitant and surface share of wholesale and retail trade	M2 per 1000 inhabitants per year and percentage over all store surface; not retrieved
E-commerce (producers)	85% of all businesses have access to the Internet
E-commerce (consumers)	55% of all households have access to the Internet
Transport infrastructure development	*Unit of measurement*
Railways per typology (sole or double track) and per inhabitant	Total of 2806 Km of which 930 Km sole track (in Netherlands) 2,2 km a day per inhabitant. (in Brabant)
Roads per typology (sole or double track) and per inhabitant	Total of 19060 Km

Railways capacity	32000 trains/week (in Netherlands)
Road capacity	Max vehicles per day; not retrieved
Road congestion, traffic jams and time loss	41.4 road congestions per 10.000 vehicles with a total of 4244 hours
Overcrowded public transport	Average number of crowding-hours per inhabitant per year; not retrieved
Transport intensity	*Unit of measurement*
Total passenger per transport mode: road, rail, water, air	Road: 196,6 billion km per year (national) Rail: 1 million per day (national) Water: 974.000 a year (national) Air: 32 million a year (national)
Total freight per transport mode: road, rail, water, air	Rail: 30 million ton per year (national)
Passenger transport intensity per unit GDP	Index (P-km / GDP Euro) per year; not retrieved
Freight transport intensity per unit GDP	Index (T-km / GDP Euro) per year; not retrieved
Passenger transport intensity per inhabitant	P-km per inhabitant per year; not retrieved
Freight transport intensity per inhabitant	T-km per inhabitant per year; not retrieved
External costs of transportation	*Unit of measurement*
Estimate of environmental (greenhouse and air impacts), social and health (noise, accidents, congestion) damages caused by total transport mode: road, rail, water, air	Euro per year; not retrieved Percentage of total external costs over total GDP
Estimate of total environmental (greenhouse and air impacts), social and health (noise, accidents, congestion) damages caused by passenger transport mode: road, rail, water, air	Euro per year; not retrieved Percentage of total external costs over total GDP
Estimate of total environmental (greenhouse and air impacts), social and health (noise, accidents, congestion) damages caused by freight transport mode: road, rail, water, air	Euro per year; not retrieved Percentage of total external costs over total GDP

Main hypotheses of innovative options

To improve the efficiency of the local logistic structure the next options are open:

- Optimize the use of the central geographical position of the Brabant area through the tendering of multimodal transport solutions.
- Further extension of the facilities of existing 'Hubs'.
- Improve the capacity of existing water and road infrastructure.
- Start or restart initiatives in the area of non road transport alternatives like "The IJzeren Rijn" (a neglected railway corridor).

03- Socio-culture

SDL / SWOT analysis

Strengths			**4**	**Weaknesses**			**3**
Level of knowledge is good		4	4	Little use of green energy		2	2
Telos - promotion of sustainability in Brabant		4	4	Few highly educated		3	3
Good climate for living		3	3	Little specialized education		4	4
				Moderate knowledge infrastructure		4	4
				Moderately developed tourist sector		3	3
				Low degree of innovation in business sector		4	4
Threats			**3**	**Opportunities**			**4**
Shortage of specialized personnel		3	3	Raising awareness for sustainability through INNESTO project		4	4
Shortage of up-to-date technological knowledge		2	2	Increase in tourist attractions in Brabant to prevent traffic to outside Brabant			

Main indicators

OR03. Basic indicators for SDL	
Population structure	*Unit of measurement*
Total population, women and men	Total 2391123 men: 49.96% Women: 50.04%
Total population aged 15 – 64, women and men	Total: 1626000 Men: 830000 Women: 769000
Life expectancy, total and gender breakdown (women and men)	Men: 75.05 Years Women: 80.47 Years Total: 77.76 Years
Activity developments	*Unit of measurement*
Unemployment rate	3%
Activity rate per year	67%
Employment in main sectors: agriculture, industry and services	Agriculture 3% Industry 15% Services 59%
Employment in all transport services	7% of all employment sectors per year
Employment per transport mode: road, rail, water, air	Road 30% Water 6% Air 8% Rail 10%
Employment in supporting and auxiliary transport activities – e.g. travel agencies	13% of all employment sectors per year
Employment in all trade activities, wholesale and retail trade share	15% of all employment sectors per year
Education level	*Unit of measurement*
Drop-out rate of upper secondary schools	Percentage over total student population in upper secondary schools per year; not retrieved
University degree	9%
High school degree per year	65%
Education programmes on the environment	Number per year; not retrieved

Main hypotheses of innovative options

To become a sustainable development region the Brabant region should organize their education programmes in accordance with the needs of the environment. Another important factor is the increase of using green energy in households as well in businesses.

