BRENNER BASISTUNNEL BBT SE

Brenner Basis Tunnel Project
Cost-Benefit Analysis

July 2007

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Annexes:

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1. Nature and scope of the work

The Cost-Benefit Analysis of the Brenner Basis Tunnel Project (hereinafter "BBT" or the "Project") performed on April 2004 has been updated in accordance with your engagement letter dated June 5, 2007.

Our economic analysis is performed on the basis of elements, which can be reasonably predicted, and therefore does not take into account possible extraordinary and not foreseeable events (new industry regulations, changes in the tax laws, natural, social and political catastrophes, nationalizations, etc.).

The financial figures and other data used in performing our economic analysis are based on historical and perspective data, information and assumptions provided to us by the management of Brenner Basistunnel BBT SE (hereinafter the "Company"). Our work did not include any review of the accuracy, correctness or completeness of those data information and assumptions. We have not assembled, nor verified the data, information and assumptions obtained, and we are therefore unable to express any opinion, or provide any assurance as to their accuracy, correctness and completeness.

We deem necessary to note that the economic projections generated in our analysis illustrate the possible results of the investments planned, presuming that the data, information and assumptions provided to us by the management of the Company are correct. These projections may be materially affected by changes in economic, financial and other circumstances, or when data, information and assumptions upon which they are based prove in the event to be incorrect.

Our assignment does not include any update of this economic analysis.

In carrying out our assignment, we used the following studies and documents, made available to us by the Company's management:

- ProgTrans, "Aggiornamento della previsione sul traffico merci e passeggeri per il Brennero 2015 e 2025", May 2007;
- PROGNOS, "Potenziamento asse ferroviario Monaco – Verona: Galleria di Base del Brennero", Rapporto 2002, Raccoglitore V1 – Allegato 01.i;
- ProgTrans, "Aggiornamento dello studio sul traffico della Galleria di Base del Brennero: stima di prima approssimazione dei dati fondamentali di traffico al 2015/2025", Brusselles – October 29, 2004 Presentation;
- TRT – Previsioni di traffico/Costi esterni, "Potenziamento asse ferroviario Monaco – Verona: Galleria di Base del Brennero", Rapporto 2002, Raccoglitore V1 – Allegato 02.i;
- Modelli teorici di finanziamento e di concessione, "Potenziamento asse ferroviario Monaco – Verona: Galleria di Base del Brennero", Rapporto 2002, Raccoglitore F1a – Allegato 02.i;
- Relazione complessiva, "Potenziamento asse ferroviario Monaco – Verona: Galleria di Base del Brennero", Rapporto 2002, Raccoglitore V1 – Allegato 03.i;
- Rapporto di sintesi, "Potenziamento asse ferroviario Monaco – Verona: Galleria di Base del Brennero", Rapporto 2002, Raccoglitore F1b – Allegato 07.i.

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In addition, we also used the following studies and documents:

- Statistic studies: Eurostat, Istat and Statistik Austria;
- 2001 European Commission White Paper "European Transport Policy for 2010 – Time to Decide";
- IWW-INFRAS, "External Costs of Transport- Update Study", October 2004;
- IWW-INFRAS, "External Costs of Transport, Accident, Environmental and Congestion Costs in Western Europe", March 2002;
- European Commission and European Investment Bank, RAILPAG - Railway Project Appraisal Guidelines, 2005.

2. Executive summary

This paragraph summarizes the main conclusions resulting from the analysis we performed. This section is incomplete without reference to, and should be read in conjunction with, the overall report, which is essential to fully understand the contents indicated below.

The Brenner Pass is one of the 30 major priority projects adopted by the European Council for the creation of the Trans-European Network - TEN: Berlin–Nuremberg–Munich–Verona–Naples rail link.

In this context, as a result of the significant increase in traffic in recent years –particularly, in road transportation– a radical improvement of the Munich-Verona corridor has been planned. It is important to point out that, currently, the Brenner Pass is the main Alpine corridor for road transport, while the same doesn't apply for rail transport.

The Project analyzed aims at contributing to the improvement mentioned above and involves the construction of a 55 km railway tunnel (24.3 km in Italy and 30.7 km in Austria) under the Brenner massif (BBT).

A Cost-Benefit Analysis (CBA) has been performed, in order to verify if the Project would represent an enhancement for the general welfare of the community. To this purposes, we compared two alternative scenarios: the first one assuming that the Project is carried out ("With Project"); the other one, assuming that the project is not realized ("Without Project").

The Cost-Benefit Analysis covers a period of 68 years: the planning and construction period corresponds to 18 years (2003-2020) and the concession period corresponds to 50 year (2021-2070).

Economic data have been computed over 68 years at their real value. As a consequence, the discount factors used to estimate the present value are based on real interest rates.

Prices and costs are at the 2006 values. Value consistency was achieved using the appropriate producer price index obtained from official statistics.

The freight and passenger traffic flows forecast are based on the ProgTrans traffic forecasts. The economic analysis has been performed comparing the freight and passengers flows resulting from the Trend scenario ("With Project" scenario) as opposed to the Minimum scenario ("Without Project" scenario).

The benefits analyzed (Consumer Surplus) were estimated on the basis of user cost savings, in terms of time savings and cost of transport savings connected with the Project realization. The savings valuation was performed in a differential way, by comparing the With Project scenario as opposed to the Without Project scenario, on the basis of the shadow prices of time and costs of transport estimates provided by the Company management on the basis of ProgTrans data.

The above-mentioned economic benefits for the users (Consumer Surplus) resulting from the Project realization correspond to € 92 mln in 2021 and increase to € 147 mln in 2066.

In addition, the analysis considers the Externalities connected to the Project realization. Such benefits are equal to the costs which the society incurs as a consequence of using transportation modes other than railway. In particular, the analysis considers the external costs resulting from air pollution, noise, accidents and traffic congestion.

The total external benefits, relevant to freight and passenger transport, are estimated to be € 63 mln in 2021 and to increase to € 283 mln in 2066.

The Project economic operating and maintenance costs (Producer Surplus) were calculated by deducting fiscal transfer from the financial operating and maintenance costs estimated by the Company management. For this purpose, the financial costs were disaggregated into two elementary components (la-

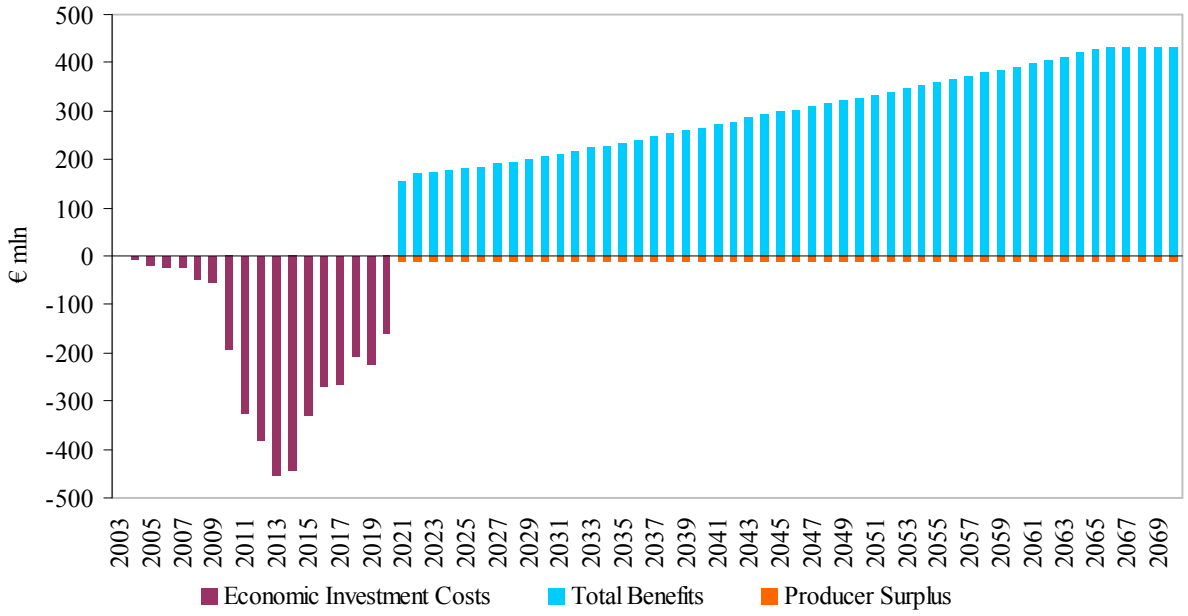
bour and other factors) and the appropriate conversion factors were determined on the basis of official statistical data and information provided by Company management. The annual economic operating and maintenance costs are equal to € 9.1 mln.

