

## TRANSPORT SITUATION IN BELGIUM IN 2007

### 1. Traffic trends

Short qualitative comments on the evolution of traffic volumes / prospects / trends.

#### 1.1. Passenger traffic in general- underlying trends

The persistent growth of passenger traffic can be explained by the following elements:

- the growing sub-urbanization;
- the development of the service sector, combined with weaker polarisation of built up areas, especially shopping and industrial areas;
- higher living standard and more leisure time of households ;
- fiscal legislation which has until now remained fairly favourable towards the acquisition of company cars and fuel bonuses;
- the development of Brussels as the national capital and seat of the European institutions, generating employment, but also commuter traffic ;
- the growing complexity of mobility trips ;
- high degree of car ownership;

Congestion - still mild by international comparison - is getting worse around the cities.

The growing traffic also gives rise to serious environmental concern. Air pollution, especially PM, remains a matter of concern, the more so as the 'dieselisation' of the cars in Belgium has gone over the 50%-mark. Belgium must also make major efforts to reduce the CO<sub>2</sub>-emissions of transport, which have risen by around 30% between 1990 and 2005.

As people look for alternative transport means, the sale of motorized two-wheeled vehicles is up and the cycling culture keeps going strong in the northern part of the country, while there is a growing interest in Brussels and Wallonia.

Due to attempts at a more sustainable mobility of the authorities and more client oriented policies of the companies, all modes of domestic public transport are growing steadily:

In conformity with a world wide trend, air transport too continues to grow in Belgium.

#### 1.2. Car ownership and yearly km/passenger car

- **Car ownership** remains high: over 5 Mio cars for 10,5 Mio inhabitants. Ever since the year 2000, the BVRI index turns around 133, corresponding to an average of 15.000 yearly km/passenger car; this trend is also observed in other European countries. On the other hand, 70% of Belgian people use their car on a daily basis, compared to only 53% in The Netherlands.

#### 1.3. Public transport

- Continual growth in the number of rail passengers, as in other forms of public transport, due to government efforts at a modal shift for commuters and a more attractive commercial attitude of the rail road company NMBS/SNCB. Between 2000 and 2006 the number of train passengers on domestic connections grew by 34%: from 139,9 to 187,5 million. In 2006 the *total* number of rail passengers grew by 6,3% and climbed to a record number 204 Mio, of which 189 Mio were transported within Belgium and 15 Mio in international traffic (mostly Thalys: and Eurostar:3.9 million passengers, up 4,8%).

- In 2007 record numbers of passengers were again registered for the Brussels metro, bus and tramway-operator MIVB/STIB: 285 million. Between 1996 and 2006 the Brussels public transport company saw the number of its passenger soar from 161,8 million to 269,4 million, up 67 %. The same goes for the regional bus and tramway-operator De Lijn in Flanders: between 1996 en 2006 the number of passengers doubled from 214,9 million to 463 Mio; the pace of growth was still 3% in 2006. For the Walloon public transport operator TEC the growth over the past decade was substantial, but more modest than in the 2 other regions.

As a result, the previous loss of market share of public transport is now stopped and the respective public transport companies are all heavily investing in extra capacity.

#### **1.4. Air passenger transport**

Passenger traffic in Brussels Airport continues to grow after a serious dip in 2001-2002 when the national air carrier Sabena went out of business and in the wake of 9/11 attacks. An annual 17 million passengers transited through Brussels in 2006 (+530.000) and figures are further on the rise, but are not expected to reach the number of passengers of 2000 soon (over 20 Mio). Of this total 6 Mio (up 8%) made use of the services of the new national carrier SN Brussels Airlines and its merger partner Virgin Express, who adopted the name Brussels Airlines as of March 2007.

As of 2007 Brussels Airport started to offer new European destinations such as Vienna, Budapest, Prague and new overseas destinations such as Philadelphia, Detroit and Mumbai.

Furthermore, thanks to permanent upgrading, excellent scores for punctuality, safety standards and quality of service, the activity on the regional airports of Charleroi (2,2 Mio passengers, up 16%), Liège (330.000 passengers, up 7%) is equally expanding in 2006. Passenger traffic growth in regional airports like Ostend-Bruges and Antwerp lags somewhat behind; promising niches are explored however.