04 – Social equity (between individuals)

SDL / SWOT analysis

Strengths			**3**	**Weaknesses**			**3**
Good public transportation network		3	3	Low education level of immigrants		3	3
				Many inhabitants of Brabant work outside Brabant which creates traffic		4	4
Threats				**Opportunities**			
Unequal access to information		2	2				

Main indicators

OR04. Basic indicators for SDL	
Equal opportunities developments	*Unit of measurement*
Women and men unemployment rate	2,1% men 2,6 women in 2002
Women and men activity rate	Rate per year (Eurostat methodology); not retrieved
Transport and logistics companies directed by women	Percentage over the sector companies per year Not retrieved
Women in local government	About 1 of 3 employees in local government are women
Women with University degree	Percentage over population per year
Families below the poverty line (absolute and / or relative)	10.5% of total families
Immigrant families below the poverty line	40% of total immigrants
Transport intensity impacts	*Unit of measurement*
Death and injury related traffic accidents	195 deaths and 6.376 injuries in 2002 that is respectively 0,01% and 0,27% over total local population
Death and illness related to transport pollution	Number and percentage over total local population per year

Main hypotheses of innovative options

To create a better social cohesion between individuals, programmes with integration as core should be developed more intensely and creating more "interesting" jobs in the region itself should repel forensic traffic to other provinces.

05 – Inter-local equity (between territories)

SDL / SWOT analysis

Strengths			**4**	**Weaknesses**			**3**
Good location with harbors Rotterdam and Antwerp, and hinterland Germany		4	4	Not much cooperation with regions in other countries		4	4
Fair distribution of industry activities in Brabant		4	4				
Cooperation with other Provinces in IncoDelta		5	5				
Threats			**4**	**Opportunities**			**3**
Move away from important industry to the Randstad		4	4	Attraction of industry from other areas in The Netherlands		3	3
				Cooperation with regions in Germany and Belgium (EURREGIO)		4	4

Main indicators

OR05. Basic indicators for SDL	
Economic and social cohesion	*Unit of measurement*
GDP per inhabitant (Euro)	Euro per year compared to regional and EU 15 GDP per inhabitant; not retrieved
Immigration	0,6% of immigrants over total local population in 2002 0,63% of emigrants over total local population.
Internet - based networks between concerned territory and other local communities	Number and scope of the networks; not retrieved

Main hypotheses of innovative options

To improve the inter–local equity between territories the next two actions can be undertaken:

- Structure interregional cooperation at the area of multimodal transport solutions (for example: Tune the departing time schedules of railway, inland waterway, road and intermodal transport services within a mode and between the modes.
- Invest in or attract intermodal service providers.

O6- inter-temporal equity (between generations)

SDL / SWOT analysis

Strengths			**3**	**Weaknesses**			**3**
More human capital through immigrants		3	3	Integration problems with immigrants		3	3
Cheap public transport for students		3	3	Increasing use of cars and scooters by youth		4	4
				High rate of young people leaving school		2	2
Threats			**2**	**Opportunities**			**3**
Risk of losing traditional culture		2	2	More cultural diversity		3	3
Risk of losing natural areas		3	3	Raising awareness of youth for using public transport		2	2

Main indicators

OR06. Basic indicators for SDL	
Social cohesion	*Unit of measurement*
Share of population below 15 years and above 65 years	18,6% people below 15 years and 13,1% people above 5 years over all local population in 2002
Dependency rate per year	Percentage of 0-14 and 65 – over aged people over population aged 15 –64 per year
Immigrant pupils in primary schools	Number and percentage over the autochthonous pupils in primary school per year; not retrieved
Development impacts	*Unit of measurement*
Public debt per inhabitant	Euro per year; not retrieved
Strategic environmental impact assessment	Number of assessments carried out in the concerned territory per year; not retrieved

Main hypotheses of innovative options

To create a stable environment between cultures and between generations some exonerates must be declined.