The sum of the Consumer Surplus, the Producer Surplus and Externalities, for each year in the time frame considered, produces the Project Net Benefits. Such benefits are equal to € 147 mln in 2021 and are expected to increase to € 420 mln in 2066.

The Net Benefits Flows were discounted by applying three different social discount rates, 0%, 2.5% and 8%; Social Surpluses obtained are, respectively, € 14,584 mln, € 5,256 mln and € 893 mln. Such values were compared with the Project economic investment costs.

To this purpose, the financial investment cost (equal to € 6,000 mln) was disaggregated into two elementary components (labour and other factors) and netted of fiscal transfer using the same approach applied to calculate the economic operating costs. As a result, the economic investment costs are equal to € 3,435 mln.

The following chart summarises the total economic flow of the Project:



The economic feasibility of the Project can be assessed by using the following synthetic indexes:

Index	Social discount rate		
	0%	2.5%	8%
ENPV	€ 11,147 mln	€ 2,435 mln	€ (1,000) mln
EIRR	4.73%	4.73%	4.73%
EBC ratio	4.2	1.9	0.5
EIMRR	4.27%	3.68%	2.64%

It generally appears that the Project realization contributes to the increase of the community welfare. The ENPV obtained from social discount rates equal to 0% and 2.5% is positive, while becomes negative in correspondence of a social discount rate of 8%. The positive contribution to the general welfare is also supported by the EIRR, the value of which can be considered satisfactory, given the technical and economical nature of the analyzed infrastructure.

The EBC ratio and the EIMRR confirm the ability of the Project to generate Net Benefits exceeding the economic investment costs incurred.

A sensitivity analysis was performed considering a 25% increase of the construction costs after 2006.

3. Cost-Benefit Analysis

The economic valuation of an infra-structural project is aimed at quantifying the incremental economic impact on general welfare (benefits and costs) resulting from the realization of the project.

In this context, the main methodology used is represented by the Cost-Benefit Analysis, according to which, a project is economically feasible if the increase of general welfare resulting from its completion is higher than the increase of welfare generated from the completion of alternative infra-structural projects.

The economic valuation is not limited to quantify monetary impacts, but it may also incorporate non-monetary items such as time, health and environmental quality. Consequently, this economic theory quantifies the increase of general welfare in terms of Social Surplus, defined as the sum of the Consumer Surplus, the Producer Surplus and Externalities.

The Consumer Surplus is estimated as the difference between the economic benefits obtained by the consumer for goods or services and the costs necessary to gain them. The cost is directly measurable in terms of the market price of the goods or services, while the economic benefit estimate is usually performed according to the Willingness-To-Pay, in other words, the maximum amount that a consumer is willing to pay to obtain such a benefit.

The Producer Surplus is defined as the difference between the variable costs related to the offer of goods or services and the corresponding financial revenue. The costs are considered as opportunity-costs of the goods and services necessary for production. Theoretically, these opportunity-costs are equal to the value of the goods and services that could be used for an alternative optimal production. In practice, financial variable costs are used to estimate economic costs.

Externalities are costs deriving from an economic activity that are not completely incorporated in the market prices, and thus affect not only the parts directly affected but also the entire community. In particular, the external costs of transport are those that affect the society as a whole, although they are not directly borne by the transport system itself. Such costs are:

- Environmental costs (e.g. damage produced by air pollution, climate changes, electromagnetic fields, etc);
- Road accident costs;
- Noise costs;
- Traffic congestion costs.

In general, the investment benefits will emerge over a long period of time, depending on the technical-economic life of the investment considered. As a consequence, the Social Surplus must be calculated according to the entire time frame of the Project.

In practice, the sum of the Consumer Surplus, the Producer Surplus and Externalities is calculated in each time period (year) determining the project Net Benefits. The Social Surplus is calculated by discounting the Net Benefits for each year to the base year by applying an appropriate social discount rate.

In symbols:

$$Social\ Surplus = \sum_{1}^{t} \frac{CS_i - PS_i \pm E}{(1+r)^i}$$

CS = Consumer Surplus
PS = Producer Surplus
E = Externalities
r = Social discount rate

Considering the intrinsic nature of the Cost-Benefit Analysis, the discount rate must be a social rate that represents:

- The individual's decision to obtain a specific service at the present time rather than postponing the acquisition to a future time;
- The willingness to use a part of the personal income available at the present time rather than investing it for future use;
- The different investment choices between current and future generations.

The determination of the social discount rate is discussed thoroughly in literature but a univocal solution has not yet been found. In practice, the social discount rates indicated by governmental agencies may be used or, alternatively, the social discount rate may be calculated on the basis of the financial free-risk rate.

The economic feasibility valuation performed through a Cost-Benefit Analysis compares the "With Project" scenario and the "Without Project" scenario. The comparison of the Social Surplus with the project economic investment makes it possible to validate the project realization.

When the project Net Benefits are higher than the corresponding opportunity-costs, the realization of the project generates a real increase of the general welfare against the *status quo* and consequently it should be pursued.

4. Methodological Approach

In accordance with the Engagement Letter dated June 5, 2007, we carried out an economic analysis to estimate the increase in general welfare resulting from the realization of the Project. The Costs-Benefits Analysis was performed comparing the "With Project" scenario and the "Without Project" scenario.

The economic analysis was performed on the basis of the following methodological approach:

- *Traffic flow projections:* on the basis of freight and passengers traffic studies and information provided by the Company management, we estimated the annual tons of goods and number of passengers transported through the BBT, during the concession period (until 2070);

- *Consumer Surplus analysis:* we estimated the Consumer Surplus on the basis of user's cost savings related to the Project realization. The main direct benefits are represented by time savings and cost of transport savings: the Project completion contributes to the general welfare, since it allows the users to reduce travelling times and costs to cross the Brenner;

- *Producer Surplus analysis:* we estimated the Producer Surplus calculating the operating and maintenance economic costs of the Project by eliminating fiscal transfers (corporate income tax, individual income tax, social security contributions, etc.) from the financial costs. The fiscal transfers were eliminated by applying specific conversion factors to the financial costs disaggregated into the following two elementary components: labour and other factors. This approach allows the comparison of the Project economic costs and benefits;

- *Externalities analysis:* we estimated the Project Externalities considering the external costs due to atmospheric pollution, noise, accidents and congested traffic. The evaluation of the external costs and their monetary quantification are based on the average external costs estimates of various transport modes released by official sources;

- *Social Surplus analysis:* we calculated the sum of the Consumer Surplus, the Producer Surplus and Externalities for each year in the time frame considered, obtaining the annual Project Net Benefits. Subsequently, we determined the Project Social Surplus discounting the Net Benefits to the base year, by applying an appropriate social discount rate;

- *Project economic feasibility analysis:* we assessed the project economic feasibility comparing the Social Surplus with the economic investment cost, discounted to the base year. The Project economic investment was estimated by eliminating the fiscal transfers (corporate income tax, individual income tax, social security contributions, etc.) from the financial investment cost. The Project economic feasibility was assessed on the basis of the following synthetic indexes:

    a) Economic Net Present Value (ENPV), i.e. the present value of costs and benefits annual flows;

    b) Economic Internal Rate of Return (EIRR), i.e. the discount rate which makes the ENPV equal to zero;

    c) Economic Benefit/Cost Ratio (EBC ratio), i.e. the ratio between the present value of Net Benefits and the present value of investment costs;

    d) Economic Immediate Rate of Return (EIMRR), i.e. the ratio between the first year Net Benefit and the investment costs updated to the same year.

- *Sensitivity analysis:* we performed an analysis to assess the steadiness of the Project economic return with respect to potential changes in investment costs.

5. Main assumptions

The analysis considers the Project as a whole, from planning and construction to the end of the concession, covering a total period of time of 68 years. The project timing is the following:

- Phase II: Planning and Approvals 2003-2006
- Pilot Tunnel Construction 2006-2012
- Main Tunnel Construction 2010-2020
- Operating Period 2021-2070

Economic data for the period 2007-2070 have been projected at their real value. As a consequence, discount factors used to estimate the present value, are based on real interest rates.

All prices and costs are at the 2006 values. When necessary, price consistency was achieved using the relevant producer price index obtained from official statistics.

