## **Tauern axe; Consultation EU TEN-V**

### Questions to the stakeholders

## A) Which are the major axes?

1. What are the main transport axes, including motorways of the sea, connecting the European Union to the neighbouring countries or broader regions today?

Tauern axe (Salzburg - Ljubljana and Salzburg - Trieste), Part of Corridor X

2. What will these axes be with a time horizon of 2020?

The Tauern axe will be the main connection between The Nederlands, Belgium, Skandinavia, northern France, Germany, western Austria on the north and Slovenia, Croatia, Serbia, Albania, Greece on the south of the Tauern axe. Furthermore it will be a major link of Czech, Poland and north Austria with Italy, both for freight and passenger ttraffic. A high increase especially of road traffic has to be expected.

3. What is the balance between the different transport modes

Freight Traffic: Tauern axe: Road: 60%

Rail: 40 %

→ data source: Federal Office for Spatial Planning Switzerland

4. What are the current traffic volumes, both passenger and freight, on the proposed axes?

Freight traffic: Salzburg – Villach:

2001:

Road: 10,8 Mio tons
Rail 7,4 Mio tons net

→ Total: 18,2 tons

→ data source: Federal Office for Spatial Planning Switzerland

5. What is the amount and share of international traffic to/from the Union or between the neighbouring regions?

Exporte Sloweniens  Nach den 5 wichtigsten Bestimmungsländern 2000 und 2001; Wert in Mio. USD						
Bestimmungsland	Rang	2000	2001	Veränderung 2000/2001 in %		
Deutschland	1	2.376	2.428	+ 2,2		
Italien	2	1.188	1.158	- 2,5		
Kroatien	3	688	799	+ 16,1		
Österreich	4	656	693	+ 5,6		
Frankreich	5	619	628	+ 1,4		

Importe Sloweniens Aus den 5 wichtigsten Herkunftsländern 2000 und 2001 Wert in Mio. USD						
Herkunftsland	Rang	2000	2001	Veränderung 2000/2001 in %		
Deutschland	1	1.918	1.949	+ 1,6		
Italien	2	1.761	1.793	+ 1,8		
Frankreich	3	1.043	1.079	+ 3,4		
Österreich	4	833	844	+ 1,4		
Kroatien	5	448	404	- 9,8		

Exports and Imports of Slovenia  $\rightarrow$  data source: Business Chamber Austria

### 6. How will these traffic volumes develop by 2020?

See question A2

# 7. Are there particularly environmentally sensitive areas that must be taken into account when identifying major axes?

### The Alpes:

The Alpes are a region, which has to be protected particularly. Because of the special situation in the Salzach valley and in the further alpine valleys of Salzburg, where the tauern motorway goes through, there is a permanent damaging burden for the region especially by nitrogen oxids (NOx). Further there are a number of biological reserves in the area of the Tauern axe, which also partly belong to the European network of biogenetic reservations and so require to be protected especially. Target and precaution values especially for secondary air pollutants like nitrogen oxids can't be kept in the alpine space. In addition the emission of sulfate and nitrate in the holdup

situation of the Alpes belong to the highest one in Europe. Totally the traffic causes about 70% of the total emission of NOx in Salzburg; in the affected area near the tauern motorway this part is more than 90%. Almost 88% of NOx emissions could be assigned to the trucks, although these only are only a part of 18% of the whole traffic volume. Additionally the noise exposure is very high because of the narrow valleys in the Alpes.

→ Source: Land Salzburg; "Tauernautobahn als besonders sensible Zone in EU-Verkehrspolitik anerkennen"

(Quelle: http://www.land-sbg.gv.at/lkorr/2001/12/19/26794.html)

## B) Which investments and how?

1. Which are the most pressing congestion, traffic safety or geographical bottlenecks on the major axes that could justify investments?

Railway line is in area of danger of avalanches. Therefore it had to be closed for some days and traffic had to be reduced during some more days.

The railway line is partially only single track which reduces capacity and reliability.

The journey time from the north end of the Tauern axe (Salzburg) to the south end (Ljubljana) is very long and unattractive compared to road: 4 h 40 min by train, 2 h 45 min to 3 h by car. In result, there are only 3 direct passenger trains.