- By means of information programmes the gap between generations would decline. Mutual understanding creates a more stable underground for sustainable development.
- Integration programmes should be developed on a increased scale.
- By stimulating young people to don't leave school.
- By stimulating young people to use public transport. A Dutch proverb is: "Jong geleerd is oud gedaan.", which means: things learnt at young age, will be applied at an older age.

O7- Diversity

SDL / SWOT analysis

Strengths			**2**	**Weaknesses**			**3**
Good cooperation between regional organizations	2	2		Specialized industry (process industry, transport industry)	3	3	
Existence of good networks for road, water and rail	3	3					
Threats			**3**	**Opportunities**			**3**
Low acceptance of new cultures of immigrants	4	4		Attraction of more diversified industry	3	3	
Reduction of diversity in flora and fauna	2	2		Stimulation of contact between different cultures	3	3	

Main indicators

OR07. Basic indicators for SDL	
Social diversity	*Unit of measurement*
Immigration by origin	Europe 39% America 18% Asia 21% Africa 21% Oceania 1%
Environmental diversity	*Unit of measurement*
Biodiversity	Number of programmes and plans per year; not retrieved
Economic diversity	*Unit of measurement*
Businesses with local origin certification	Number of certified businesses per year; not retrieved

Main hypotheses of innovative options

To create a more sustainable environment differentiation on diverse economical sectors should be stimulated in order to keep the competitive position.

O9 – Networking and partnership

SDL / SWOT analysis

Strengths			**5**	**Weaknesses**			**4**
Strong cooperation with other regions in the Netherlands		5	5	Not much cooperation with regions outside The Netherlands		4	4
Networks between university and industry		4	4				
Strong existing networks between public and private sector within Brabant		5	5	Lack of cooperation between transport operators and terminal operators		4	4
Partnership between research institutes on sustainability (TELOS) and public authorities		5	5				
Threats			**3**	**Opportunities**			**4**
Low interest of local actors in regional development		3	3	More business because of central position between important Euro regions		3	3
				More cooperation between industry		4	4

Main indicators

OR09. Basic indicators for SDL	
Total businesses (local units) in all economy sectors	142.600 businesses
Businesses (local units) per main sectors: agriculture, industry, services	Agriculture 17.600 (12.3%) Industry 11.000 (7.7%) Services 54.900 (38.5%)
Business associations	Number per economy sector per year; not retrieved
Businesses (local units) in all transport services	2.231 (2%)
Businesses (local units) per transport mode: road, rail, water, air (mode/)	Number and percentage over all transport services per year; not retrieved
Businesses (local units) in supporting and auxiliary transport activities – e.g. travel agencies	Number and percentage over all economy sectors per year; not retrieved
Consortia between logistics operators	Number per year; not retrieved

Main hypotheses of innovative options

To increase networking and partnership in Brabant there are several options:

- Stimulate thinking in intermodal transport solutions (transport chains; starting with the initial origin of the shipped product and ending at the final destination of this shipment) with regard to foreign destination regions in particular.
- First: promote, and then facilitate the concept of the “virtual transport company”

O10 - Participation

SDL / SWOT analysis

Strengths			**4**	**Weaknesses**			**3**
High vote rate during elections		3	3	Low actual involvement of citizens in transport and logistics problems, e.g. waste recycling		4	4
Existence of networks with public and private sector		4	4				
Citizens have possibility to react on public plans, e.g. concerning infrastructure		4	4				
Threats			**4**	**Opportunities**			**3**
Delays in regional planning because of active local involvement		3	3	Increasing involvement of local actors in regional planning		3	3

Main indicators

OR010. Basic indicators for SDL	
Public awareness campaigns related to the environment	Number per year; not retrieved
Public awareness campaigns related to transportation and logistics	Number per year; not retrieved
Non profit associations (volunteer) related to social, cultural and environmental interests	Number per typology of interests per year; not retrieved

Main hypotheses of innovative options

Stimulate the use of green energy, sorting waste and use of public transportation or bike instead of the car.