The main assumptions are the following[1]:

- Length of the Tunnel (Innsbruck-Fortezza):
  - Railway segment length in the "With Project" scenario is equal to 55.0015 km (hereinafter "55 km"),
  - Railway segment length in the "Without Project" scenario is equal to 78 km,
  - Road segment length is equal to 73 km;
- A standard freight train has a net weight of 500 tons;
- Days of activity for freight trains are 250 per year;
- Days of activity for passengers trains are 365 per year;
- A standard Heavy Goods Vehicle (HGV) has a net weight of 15.9 tons;
- Days of activity for HGV are 365 per year;
- A standard car has an average occupancy rate equal to 2.7 passengers.

[1] Information provided by the Company management.

6. Traffic Flow Projections

In order to assess the future traffic flows during the operating period, the Company has relied upon several traffic studies. The most recent was performed by PROGNOS (currently ProgTrans) in 2001: "Potenziamento asse ferroviario Monaco-Verona: Galleria di Base del Brennero, Rapporto 2002". In addition, in May 2007, ProgTrans provided the Company with preliminary data of the updated traffic forecasts.

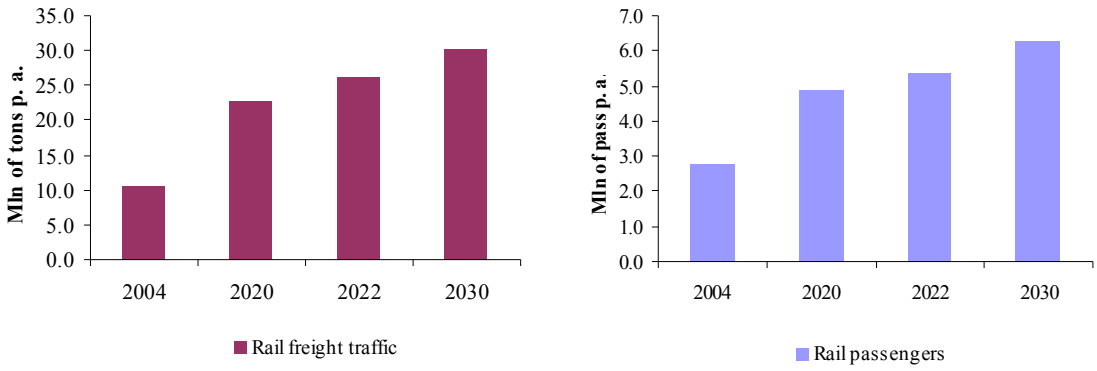
The traffic forecasts, based on the social-economic estimates, were developed in four different scenarios:

- *Trend scenario*, which considers the construction of the Brenner Tunnel;
- *Minimum scenario*, which does not consider the construction of the Brenner Tunnel but assumes the realization of the infrastructure that are to date a part of the general framework conditions of the transport policy;
- *Approval scenario*, which considers the construction of the Brenner Tunnel and the implementation of favourable rail transport policies;
- *Incidental scenario*, which considers the construction of the Brenner Tunnel and the closing of the S. Gottardo tunnel.

According to the Company management, the Trend scenario envisages the following traffic flows:

	2020	2022	2030
Annual freight flow by rail	22.8 mln of tons	26.2 mln of tons	30.2 mln of tons
Annual passengers flow by rail	4.9 mln	5.4 mln	6.3 mln

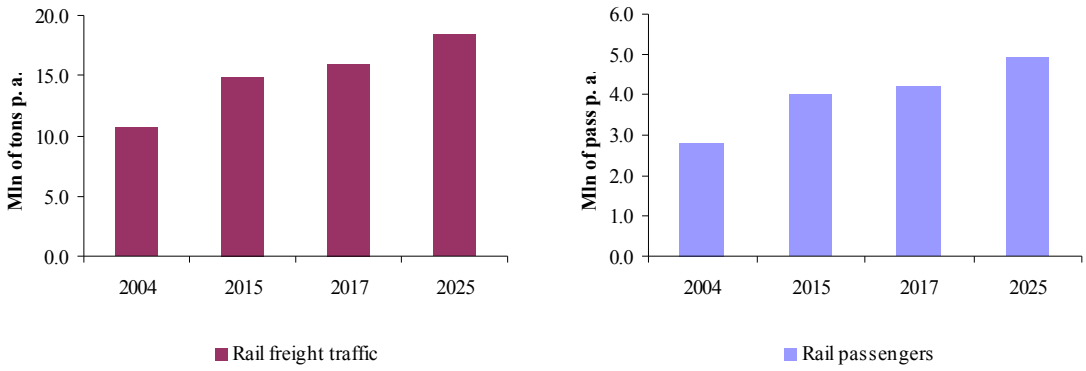
Trend Scenario – Freight and Passengers crossing the Brenner (2020-2030)



Source: BBT on ProgTrans data, 2007

In the Minimum scenario (without the Project), the traffic flows crossing the Brenner would amount to 15.9 million of tons of rail freight and 4.2 million passengers in 2017.

Minimum Scenario - Freight and Passengers crossing the Brenner (2015-2025)



Source: BBT on ProgTrans data, 2007

For the purposes of this analysis, the data above were used to estimate the traffic volumes crossing the Brenner during the Project timeframe.

In particular, the economic analysis was performed comparing the freight and passenger flows resulting from the Trend scenario ("With Project" scenario) as opposed to the Minimum scenario ("Without Project" scenario).

6.1. Freight traffic

Freight traffic (HGV AADT and number of freight trains) depends on various assumptions (total freight demand in the future, modal splits, capacity limits and the like).

The number of HGV on the motorway and freight trains on the railway has been calculated in accordance with the following assumptions.

6.1.1. Freight traffic in the With Project scenario

Total freight volume

In 2004, the total freight market over the Brenner was 42.2 million tons, of which 10.6 million tons carried by train and the remaining 31.5 million tons carried by road.

The Compound Annual Growth Rates ("CAGR") resulting from the traffic forecast provided by the management of the Company are the following:

	Until 2015	Until 2017	Until 2020	Until 2022	Until 2030	Thereafter
Rail - CAGR	3.1%	3.3%	12.8%	7.2%	1.8%	1.9%
Road - CAGR	1.9%	1.9%	-1.3%	1.8%	1.3%	1.4%

Source: E&Y calculations on ProgTrans data, 2007

As shown above, the management of the Company assumes that the annual long-term growth rate for rail and road freight traffic will be 1.9% and 1.4%, respectively.

Number of vehicles

The number of HGVs and freight trains crossing the Brenner (either over the Pass or through the Tunnel) has been calculated considering 15.9 tons of freight per HGV and 500 tons of freight per train.

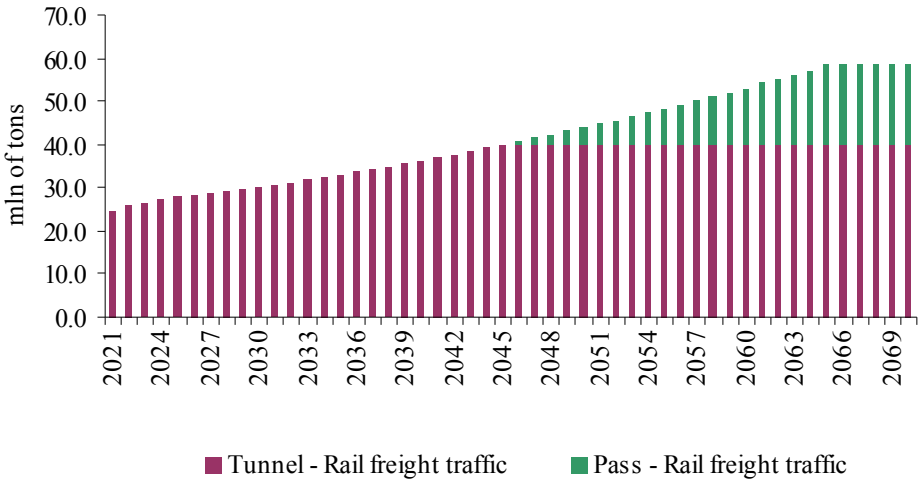
With the Project, the proportion of freight trains crossing the Brenner through the Tunnel rather than over the Pass (existing line) is assumed to be 100% until the Tunnel's capacity limit is reached. Thereafter, the eventual traffic in excess is assumed to cross the Brenner over the Pass (existing line).

Capacity limits

As indicated by the Company management, the total capacity of freight trains crossing the Brenner has been capped at 320 freight trains per day for the Tunnel and 148 freight trains per day for the Brenner Pass, and 12,000 HGVs per day.