#### **1.5 Freight transport in general**

Due to the geographical situation of the country - at the heart of major European markets - and its expertise in transport and logistics, goods transport in Belgium is expanding at a steady rate in all modes. Overall traffic volumes are up in 2006 and - given the growth in the world economy (e.g. in China, Brazil, India) - volumes are expected to continue to grow.

Globalisation of the economy, with its consequence on long distance transport, results in impressive traffic growth in the seaports of Antwerp and Zeebrugge. The need to ensure timely distribution of (container) goods to the hinterland gave rise to the concept of considering all inland ports and multi-modal terminals as a network of "extended gateways".

Growth in inland transport demand remains primarily attracted towards road haulage (market share +75%): because of the advantages it still offers in terms of flexibility, reliability and price it is favoured over railroad (+11%) and inland navigation (+14%). Goods transport over railroad and inland waterways is steadily expanding however.

#### **1.6. Road haulage**

The modal share of road transport in the total is rather high, compared to other European countries: 75% in tonnes-km, with 52, 5 billion tonnes-km in 2005. This share is slightly decreasing since 1999 (-4%) due to the success of transport by inland waterways.

Despite efforts made towards a more sustainable modal split, road haulage is expected to continue to grow faster than the other modes. This is mainly but not exclusively due to:

- The choice of Belgium as European Distribution Centre for the logistics of a great number of multinationals (already over 450 EDC's in 2006) on the grounds of the exceptional location, road network and logistics-know how of the country;
- The fast expansion of the port of Antwerp, a main gateway to the richest European markets for (container) goods coming from overseas;

Fierce competition from Eastern European countries causes a delocalisation of the truck fleet and a turnaround of part of Belgian transport businesses towards logistics management because of higher profitability.

### **1.7. Rail cargo**

After still mitigated results in rail cargo in 2005 (+1,6%), turnover grew by 6,6% in 2006 to 61,6 Mio tonnes. Calculated in tonnes-kilometres the expansion of rail cargo is even more promising: traffic climbed from 8,11 to 8,56 billion tonnes-kilometres, generating a financial turnover of 385,5 Mio euro (+15,5 %). So at last efforts to increase the part of railroad transport in the modal split paid off in 2006 and profitability of operations improved.

In 2007, further public and private initiatives were taken, mainly in the field of international rail cargo. The liberalisation of the domestic market as of the 1<sup>st</sup> of January 2007 was not expected to have much more impact on traffic volumes than the ongoing trend. However, the number and scale of new initiatives seems to belie this. At the port of Zeebrugge, for instance, 2007 saw the opening of a direct rail connection to the multi-modal logistic center of Dourges (Nord/Pas-de-Calais Region in France), whereas the port of Antwerp got a new direct cargo connection to Basle and Lyon.

### **1.8. Intermodal transport**

It remains rather marginal, though the trend is positive;

- Rail: for the years 2005 to 2007 financial aid has been organized by the authorities for railroad stretches intended for intermodal rail cargo initiatives. In 2007 this resulted in some traffic growth.
- Air: the interface air cargo/inland transport remains monopolised by road haulage. However, a study is underway in the Walloon Region with operators of Aéroport de Paris on the feasibility of HST/Freight-feederling and better rail connections at Brussels Airport are expected to pay off soon.

### **1.9. Inland navigation**

With a modal share in tonnes-km of 14% inland navigation is significant in Belgium; expressed in tonnes of goods inland navigation even had a share of 24% in 2006. Somewhat more than 168 million tonnes of goods were transported over the inland waterways (on a total of 696 million tonnes) of which almost 100 million in the Region of Flanders. Inland navigation is the fastest growing transport modus in Belgium.

- By the end of 2005 the number of vessels in Belgian inland navigation was 1.600 with an average loading capacity of 1.186 tonnes, to be compared with an average of 840 tonnes in 1991;

- In 2006 inland navigation was characterized by consolidation of the number of tonnes-kilometers at 5.6 billion, though in some segments there was steady growth.