3.2 Social potential

P1 – Perception of a variety of development approaches

SDL / SWOT analysis

Strengths			**4**	**Weaknesses**			**4**
Emphasis on sustainability in new infrastructure			5	Quality of life perception is low			5
Interaction/cooperation between province, branch organizations and municipalities in spatial policy		3	5				5
International perspective on economical ecology			5				3
High level of entrepreneurship			3				
Innovative entrepreneurship is stimulated when sustainable and space-saving			2				
Multiple use of space and intensified use of space is stimulated			1				
Threats			**3**	**Opportunities**			**3**
Increasing congestion			3	Preservation of economic growth with absolute decrease of environmental damage			4
				Intensified use of existing infrastructure			3
				Tourism/recreational development combined with maintenance of nature/landscape			3
				Develop sustainable industrial areas			2
				Preservation of economic growth with absolute decrease of environmental damage			
				Public/private co-operation towards modal shift			

Main indicators

P01. Basic indicators for SDL	
Workshops and seminars focused on sustainable development	Number per year; not retrieved
Publications and public information on sustainable development and related innovation	Number per year; not retrieved

Main hypotheses of innovative options

Stimulating of the “transport region”-thinking with special attention paid to sustainable development.

P2 – Creativity and innovation in an entrepreneurial culture

SDL / SWOT analysis

Strengths	**3**	**Weaknesses**	**4**
High level of entrepreneurship	35	Lack of space for new developments	5
Increased mobility in small country-municipalities by innovative small-scale modes of public transport	3	Need for sustainable industrial areas	5
International perspective and border-crossing economical and ecological relations	2		3
Ritts-programme Brabant: stimulates innovation	1		
Dynamic and competitive environment			
Sales of regional products			
Threats	**3**	**Opportunities**	**3**
		Freight traffic preferably by Line-11, Betuweroute and IJzeren Rijn	4
		Preference of innovative solutions instead of new roads	4
		Regional business is succeeding in developing new possibilities for further growth	4
		In co-operation with market develop Underground Logistic Systems and increase possibility of rail transport	3
		Region-wide restructuring of industrial areas	3
		Farm for other uses than farming only: tourism, environmentally friendly work-practices	2
		Stimulation of bicycle use and increase of bicycle infrastructure	2

Main indicators

P02. Basic indicators for SDL	
Average business size in all economic sectors	6.8 employees per unit
Average business size in main economic sectors: agriculture, industry and services	Agriculture 2.4 employees Industry 19.7 employees Services 7.2 employees
Average business size in transport services	11.8 employees
Businesses with ISO 14001, EMAS II, Vision 2000 and SA 8000 certification	ISO 14001 257 out of 1152 total certificated companies in the Netherlands EMAS II 6 out of 29 total certificated companies

Main hypotheses of innovative options

Attracting new innovative (transport) solutions and creating more chances for outsourcing, specializing or restructuring, should stimulate entrepreneurial development.

P4– Openness to enrich own culture and enhance multicultural cohesion.

SDL / SWOT analysis

Strengths	**3**	**Weaknesses**	**3**
Social engagement	35	Social exclusion of elderly, immigrants and handicapped still needs attention	5
Equal share of foreign migration absorbed by the Netherlands	3	% Elderly is growing	3
Dynamic and competitive environment	2	Individualism is growing	3
Ambition to preserve diversity, identities of landscape and culture-historical values	1		
Threats	**3**	**Opportunities**	**4**
		New forms of small-scale business in country	4

Main indicators

P04. Basic indicators for SDL	
Programmes for emersion of black market activities	Number per year; not retrieved
Projects of multicultural integration and for labour - social insertion	Number per year; not retrieved

Main hypotheses of innovative options

To increase the integration of the elderly, immigrants and handicapped, stimulating reintegration and adapting jobs to special needs by means of special programmes, should enrich national culture as well multicultural groupings.

P11– Social cohesion.