The Tunnel will reach the target of 320 freight trains per day (40 mln tons p.a.) in 2045 whilst the Brenner Pass will reach the target of 148 freight trains per day (18.5 mln tons p.a.) in 2066. The following graphic shows the Brenner rail freight traffic evolution in the With Project scenario.

With Project scenario– Brenner rail freight traffic



Source: BBT on ProgTrans data, 2007

6.1.2. Freight traffic in the Without Project scenario

Total freight volume

The CAGR resulting from the traffic forecast provided by the management of the Company are the following:

	Until 2015	Until 2017	Until 2025	Thereafter
Rail - Annual growth rate	3.1%	3.3%	1.8%	1.2%
Road - Annual growth rate	1.9%	1.9%	1.3%	1.0%

Source: E&Y calculations on ProgTrans data, 2007

As shown above, the management of the Company assumes that the annual long-term growth rate for rail and road freight traffic will be 1.2% and 1.0%, respectively.

Number of vehicles

The number of HGVs and freight trains crossing the Brenner Pass has been calculated considering 15.9 tons of freight per HGV and 500 tons of freight per train.

Capacity limits

As indicated by the Company management, total capacity of freight trains crossing the Brenner over the Pass is capped at 148 trains per day.

6.2. Passenger traffic

The Project Costs-Benefits Analysis was performed considering the passenger rail traffic as well.

6.2.1. Passenger Rail Traffic in the With Project scenario

Passenger rail traffic was split into three categories: Eurocity, Regional and Other.

Eurocity trains are the only trains that travel through the Tunnel. As a consequence, the analysis considers this category only.

The forecast of Eurocity trains traffic in the period analyzed is based on a Company management assumption, according to which the number of trains per day will change at the completion dates of the relevant works which increase the capacity of the railway connections.

These forecasts are as follows:

N. Eurocity trains per day	Until 2010	Until 2020	Thereafter
Innsbruck – Fortezza (Pass)	20	38	14
Innsbruck – Fortezza (Tunnel)	0	0	42

Source: Data provided by the Company management

In 2004, the annual volume of passenger crossing the Brenner by train was 2.8 mln passengers. The CAGR resulting from the traffic forecast provided by the management of the Company are the following:

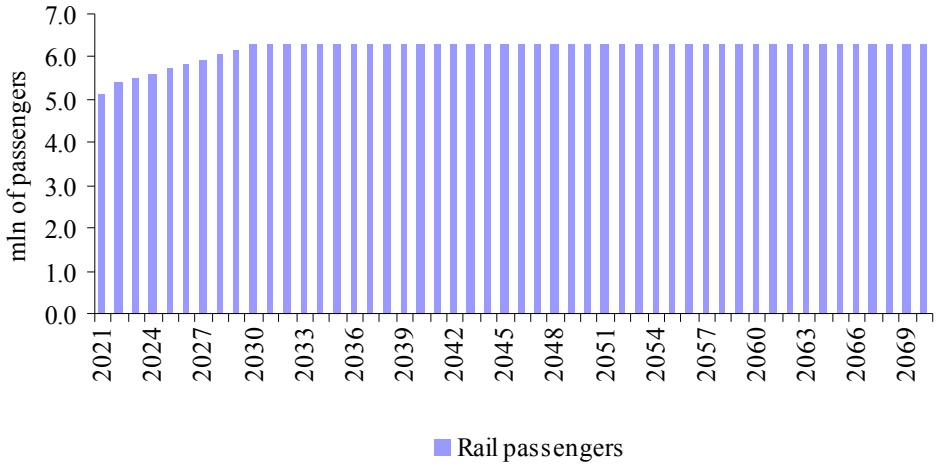
	Until 2015	Until 2017	Until 2020	Until 2022	Until 2030	Thereafter
Annual growth rate	3.3%	2.5%	5.3%	5.0%	1.9%	0%

Source: E&Y calculations on ProgTrans data, 2007

As shown above, the management of the Company assumes a zero annual long-term growth rate for passenger traffic.

The following graphic summarizes the Brenner rail passenger traffic flow in the With Project scenario.

With Project scenario – Brenner rail passenger traffic flow



Source: BBT on ProgTrans data, 2007

6.2.2. Passenger Rail Traffic in the Without The Project scenario

On the basis of the information provided by the Company management, the forecast of Eurocity trains in the Without Project scenario has been assumed to be equal to the With Project scenario until 2020. After 2020, the number of Eurocity trains was assumed to be equal to 38.

N. Eurocity trains per day	Until 2010	Until 2020	Thereafter
Innsbruck – Fortezza (Pass)	20	38	38

Source: Data provided by the Company management

The CAGR resulting from the traffic forecast provided by the management of the Company are the following:

	Until 2015	Until 2017	Until 2025	Thereafter
Annual growth rate	3.3%	2.5%	1.9%	0%

Source: E&Y calculations on ProgTrans data, 2007

As shown above, the management of the Company assumes a zero annual long-term growth rate for passenger traffic.

7. Consumer Surplus

In a Cost-Benefit Analysis of infrastructures and/or transport systems, the Consumer Surplus is usually estimated on the basis of the "user savings" criteria, by calculating the generalized cost of transport. Overall, the generalized cost of transport refers to a single user and represents all the economic benefits that the user can obtain from transport, net of the corresponding economic costs to obtain them.

The generalized cost of transport calculation is usually based on three fundamental items:

1. Transport time. A transport project contributes to the general welfare if it is able to reduce the average transport time in relation to an alternative mode of transport used in absence of the project. The benefits could affect both the transportation project users and the non-users since traffic congestion is reduced and the efficiency of other transportation modes is increased;

2. Cost of transport. A transport project contributes to the general welfare if it is able to provide a cheaper transportation mode with respect to an alternative mode of transport used in absence of the project. The cost savings could result, for example, from a modal substitution (train vs. car), reduced traffic congestion and reduced distances; in general, from each of those events which are able to reduce the monetary user transport costs;

3. Service Quality. A transport project contributes to the general welfare if it is able to offer a higher quality service (higher reliability, higher comfort, etc.) with respect to an alternative mode of transport used in absence of the project.

For purposes of this analysis, the Consumer Surplus was estimated as the sum of:

- *Time savings*, deriving from the reduction of the time spent to pass through the Brenner (for both, freight and passenger trains) as a consequence of the Project realization;

- *Cost of transport savings*, deriving from the reduction in the unitary cost of transport of by train mode (both freight and passenger trains) that would have travelled through the existing railway in the Without Project scenario and that will be shifted through the Tunnel as a consequence of the Project completion;

- *Increase in the cost of transport*, due to the higher cost of transport of trains travelling through the Tunnel compared to the traffic that would have travelled through the motorway (both freight and passenger traffic).

The Consumer Surplus valuation is performed comparing the With Project scenario and the Without Project scenario.

The economic valuation of consumer benefits was performed on the basis of shadow prices of time and cost of transport estimates provided by the Company management on the basis of ProgTrans data and summarized in the following table.

1999 prices

	Time Shadow price	Cost of transport	
	€/hour With/Without Project	€/km Without Project	€/km With Project
Freight train	68.2	31.9	31.9
HGV	34.1	0.57	0.57
Train passenger	9.15	0.09	0.09
Car passenger	9.15	0.1	0.1

Source: BBT on ProgTrans data, 2007

7.1. Freight transport

7.1.1. Time savings

Time savings were estimated on the basis of the average travelling time required to pass through the Brenner for both freight trains and HGV.

Freight train:

	Time in minutes		
Segment	**Current**	**2012 Brenner Pass**	**2021 BBT**
Innsbruck – Fortezza	100	85	30

Source: data provided by the Company management

HGV:

	Km	Time in minutes
Segment	**Current/2021 – Brenner Pass**	**Current/2021 – Brenner Pass[2]**
Innsbruck – Fortezza	73	87.6

Source: data provided by the Company management

The economic valuation of the time saving benefits connected to the Project realization was performed considering:

- The monetary valuation of time savings obtained by trains that would have travelled through the existing railway in the Without Project scenario and that are shifted through the Tunnel with the Project realization;
- The monetary valuation of time savings obtained by shifting freight volumes from road to railway with the Project realization.

On the basis of the data provided by Company management, the time saving from Innsbruck to Fortezza with a freight train in the With Project scenario with respect to the Without Project scenario is estimated to be 55 minutes.

The total value of time saving benefits obtained by applying freight train and HGV time *shadow prices* to time savings resulting from the comparison between With Project and Without Project scenarios is equal to € 29.8 mln in 2021. This value increases to the level of € 148 mln, which is achieved in 2066.