- Thanks to infrastructure works by regional governments and new industrial opportunities, stimulated a.o. by European incentives such as the Marco Polo- and Naiades-programmes, further growth is expected. Without such measures and major infrastructure works, further growth would be hampered;

- Due to globalisation of the world economy and the explosion of container traffic in the seaports the relationship between the seaports and the inland ports has changed; their activity seems to be

more intertwined; inland navigation is seen as a major solution to keep the Belgian seaports congestion free;

- Traffic at the 13 inland container terminals – of which 3 dedicated terminals in the seaports - grew steadily (tenfold growth over the last decade);

- The inland ports of Liège and Brussels flourish again as they are gradually turned into multi-modal hubs.

-The new estuary traffic of river-sea going vessels at the port of Zeebrugge is expected to give a further boost to inland navigation.

- 2006 saw the ratification of the CMNI-treaty and a whole range of initiatives for administrative simplification; in 2007 implementation was started up.

- Investment in CCRII-motors is encouraged in the Naïades-context;

- Bundling of traffic should improve efficiency and profitability, as should further improvement of professionalism.

### **1.10. Maritime**

Steady growth, also of short sea shipping (SSS).

Traffic growth in the port of Antwerp continues steadily, whereas the deep sea container port of Zeebrugge again shows exceptional growth of turnover in 2007. After a previous dip the port of Ghent ensured new traffic growth in 2006-2007, as well in inland navigation as in maritime traffic. Where container transport is concerned, SSS is bound to become an ever more important feeder in international maritime traffic as ports are increasingly confronted with the gigantism of ships (up to 13.000 TEU). For the ports in the Hamburg-Le Havre range the main challenges lie in providing adequate access through a better draught and optimal mobility, supply chain management and logistics in the hinterland.

- From January to June 2006 total turnover in the seaports of Antwerp, Zeebrugge, Ghent and Ostend was 118 Mio tonnes, of which SSS traffic accounted for +-60 Mio tonnes, that is over 50%. In the first half of 2007 short sea traffic in the Flemish ports reached a total of 63.332.715 tonnes, up more than 5%.<sup>1</sup>
- . In the first nine months of 2007 freight volume was up 8,4% in the port of Antwerp and stood at nearly 135 million tonnes of goods by the end of September. A new record total turnover of 180 million tonnes is expected by the end of 2007, compared to the 2006 record of 167,3 million tonnes. In the period from January to September 30<sup>th</sup> 6,1 million TEU were handled, up 16%.
- At 24 Mio tonnes, maritime traffic was up 8% in the port of Ghent in 2006, while inland navigation grew with a record 10,4% here to 18,3Mio tonnes.
- The strongest growth of all Belgian ports - and of all ports in the Hamburg–Le Havre range for that matter - was realized by the deep seaport of Zeebrugge; by the end of 2006 total turnover stood at a record 39,3 Mio tonnes (+13,6% ), compared to 34,59 Mio tonnes in 2005; container traffic grew by a record 16,5% to 1,64 Mio TEU. In the first half of 2007 there was a further 6% traffic growth and container traffic was up 25%.
- The port of Ostend is doing well again after a previous dip and hit the 8 Mio tonnes-mark in 2006.
- Furthermore, the Belgian fleet kept its capacity of 6 Mio tonnes (dwt) in 2006, up from 1,5 Mio tonnes in 2004.

### **1.11. Air cargo**

Steady growth in 2006:

---

<sup>1</sup> Source : SSS Vlaanderen

- With 719.560 tonnes of goods in 2006 (+2,4%) Brussels Airport maintains itself among the top 5 of European airports for air cargo. The strong annual expansion of air cargo in Brussels is expected to slow down somewhat by 2008, when DHL will move the bulk of its night flights to Leipzig (Germany) as further expansion of night flights in Brussels is limited due to population density and sub-urbanisation;
- Furthermore, cargo activity on the regional airports of Liège-Bierset (406.525 tonnes of cargo in 2006, up 24%) and Ostend-Bruges evolved in different directions (a mere 100.000 tonnes compared to 108.000 tonnes in 2005, down 9%) due to local factors.