SDL / SWOT analysis

Strengths			**3**	**Weaknesses**			**3**
Stimulate re-integration of women, immigrants, commuters, not-working elderly and partly disabled			5	Employment loss in agraric sector			4
Attractive living environment			4	Number of immigrants is growing			4
Expectation unemployment growing slightly			4	Growing % of elderly people			3
Strong social and political network		3	4	Individualization is growing			3
Unemployment in 2001 is only 2 %			4	Decrease of traditional influx of school graduates			2
Employment has grown with 11,5% in 1997-2001, in 2001 increase of 5000 jobs			3				
Restructuring of disadvantaged areas			3				
Social engagement			3				
Strong engagement of business			3				
Equal share of immigration absorbed compared to NL			2				
Regional co-operation			**2**				
Threats			**4**	**Opportunities**			**1**
Decrease of social cohesion in terms of participation in social associations			4				
Social exclusion of elderly, immigrants and handicapped people			4				
Quality of life in small municipalities is a concern			3				

Main indicators

P11. Basic indicators for SDL	
Local inclusion plans (housing, social transport, child care, immigrants, elderly, etc.)	Number per year and typology of target groups; not retrieved

Main hypotheses of innovative options

To stimulate the economic development in relation with social cohesion a few things should be taken care off:

- the increasing percentage of elderly people for instance by reserving financial funds for the coming years.
- The outflow of people from the agricultural sector. Stimulate working in the agricultural sector, by means of special information or subsidies.

3.3 Dynamics

D1 – Enhancing problem understanding.

SDL / SWOT analysis

Strengths	**3**	**Weaknesses**	**4**
Well-educated population	5	Lack of knowledge infrastructure, research centers and higher education	5
Creation of Indexcentre Mid- and West-Brabant in order to bring together knowledge and business	4	Lack of innovation in business	4
ICT services, knowledge and research companies account for 2% of total employment	4		
Excellent education and health care	3		
Tradition in regional co-operation	3		
"Social Economic Co-operation" (SES)/ Center of commerce research in efficient spatial planning	2		
Existence of political networks, platforms, action programmes in regional perspective	2		
In 2000 a regional debate was organized, 250 participants from the region	2		
International perspective on economics ecologics	2		

Main indicators

D01. Basic indicators for SDL	
Existence of local initiatives towards innovation and creativity in logistics:	Yes / Not If yes, number and type of relevant cases; not known

Main hypotheses of innovative options

By means of (adaptation of) education programs the existing mismatch between “supply” and “demand” of adequately educated people in the logistic sector could be reduced. A deliberate side-effect of this upgraded educational level will be that the innovation in transport business also increases.

D3 – Negotiation and co-decision.

SDL / SWOT analysis

Strengths			3	Weaknesses			3
Interaction/cooperation between province, branch organizations and municipalities in spatial policy		3	4				
Existence of political networks, platforms, action programmes in regional perspective			3				
Region-wide restructuring projects for industrial areas			3				
Strong political and social network			3				
In 2000 a regional debate was organized, 250 participants from the region			2				
Tradition in regional co-operation			2				

Main indicators

D03. Basic indicators for SDL	
Existence of round tables, joint committees and groups of logistics stakeholders for plans and projects development	Yes / Not If yes, number and type of relevant cases

Main hypotheses of innovative options

More regional debates on strategic transport issues should be organized, because these kinds of debates increase the perception on the region with respect to its linking transport function. Furthermore, cooperation between parties involved in the transport process could be stimulated, as all stakeholders will become acquainted with the points of view of the other stakeholders.

D4 – Creation of a shared vision

SDL / SWOT analysis

Strengths			4	Weaknesses			5
Existence of political networks, platforms, action programmes in regional perspective			4	Increasing competition in transport by EU-accessing states			5
Interaction/cooperation between province, branch organizations and municipalities in spatial policy		3	4				
Professional freight transport is increasing by internationalization, outsourcing and order-directed production			4				
Scale of operations and co-operation in transport is increasing			4				
Region-wide agreements on youth-care			3				
Region-wide restructuring projects for			3				

industrial areas							
Strong political and social network			3				
Strong social engagement			3				
In 2000 a regional debate was organized, 250 participants from the region			2				

Main indicators

D04. Basic indicators for SDL	
Existence of inter-sectoral and integrated territorial plans decided with the involvement of logistics stakeholders	Yes / Not If yes, number and type of relevant cases

Main hypotheses of innovative options

Strengthen the competitive position before the entry of the new accessing countries to the EU by specializing on “superb transport performance”.