7.1.2. Cost of transport savings/increase

The savings/increase in the cost of transport has been calculated on the basis of the distance between Innsbruck and Fortezza in respect of the use of both freight trains and HGV.

Freight train:

	Km		
Segment	**Current Length**	**2021 Length at Brenner Pass**	**2021 Length through BBT**
Innsbruck – Fortezza	78	78	55

Source: data provided by the Company management

[2] Time calculated assuming a HGV average speed equal to 50 km/h – Albo Nazionale Autotrasportatori.

The economic valuation of the cost of transport savings/increase as a result of the Project realization has been performed considering:

- The monetary valuation of the cost of transport savings obtained by reduction of distance travelled by trains that would have travelled through the existing railway in the Without Project scenario and that are shifted through the Tunnel with the Project realization;
- The monetary valuation of the increase in the cost of transport caused by shifting freight volumes from road to railway with the Project realization.

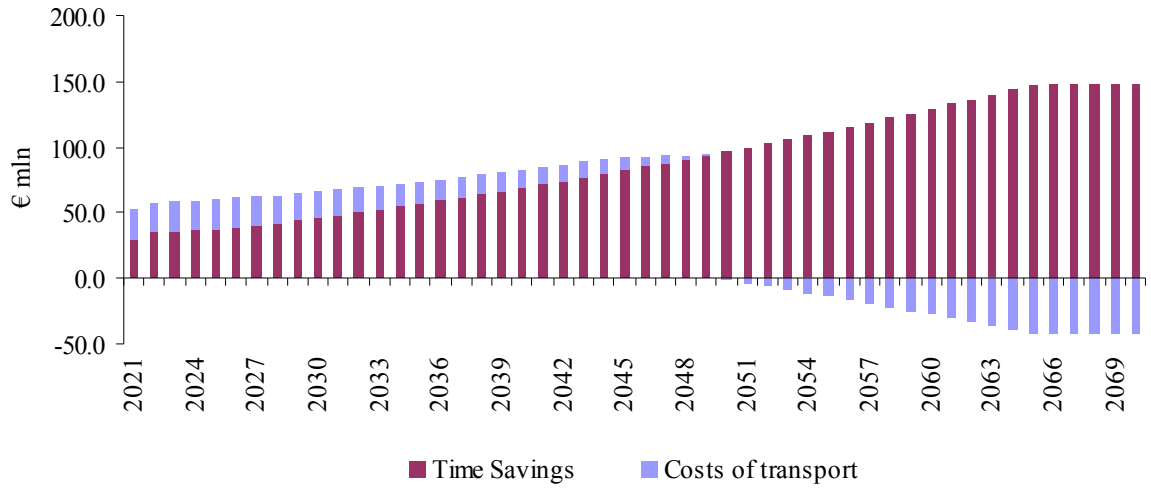
On the basis of data provided by Company management, the Project completion will allow to reduce the railway distance between Innsbruck and Fortezza by 22.9985 km.

The comparison between the costs of transport, calculated by applying €/km freight train and HGV costs of transport to the relevant distances, in the With Project scenario and the Without Project scenario will cause a reduction in the cost of transport from 2021 (€ 22.2 mln) to 2049 (€ 0.7 mln) and an increase in the cost of transport for the rest of the Project time frame. The latest cost variation is equal to € 1.8 mln in 2050 increasing to € 43.1 mln in 2066.

7.1.3. Total freight transport benefits

Total freight transport benefits evolution and composition are shown in the following graphic.

Total freight benefits – trend and composition



Source: E&Y calculation on data provided by BBT management

Annual freight transport benefit will increase from € 52 mln in 2021 to € 104.9 mln in 2066.

7.2. Passenger transport

7.2.1. Time savings

Time savings were estimated on the basis of the average travelling time required to travel in the different segments under analysis for both passenger trains and cars.

Passenger train:

	Time in minutes			
Segment	**Actual**	**2012 Brenner Pass**	**2021 BBT**	**Time saving BBT vs. Pass**
Innsbruck – Fortezza	83	73	20	53

Source: data provided by the Company management

Car:

	Time in minutes	
Segment	**Current/2021 - Brenner Pass[3]**	**Time saving BBT vs. Car**
Innsbruck – Fortezza	39.8	19.8

Source: data provided by the Company management

The economic valuation of time saving benefits connected to the Project realization was performed considering:

- The monetary valuation of time savings obtained by passengers that would have travelled through the existing railway in the Without Project scenario and that are shifted through the Tunnel with the Project completion;
- The monetary valuation of time savings obtained by shifting passengers from road to railway with the Project completion.

As above-mentioned, the time saving to cover the Innsbruck-Fortezza distance by a passenger train in the With Project situation in comparison with the Without Project situation is estimated to be 53 minutes.

The total value of time saving benefits obtained by applying to train passengers and car passengers the time *shadow prices* multiplied by the time savings is equal to € 33.9 mln in 2021. This value will increase to € 37.6 mln in 2030 and will remain steady until 2070.

7.2.2. Cost of transport savings

Cost of transport savings were calculated on the basis of the distances travelled in the Innsbruck-Fortezza segment by both passenger trains and cars (see paragraph 7.1.2.).

The economic valuation of the cost of transport saving benefits achievable with the Project realization was performed considering:

- The monetary valuation of cost of transport savings obtained by the reduction of distance travelled by passenger trains that would have travelled through the existing railway in the Without Project scenario and that will be shifted through the Tunnel with the Project completion;
- The monetary valuation of the increase in the cost of transport caused by shifting passengers from road to railway with the Project completion.

As indicated above, the Project completion makes it possible to reduce the rail distance between Innsbruck and Fortezza by 22.9985 km.

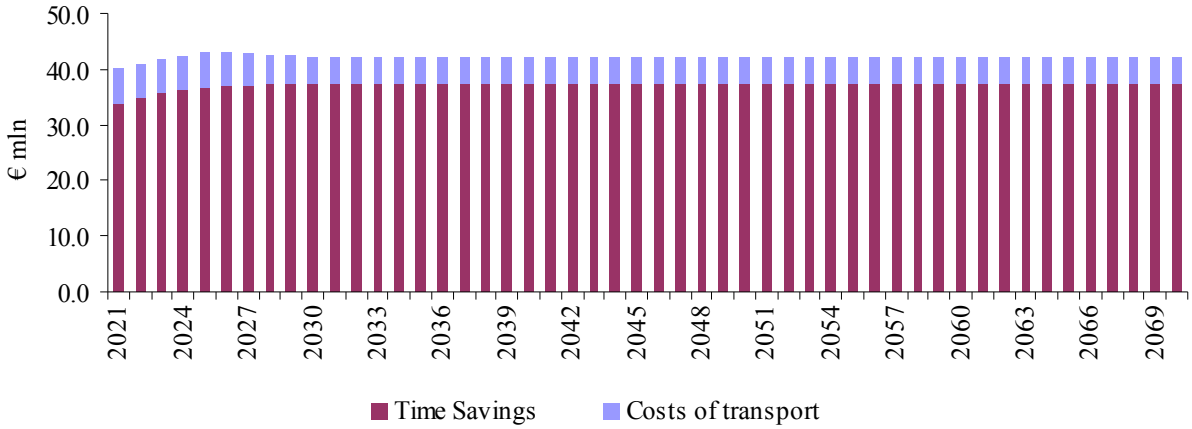
The comparison between the With Project scenario and the Without Project scenario will produce a reduction of the cost of transport of € 6.5 mln in 2021 and € 4.5 mln in 2030 and will remain constant until 2070.

[3] Times calculated by assuming an average car speed equal to 110 km/h (source: Company management).

7.2.3. Total passengers transport benefits

Total passengers transport benefits trend and composition are shown in the following graphic.

Total passengers benefits – trend and composition



Source: E&Y calculation on data provided by the Company management

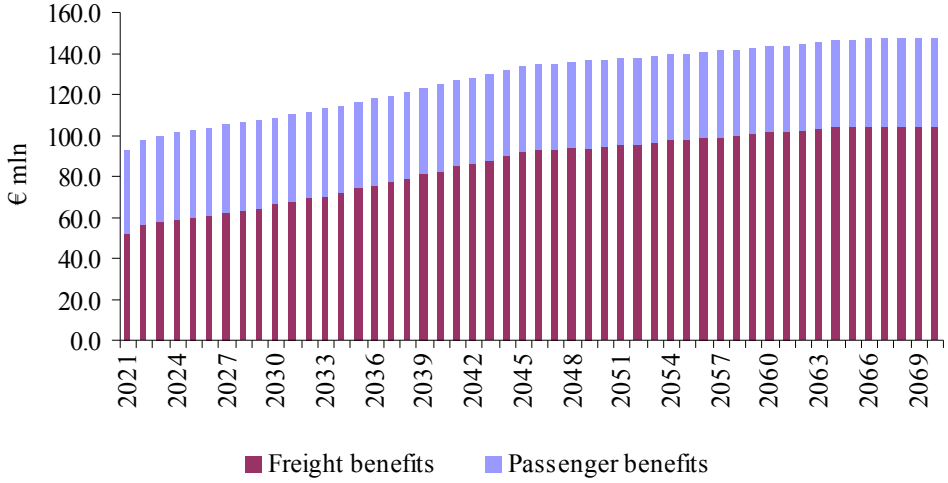
Annual passengers transport benefits has been estimated to be € 40.4 mln in 2021 and € 42.1 mln in 2030 and they will remain steady over the rest of the Project life.