## **2. Obstacles to the development of transport**

### **2.1. General obstacles**

A general “obstacle” to a fast and unlimited development of transport is its more and more unacceptable pressure on the environment, broad sense, up to climate changes. To face this, Belgium has to comply with obligations under the Kyoto Agreement and other environmental constraints (EU-directives on clean air; Natura 2000-areas, etc.)<sup>2</sup>

Moreover the protection of safety, the health and living conditions of the people living in the vicinity of transport infrastructure is a growing matter of concern.

Other more specific obstacles are:

- The intricacy of the Belgian political system, with a split up of responsibilities between the EU, the federal and the regional governments and the local authorities;
- Some lack of coherence between policies in the field of transport & mobility, environment and fiscal policy;
- The unfinished liberalisation of transport at the European level, preventing an evaluation of the real strength of the underlying market trends and thus of a reorientation of policies in the field of transport and logistics;
- More than ever, the exiguity of the territory combined to the high density of the population and decades of sub-urbanization limits the growth of night flights at the airports and creates scarcity of land for further development of massive transport infrastructure;

### **2.2. Road transport**

Road congestion, especially around Antwerp and Brussels, though mild in comparison with neighbouring countries, is an obstacle to further traffic growth. For the main cities, the high rate of car use for daily shuttle causes twice a day a traffic infarctus, affecting lorries as well.

Part of the solution for the congestion problem might come from road pricing and congestion charges. However, in the absence of a coherent policy for all EU-member countries, the dispute at the European level over the different systems seems to be mirrored in the different option taken by the autonomous Belgian regions. After some discussion with neighbouring countries and the EU, the regions have renounced to the introduction of a road vignette for passenger cars. In October 2007 the Flemish government has decided the introduction by 2011 of an electronic system of road pricing per kilometre for heavy vehicles in concertation with the others Benelux countries. For passenger cars the Flemish government favour a greater cost variabilisation per kilometre and the use of ecoscore<sup>3</sup> for the annual car tax. The Walloon government prefers to start with a road vignette as soon as possible and eventually introduce kilometre charging in a next stage. A fact is that Belgium as a whole still has to find a coherent and comprehensive policy on road pricing.

---

<sup>3</sup> [Ecoscore take into account : noise, pollution emission, and CO2.](#)

Fierce competition from Eastern European countries increasingly leads to delocalisation of the truck fleet and /or transport business, especially in long distance haulage. Problems of “shortage of wheels and truckers” lie at the basis of the turnaround of part of Belgian transport businesses towards logistics management.

A problematic evolution is the growth in recent years of heavy transit traffic on toll free Belgian roads, mainly trucks to the Channel and the ferries in Calais (Fr.) as links from the northern European ports to the UK are shifting from unaccompanied traffic to accompanied traffic now that large haulage companies are hiring dozens of cheap drivers from Eastern European countries (after a growth of +150% between 2000 and 2003, this traffic grew by another average 10% between 2003 and 2006 and is still going strong). This trend clearly goes against EU-promotion of the “Motorways of the Sea”.

### **2.3. Railroad**

- Due to previous investment deficit and given the density of the Belgian railroad network, there are a few bottlenecks in the passenger traffic to and from Brussels and in the freight transport to and from the ports.
- The reliability of rail cargo systems and the traceability of goods remains the main challenge for combined rail/road haulage transport systems. This reliability depends on all operators in these mainly international supply chains.
- Within Belgium the priority of passenger traffic over freight regularly gives rise to problems due to shortage of tracks on some crossings and also due to lack of dedicated traction capacity for freight.
- Another obstacle to be overcome is the lack of interoperability of personnel and infrastructure in international rail traffic.
- Finally due to environmental concerns of The Netherlands there is some delay in the reopening the Iron Rhine-railroad linking the port of Antwerp to the industrial area of the Ruhr in Germany.<sup>4</sup>

### **2.4. Inland navigation**

The pace of growth is hampered by severe competition and the low profitability poses a threat to the renewal of the fleet.