The country boarders cause severe problems with interoperability in aspects of signalling system, driver license, access of vehicles of one country to the railway net of another country.

Intermodal terminal road-rail in the area of Salzburg.

- 2. What kind of improvements (rehabilitation, new construction) to the infrastructure would be needed to remove the bottlenecks?
- a. About 14 km new railway line between Golling and Werfen to make the line safe regarding to avalanches.
- b. Upgrade the single track sections to double track.
- c. Upgrade the line to allow higher speeds, e.g. for tilting trains.
- d. Building of a new freight terminal.

## 3. What is the time horizon for the realisation of such a project?

In various steps. First step for a., b. and c. in 2013, for d. earlier.

# 4. What would the economic, environmental and safety benefits of such project be?

Economic benefits (Tauern report 2004):

- In the short term, a shift of approx. 5000 heavy goods vehicle (HGV) per month from road to rail can be realized by the implementation of three products (this equals 18 additional trains per day).--> see response C5
- After conclusion of the expansion measures, which have been decided in the "Generalverkehrsplan 1a" for the Tauern-Rail, by the year 2006 up to 30% more freight trains could be operated compared to 2003. At the same time, the journey time can be reduced by nearly 20% (this equals further 15 trains per day or 6000 HGV per month).
- If a double track expansion was realized, a capacity increase of up to 89% compared to 2002 could be achieved (this equals approx. 96 additional trains per day).
- 5. Are there alternative technical or modal options to remove or alleviate the bottleneck?

None.

6. How can the project best be financed? What could be the role for private sector involvement and user charges?

By the Austrian government and the EU.

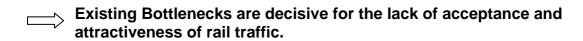
## C) How to ensure seamless and efficient use of the axes?

1. What are the main technical and administrative bottlenecks on the axes?

### Rail freight traffic:

- Non-observance of train schedules leads to a worse utilization of the existing rail infrastructure (e.g. on average, freight trains stand still 20% longer than originally

- scheduled), prevents an optimal utilization of the potential average speeds, and because of that decreases the theoretical potential.
- Interface difficulties between railway companies (e.g. double wagon control; different power systems).
- Capacity shortages in transit terminals e.g. caused by complex locomotive dispositions, limited container storing position and rail capacity (Liefering, Villach-South).
- Incompatible data systems of railway companies.
- No stringent information chains between railways and customers.
- Technical bottlenecks: see B 1.



# 2. Are there problems of interoperability when crossing borders or changing modes?

- Different electricity and signalling systems (Germany, Austria Italy)
- no standard data system
- Different countries and responsible persons concerning the organisation of trains
- → no continuous transport chain available

## 3. Is safety or security a major concern along an axis?

Yes, danger of avalanches.

## 4. What could be done to solve the bottlenecks today and with a time horizon of 2020?

### Today:

- Standard Data System
- Implementation of the Tauern products
- Implementation of combined traffic to the south harbours to ship freight from Bavaria and Austria from there to Far East (not over Hamburg or Rotterdam)
- Improvement of the traffic process: material flow in the terminals
  - Traction and performance on the rails
  - Avoid of interfaces between the rail associations
- Improvement of the infrastructure: Equipment in the Terminals
- Implementation of a continuous information and quality system

### Until 2020:

- Continuous transport chain
- Expansion of one track rails
- Journey time reduction for Inter City Trains by 30 %.

### 5. How can intermodal transport be facilitated

- Standard European locomotive driver's licence → no change of personnel, no change of the documents, no change of the locomotive
- Standard European Safety system (for ex. signal technology
- Creation of market orientated products (one product faced to the customer)

### For ex.:

- UCT Shuttle Salzburg Villach
- RO-RO bridge" Triest Region Salzburg/Bavaria
- UCT direct relation Munich Villach/Tiest/Koper

# 6. What common market rules should be implemented to facilitate and speed up transport along the axes?

- market orientated transport times
- competitive prices (for one product)
- cross national information and quality system
- Standard European locomotive driver's licence

### 7. Which policies or administrative procedures should be better integrated?

See C2

### 8. What could be the role of the private sector?

inclusion of private rail companies -> competition on rail