7.3. Consumer Surplus

Total annual Consumer Surplus deriving from the Project completion has been calculated as the sum of total freight and passengers transport benefits.

Consumer Surplus increases from € 92.4 mln in 2021 to € 146.9 mln in 2066, as represented in the following graphic.

Consumer Surplus – trend and composition



Source: E&Y calculation on data provided by the Company management

8. Producer Surplus

In order to estimate the Producer Surplus, Project economic operating and maintenance costs were determined on the basis of the financial operating and maintenance costs estimated by the Company management, including both corporate costs and track, signalling and other equipment replacements.

The annual financial cost breakdown, not including VAT, is shown in the following tables.

Financial operating and maintenance costs	Amounts €/mln
Labour	10.1
Materials	6.0
Other costs	1.4
Total	**17.5**

Source: E&Y on data provided by Company management

Economic costs were calculated by deducting fiscal transfers from financial costs, according the following formula:

$$EC = FC - T$$

where ***EC*** stands for economic cost, ***FC*** for financial cost and ***T*** for total transfers.

By assuming the fiscal transfers weight on the total financial costs to be equal to an amount ***F*** (where ***F = T/FC***), the total economic cost is equal to:

$$EC = FC \times (1 - F)$$

where ***(1 – F)*** is defined as the "Conversion Factor".

In estimating the economic costs, the following fiscal transfers were considered:

1. Corporate taxes;
2. Income taxes on individuals;
3. Social contributions;
4. Excise duties on energy products.

The burden of corporate income taxes on national Gross Value Added (hereinafter GVA) for both Italy and Austria was taken as a proxy of the incidence of corporate taxes on costs. The following table shows the incidence for both Italy and Austria.

	Corporate income tax (as % of GVA)
Italy	2.62%
Austria	2.67%

Source: E&Y on Eurostat data (3-year average 2003-2005)

The average incidence of personal income taxes was assumed to be equal to 26.07% in Italy and to 20.25% in Austria. These tax rates result from the ratio between total annual personal income taxes and total annual compensation of employees in the two countries[4].

The incidence of social contributions was assumed to be 31.55% in Italy and 32.68% in Austria. These rates result from the ratio between total annual social contributions and total annual compensation of employees in the two countries[5].

The incidence of excise duty on energy products has been assumed to be 14.32% in Italy and 14.55% in Austria. In the two countries, this percentage was calculated by weighting the incidence of the excise tax on oil by the incidence of fuel costs on the average operating cost of a heavy truck (excluding labour costs)[6].

In order to correctly apply Conversion Factors, the financial costs were drilled down into the following elementary components:

1. Labour;

2. Other factors.

In particular, the incidence of the labour component on the total cost was obtained both on the basis of the information directly provided by the Company management and by relying upon the "National Accounts by 31 branches" tables available for both Italy and Austria. The latter tables provide an indication of the percentage incidence of total compensation of employees on the total Gross Value Added produced by each NACE branch[7].

For each elementary component, we calculated the appropriate Conversion Factor, by eliminating the incidence of transfers. Two different Conversion Factors were applied to "other factors" costs depending on whether the costs were related to "Transport and rents" rather than to any other cost category[8]. The Conversion Factors obtained are indicated in the following tables.

Italy – Conversion factors

	Labour	Other factors Other categories	Other factors Transport and rents
Cost	1.000	1.000	1.000
Corporate tax incidence	0.026	0.026	0.026
Personal Income taxes /Social contributions incidence	0.576		
Excise duties on energy			0.143
Conversion Factor	**0.398**	**0.974**	**0.831**

[4] Source: E&Y calculation on Eurostat data (3-year average 2003-2005).

[5] Ibid.

[6] Albo degli Autotrasportatori (2006).

[7] For-the purpose of this analysis, 3-year average (2003-2005) Eurostat data was considered.

[8] This distinction is only relevant for the application of the Conversion Factors to the investment financial costs (cf. Section 11)

Austria – Conversion Factors

	Labour	Other factors Other categories	Other factors Transport and rents
Cost	1.000	1.000	1.000
Corporate tax incidence	0.027	0.027	0.027
Personal Income taxes /Social contributions incidence	0.529		
Excise duties on energy			0.145
Conversion Factor	**0.444**	**0.973**	**0.828**

The economic operating and maintenance costs were calculated by applying the appropriate Conversion Factor to the basic components of the financial costs.

The economic costs (Producer Surplus) are steady during the Project time frame and equal € 9.1 mln.

9. Externalities

In recent decades, the external costs of transport have represented an increasingly important issue in the political debate of many European countries. Externalities are frequently taken into consideration in the decision-making processes involving infrastructure development, the transport price policy and the environmental policy.

The 2001 European Commission White Paper -*"European transport policy for 2010: time to decide"*- recognizes the complexity of the problems to be solved in order to implement a sustainable transportation system in the next 30 years. The gradual internalization of external costs is the solution identified in order to reach a balance between the different modes of transport for both freight and passengers.

In this framework, the Cost-Benefit Analysis considers the benefits resulting from the reduction of external costs obtained with the Project realization.

External costs or externalities are costs relating to the use of means of transport, which are not included in the market prices and which are borne not only by transportation system users but weigh on the society as a whole and on the relevant environment.

According to the European Union suggestions as well as leading specialized studies, the Cost-Benefit Analysis considered the main externalities, summarized as follows:

- *Air pollution*: damages caused by vehicle emissions;
- *Noise*: undesired sounds and vibrations. Motor vehicles cause various types of noise, including engine acceleration, tire/road contact, braking and horns. The effects of noise pollution are damaging the human health. Macroeconomic effects include a decrease in the ability to work, the increase of medical costs and a general reduction in welfare;
- *Accidents*: damages caused by vehicles collisions. The main costs borne by society include insurance costs, legal fees and emergency interventions, death, temporary/permanent disability and hospitalization costs.
- *Congestion*: damages caused by traffic. The costs for society can be divided into direct costs, like the cost of wasted time, the increase in oil consumption, the increase in maintenance costs and the increase in pollution, and indirect costs, like costs caused to others by delays and environmental costs.

The economic valuation of externalities connected to the Project completion has been performed considering:

- The reduction of external costs related to the transportation of incremental flows of freight and passengers by train rather than by road;
- The reduction of external costs of rail transport arising from the reduction of the distance in the Innsbruck-Fortezza segment.

9.1. Economic valuation of external costs

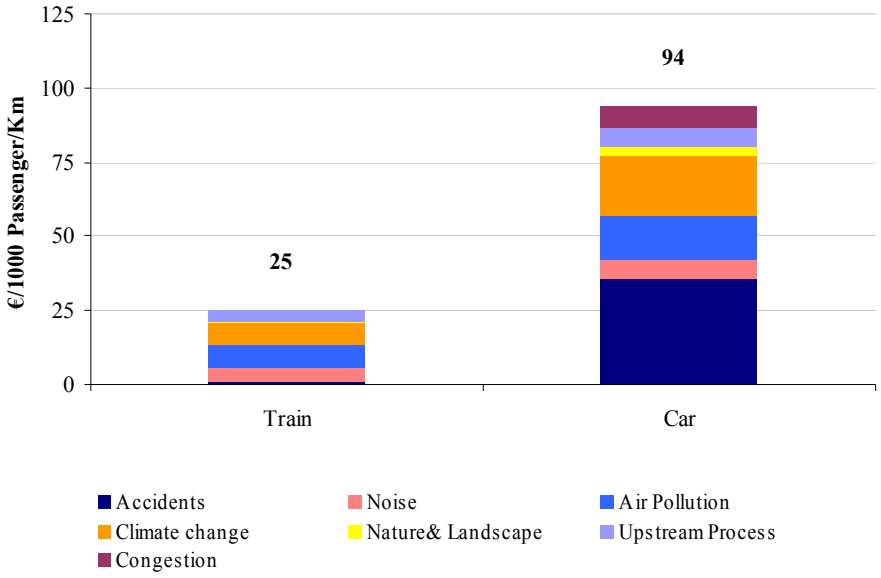
The monetary quantification of the impact of external costs has been performed considering the proper methodology according to the main studies and research works available in the international literature.