### **2.5. Maritime**

- The EU-habitat and birds-directives and tensions with The Netherlands over the dredging of the river Scheldt to a deeper draught used to complicate further expansion of the port of Antwerp, but an agreement was reached by the end of 2007 and work can start;
- Due to traffic growth there is increased risk for port congestion as hinterland connections begin to reach their maximum capacities; however, in 2007 there were some interesting initiatives in the field of container traffic to the hinterland over inland waterways and railways.
- Speaking in terms of competitiveness, SSS still suffers from administrative burdens when compared to road traffic, slowing down the pace and/or reducing the smoothness of SSS traffic flow;
- Maritime and inland containers are still based on different standards, impairing their interoperability.

## 2.6. Air transport

Sub-urbanization and the proximity of Brussels hinders further expansion of night flights at Brussels Airport. On the other hand, unlimited and fast growth of air transport causes an insuperable problem of compatibility with the – Belgian and European agreements on greenhouse gas emissions.

## 3. BEST PRACTICES IN TRANSPORT REGULATION AND INFRASTRUCTURE

### 3.1. Option for sustainable mobility

In principle, authorities at all levels are in favour: EU, Belgium, Regions, local authorities.

### 3.2. Regulatory framework

#### Regulations influencing modal split

- In order to combat congestion on the road during peak hours, the federal government offers free public transport to civil servants and subsidizes part of the public transport fares for commuting workers in the private sector. Due to this initiative a fair percentage of workers have already switched to train, bus, tramway or metro.
- Authorities at all levels also stimulate the new cycling culture: on a daily basis Belgian households make over a million cycling trips, mainly trips to school, work or shopping.

#### EU-rules on the liberalisation of the use of railroad infrastructure

The progressive access for new operators favourably influences total rail traffic offer. National operators fear cherry-picking amongst the more profitable operations and lines. However, recent developments (abroad) show that a new market does exist, even for diffuse traffic. The potential of rail transport is very high due to the combination of the growth of total transport volume and the unavoidable modal shift that will profit to the railways. The actual challenge will be the sharing of transport capacity and the fight against bottlenecks in rail infrastructure (see above).

#### Regulations influencing road security

In conformity with EU-policy, the traffic code and transport regulations were made more stringent and police/camera controls intensified in order to further reduce the number of casualties on the Belgian roads. This policy proves successful as the number of people killed in road traffic has dropped significantly between 2000 (+1500) and 2006 (+1000). However, the pace at which the number of accidents and casualties comes down seems to have come to a halt in 2007.

#### Environmental regulations

- In order to reduce CO<sub>2</sub> emissions, Belgian government offers a immediate 15% rebate<sup>5</sup> on the cost of a new car with CO<sub>2</sub>-emissions under 105 gram per km. For cars with CO<sub>2</sub> emissions under 115 gram per kilometre the rebate is 3 %.
- In 2007 a new regulation was introduced linking the fiscal advantage for fleet cars according to the quantity of CO<sub>2</sub> emission per km.
- A rebate of 200 EUR is offered for new car equipped with a soot filter. Up to now, the success of these measures is quite modest.

---

<sup>5</sup> Before 2007, the rebate was paid 1 or 2 years later.

### 3.3. Upgrading of infrastructure & filling in of missing links

#### Road infrastructure and ITS<sup>6</sup>

In general, road infrastructure remains among the best in the world.

The Flemish Region plans to fill in a number of missing links, especially in the hinterland of the ports of Antwerp and Zeebrugge.

In 2006 the Walloon region launched a pilot project whereby fast bus services could make use of adapted stretches of the emergency lane on the highway to Brussels; an evaluation of this project is expected in the near future. A similar project in the Antwerp region by the Flemish Region has been continued in 2007.

Belgian regions together with other European regions participate to the ITS "Easyway" project which aims at the 2020 horizon to improve traffic flow by a 25% congestion reduction; to increase traffic safety by 25% less fatalities; to improve the environment through limiting the traffic emission by 10%.