Among these sources, the monetary valuation of external costs guideline included in the 2001 European Commission White Paper -*"European transport policy for 2010: time to decide"*[9] has been se-

[9] Updated data were drown from the Railway Project Appraisal Guidelines (RAILPAG - European Commission and European Investment Bank, 2005). In order to express those data at 2006 price level, we have applied the producer price index obtained from Bloomberg.

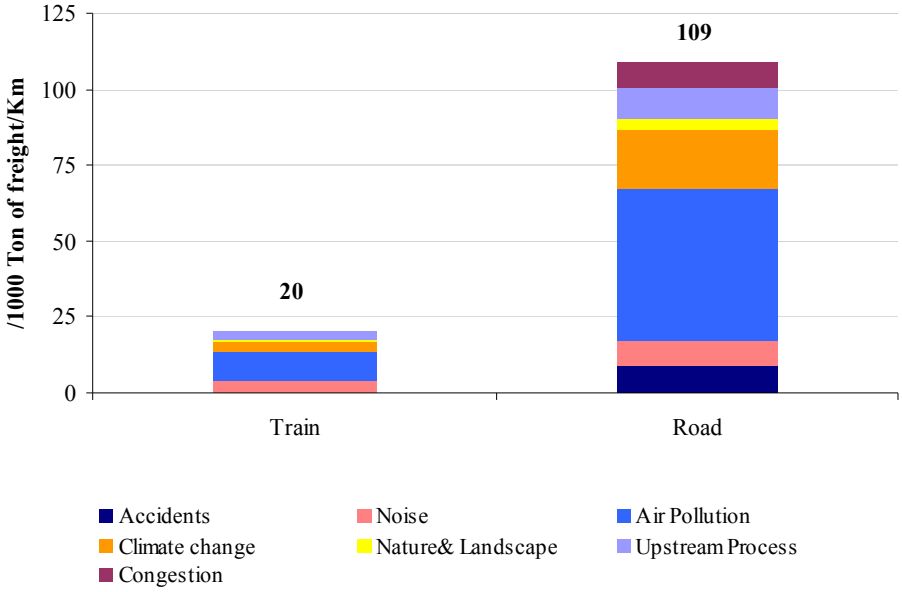
lected, because it is specifically conceived to assess a trans-national project on a European scale. The following graphics show the average external costs valuation, by transportation mode and by category of cost.

Average external cost 2006 (EU – 17) by transportation mode and by category of cost: Passengers



Source: E&Y calculation on INFRAS/IWW data, 2000 and 2004.

Average external cost 2006 (EU – 17) per transportation mode and category of cost: Freight



Source: E&Y calculation on INFRAS/IWW data, 2000 and 2004

The valuation of the external benefits, obtained from the Project completion, has been calculated in terms of external costs reduction resulting from railway transport of the incremental passengers and freights flows forecast in the With Project scenario in comparison with the Without Project scenario. Such approach is in line with the aim with the European Commission's strategies aimed at achieving a

better equilibrium between the different transportation modes, by encouraging the use of trains to transfer passengers and, especially, for for medium and long distances freight transport[10].

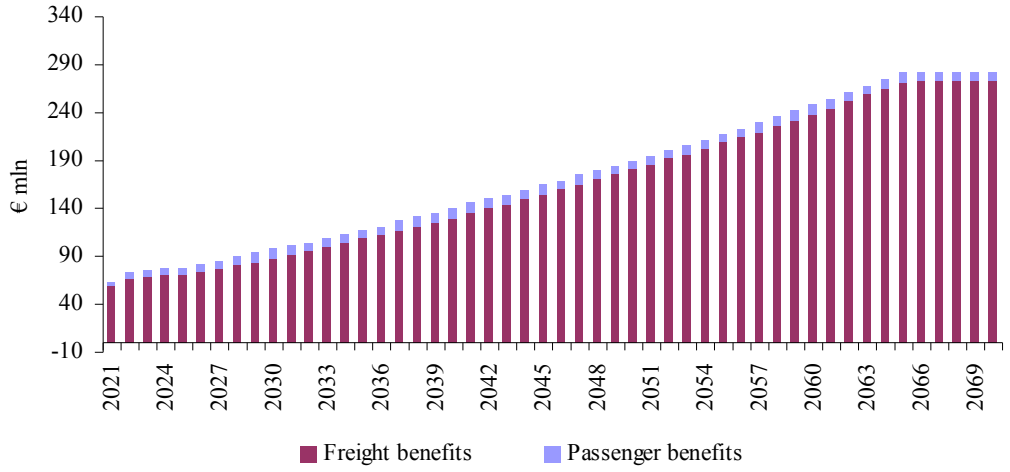
The external benefits have been calculated as the difference between the external costs associated with road transportation and the corresponding external costs for transportation by rail. The following table shows the external costs in terms of passenger/km and ton/km resulting from the transportation by road and by railway.

Value in € (2006)	Passenger/Km		Freight ton/Km	
	Car	Train	Road	Train
External cost	0.094	0.025	0.109	0.020

The additional benefits related to the reduced distance of the Innsbruck-Fortezza rail segment was assessed in monetary terms, by calculating the lower external costs of rail transport resulting from the shifting of passengers and goods from the existing line to the Tunnel.

Total freight and passengers external benefits evolution are shown in the following graphic.

Freight and passengers external benefits



Source: E&Y calculation

External benefits increase from € 63.4 mln in 2021 to € 282.6 mln in 2066.

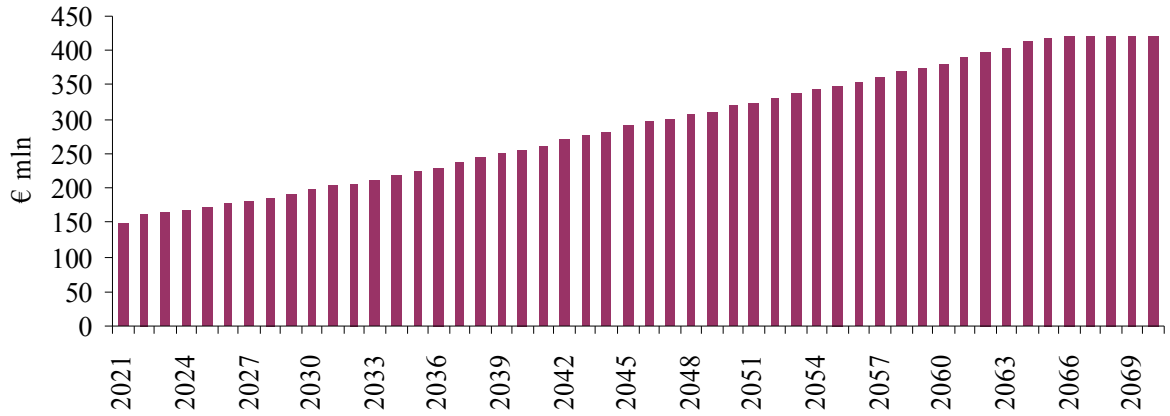
[10] The Gothenburg European Council pointed out that *"a sustainable policy should tackle… the full internalisation of social and environmental costs. Action is needed to bring about a significant decoupling of transport growth and GDP growth, in particular by a shift from road to rail…"*

10. Social Surplus

Social Surplus has been calculated by discounting the Project Net Benefits to the analysis base year, by applying an appropriate social discount rate.

The evolution of the Project Net Benefit, calculated as the sum of the Consumer Surplus, the Producer Surplus and Externalities, is indicated in the following graphs (the details are shown in Annex I).

Economic Net Benefits



Source: E&Y calculation

Project Net Benefits increase from € 146.8 mln in 2021 to € 420.5 mln in 2066.

Theoretical literature and international practice show a wide range of approaches in defining and determining the value of the social discount rate to adopt. International experience is wide and involves different countries and international organizations. In some cases, the discount rate is considered to be equal to the return on long-term free risk securities.