#### Railroad

The density of the Belgian railway network remains amongst the highest in the world; still, the firm option has been taken to upgrade the main rail connections that are part of the Trans-European Network and to fill in some missing links. In 2007, Belgian railroad projects have been selected as TEN priority projects by the EU<sup>7</sup> :

- The Diabolo project will connect Brussels airport to the High Speed Train network
- Eurocaprail will improve the Brussels-Luxembourg link and reduce the travel time by 20 min for international passenger train.
- Iron Rhine project which will improve the fret rail connection between Antwerp and the Ruhr area in order to cope with expected exponential growth of container traffic in the hinterland of the port of Antwerp.
- The "Liefkenshoektunnel" project - not a part of the TENs network - follows the same objective. The tunnel under the Scheldt river will improve the rail connection of the new multi-modal terminals of Antwerp.
- Moreover the decision by Infrabel – responsible for rail infrastructure - to put in place the ETCS for the main railroad network is expected to heighten the capacity and the safety of rail traffic ; work has already started on the HST-lines and is expected to last until 2012.
- The recent option by the Regions to promote and expand plant sites with a rail siding ought to contribute to the growth of railroad cargo; 50 of 119 projects are already operational.
- In 2007 major works at the suburban railroad around Brussels continued; this so-called GEN-project is mainly intended at commuters and should alleviate congestion of motorised traffic in the Brussels area by 2012.
- Rail passenger tariffs: in 2006 new agreements between the authorities and the rail road operators have led to simplifications and some common ticketing with other forms of public transport like the Brussels underground and regional bus and tramway companies; existing special tariffs and free travel have been extended to new social and age groups.

#### Inland navigation

Multi-modal hubs are being created as a hub-and-spoke network around the ports and the main logistic centres: 11 of these multi-modal terminals have been developed over the past ten years; together with the inland ports they form a system of extended gateways in the hinterland of the seaports. Especially the terminals along the Albert Canal between Antwerp

---

<sup>6</sup> Intelligent Transport System

<sup>7</sup> These projects will be partly financed by the EU.



and Liège are booming. Also, the port of Liège is developing a huge multi-modal logistics platform called Trilogoport in cooperation with the port of Antwerp.

- More emphasis on safety and renewal of the fleet; inland navigation also profits from huge investments by the regional governments in quays along waterbound industrial sites;
- Development of standards for river-sea going vessels: in order to decongest road traffic around maritime ports and to link them to inland waterways use is made of river-sea going vessels for estuary traffic.
- In December 2007 came the EU-decision to finance the upgrade of the main canal connecting the Belgian and French inland waterways in the Seine and Scheldt basins (Seine-Nord project) as part of the Trans-European Network. In this context the Flemish authorities took the firm option to fill in some missing links in the hinterland of the ports of Zeebrugge and Ghent.

### **Maritime**

In 2007 the region of Flanders undertook to pay the additional construction costs for a tunnel under the canal Ghent-Terneuzen near Sluiskil (The Netherlands) calculated to accommodate a future draught of 16 metres. These extra costs are estimated at EUR 24.4 mio. Replacing the bridge at Sluiskil by a tunnel is the first decision to be taken for improving nautical accessibility to the port of Ghent. A new ro-ro berth and a new sand and gravel terminal became operational in the port of Ostend.

Belgian ports in general are being better integrated with the road and rail networks and, as such, are becoming prime examples of multi-modality; missing links are often being built through public-private cooperation. (Cfr. the concept of extended gateways in the § on inland navigation)

The ports fully play their role as main SSS-hubs in the EU-project "Motorways of the Sea".

### **Air transport**

Brussels Airport and Brussels South airport, Charleroi, , have both received upgraded railway connections in 2007; their ambition is to become multi-modal hubs, both for passenger traffic and high value cargo.

In 2007 permanent upgrading of infrastructure, safety and service levels in all Belgian airports was intensified further.

## **3.4. Technological progress**

Being a small open economy and transit country, Belgium hopes for progress in the GALILEO-satellite navigation programme of the EU as a key instrument for the development of an intelligent, safe and efficient transport system in Europe;

The country also favours the speeding-up of the introduction of advanced telematics in the transport sector, both for reasons of road safety and traffic management.

E-government: there is a strong trend towards administrative simplification and paperless customs.

## **3.5. Information needs**

Belgium, that makes an effort at its own level, sees the need for and favours adequate, reliable, swift, and homogenous international statistics on transport and mobility, and expects initiatives at EU- and/or UNECE-level.