As a consequence of the uncertainties that characterize the methodology for determining the social discount rate used to discount to the base year the Project Net Benefits of each year, "a scenario" analysis for the Project economic analysis was adopted, using three different discount rates consistently with the rates used in similar studies:

- 0% - social discount rate representing a current consumer propensity equal to his or her future propensity to consume;
- 2.5% - social discount rate representing the lower bound of the range identified as applicable to the railway sector by the EC and EIB[11];
- 8% - social discount rate representing the upper bound of the range identified as applicable to the railway sector by the EC and EIB[12].

As previously discussed, the above represent real rates, net of expected long-term inflation.

The time frame used in the discount process was assumed to be equal to 64 years (remaining planning and construction period equal to 14 years, concession period equal to 50 years).

[11] European Commission and European Investment Bank, RAILPAG - Railway Project Appraisal Guidelines, 2005.

[12] Ibid.

Project Social Surplus, calculated by adopting the different social discount rates, is:

	Social discount rate		
	0%	**2.5%**	**8%**
Social Surplus (€ mln)	14,584	5,256	893

11. Economic Feasibility

11.1. Economic investment cost

Economic investment costs were calculated by eliminating the fiscal Transfers from the financial costs, following the same approach used for economic operating and maintenance costs.

Fiscal Transfers were eliminated by applying specific Italian and Austrian Conversion Factors to financial investment costs, disaggregated into the elementary components (labour and other factors) and broken-down *"pro quota"* between Italy and Austria on the basis of the length of the Tunnel in the two territories.

In particular, the incidence of the labour component on the total cost was obtained both on the basis of the information directly provided by the Company management and by relying upon the "National Accounts by 31 branches" tables available for both Italy and Austria. The latter tables provide an indication of the percentage incidence of total compensation of employees on the total Gross Value Added produced by each NACE branch[13].

The table below shows the total financial investment costs for the project.

Investment	Amount (€ mln)
BBT construction	
• Planning and Approvals	90
• Pilot Tunnels	430
• Main Tunnel	5.480
Total	**6.000**

The investment costs details and the corresponding breakdown into elementary components are indicated below.

Phase II - Planning and Approvals costs

(€ mn, real as at 2006 prices)	2003	2004	2005	2006	2007	2008	Total
Internal costs	1.0	3.5	4.5	3.4	3.2	0.7	**16.3**
Approval procedures	0.1	1.7	5.7	9.1	4.0	0.2	**20.8**
Monitoring and soil/site exploration and contingency	0.1	5.4	21.6	2.8	1.0	7.3	**38.2**
Premises	-	0.0	0.1	0.1	2.4	0.0	**2.6**
Project organization & basics	0.0	2.2	3.5	4.4	1.9	0.1	**12.2**
Total	**1.2**	**13.0**	**35.3**	**19.7**	**12.4**	**8.3**	**90.0**

The items above have been disaggregated into basic components on the basis of the following percentages:

[13] For-the purpose of this analysis, 3-year average (2003-2005) Eurostat data was considered.

- Internal costs[14]:

  1. Labour 69.7%
  2. Other costs 30.3%

  Other costs were disaggregated into the basic components as shown below:

Elementary components	Italy	Austria
Other costs	**All NACE branches**	
Labour	44.8%	55.0%
Other factors	55.2%	45.0%

- As indicated by the Company management, approval procedure costs were assumed entirely as labour costs for planning, engineering and economic studies;
- Monitoring and soil/site exploration and contingency costs were broken-down into elementary components on the basis of the following percentages[15]:

  1. Labour 45%
  2. Materials 55%

  Materials were disaggregated into the basic components as shown below:

Elementary components	Italy	Austria
Materials	**Branch: Average Value (*)**	
Labour	59.3%	62.8%
Other Factors	40.7%	37.2%

(*) Average of following branches: "Manufacture of machinery and equipment n.e.c." and "Manufacturing n.e.c."

- As indicated by the Company management, premises were assumed entirely as other factors as they refer to land purchases.
- Project organization & basic costs were disaggregated into the basic components on the basis of the other internal costs incidences.

Pilot Tunnel costs

(€ mln, real at 2006 prices)	2006	2007	2008	2009	2010	2011	2012	Totals
Construction costs in Austria	11.2	16.7	44.6	55.8	55.8	39.1	16.7	**239.9**
Construction costs in Italy	8.8	13.3	35.4	44.2	44.2	30.9	13.3	**190.1**
Total	**20.0**	**30.00**	**80.0**	**100.0**	**100.0**	**70.0**	**30.0**	**430.0**

The items above were disaggregated into basic components on the basis of the following percentages:

[14] These percentages were provided by Company management.

[15] Ibid.

- Construction costs were broken-down into elementary components on the basis of the following percentages[16]:

  1. Labour 31.9%
  2. Transport and rents 16.0%
  3. Materials 43.2%
  4. Other services 8.9%

  The above costs, except for Labour costs, were disaggregated into the basic components, as shown below:

Elementary components	Italy	Austria
Transport and rents	**Branch: Transport, storage and communication**	
Labour	43.7%	56.9%
Other Factors	56.3%	43.1%
Materials	**Branch: Average Value (*)**	
Labour	59.3%	62.8%
Other Factors	40.7%	37.2%
Other services	**All NACE branches**	
Labour	44.8%	55.0%
Other Factors	55.2%	45.0%

(*) Average of following branches: "Manufacture of machinery and equipment n.e.c." and "Manufacturing n.e.c."

Main Tunnel costs

Items	Values (€ mln)
1 - Main civil works	3,770.0
2 - Mechanical & Electrical	505.4
3 - Track	178.6
4 - Train Protection	116.0
5 - Project supervision	410.0
6 - Contingency	500.0
Total	**5,480.0**

- Main civil works were broken-down into elementary components on the basis of the following percentages[17]:

  1. Labour 28.7%
  2. Transport and rents 17.3%

[16] Ibid.

[17] Ibid.

3. Materials 47.6%

4. Other services 6.4%

The above costs, except for Labour costs, were disaggregated into the basic components on the basis of the Pilot Tunnel costs incidences.

- Mechanical & Electrical:

Elementary components	Italy	Austria
Materials	**Branch: Manufacture of electrical and optical equipment**	
Labour	61.0%	68.4%
Other Factors	39.0%	31.6%

- Track:

Elementary components	Italy	Austria
Materials	**Branch: Manufacture of basic metals and fabricated metal products**	
Labour	55.5%	55.0%
Other Factors	44.5%	45.0%

- Train protection:

Elementary components	Italy	Austria
Materials	**Branch: Manufacture of transport equipment**	
Labour	80.1%	52.4%
Other Factors	19.9%	47.6%

- As indicated by the Company management, project supervision costs were assumed entirely as labour costs;
- Contingency reserve for unknown geo-technical conditions: it was assumed that this cost is associated to the main Tunnel works and it was disaggregated into basic components on the basis of main Tunnel costs incidences.

11.2. Economic feasibility of the Project

The economic feasibility of the Project was assessed by using the synthetic indexes defined in the previous paragraph 4. The following table summarizes the results obtained[18].

Index	Social discount rate		
	0%	2.5%	8%
ENPV	€ 11,147 mln	€ 2,435 mln	€ (1,000) mln
EIRR	4.73%	4.73%	4.73%
EBC ratio	4.2	1.9	0.5
EIMRR	4.27%	3.68%	2.64%

[18] Already borne Planning & Approvals costs (i.e. costs borne between 2003 until 2006) were capitalized at the EIRR.

The positive ENPV, obtained with social discount rates equal to 0% and 2.5% shows that the Project realization increases the community welfare. Such increase is supported by an EIRR value, which shows a satisfactory Project economic return considering the type and economical-technical life of the analyzed infrastructure.

The EBC ratio and the EIMRR confirm the capacity of the Project to generate Net Benefits, which allow a recovery of the economic investment costs.

It generally appears that the Project realization contributes to the increase of the community welfare. The ENPV obtained from social discount rates equal to 0% and 2.5% is positive, while becomes negative in correspondence of a social discount rate of 8%. The positive contribution to the general welfare is also supported by the EIRR, the value of which can be considered satisfactory, given the technical and economical nature of the analysed infrastructure.

The EBC ratio and the EIMRR confirm the ability of the Project to generate Net Benefits exceeding the economic investment costs incurred.

12. Sensitivity Analysis

In order to stress the steadiness of the Project economic return, a sensitivity analysis was performed; in particular, we have assumed a 25% increase of the total construction costs to be borne after 2006.

The following table summarises the resulting indexes obtained:

Index	Social discount rate		
	0%	2.5%	8%
ENPV	€ 10,304 mln	€ 1,746 mln	€ (1,458) mln
EIRR	3.91%	3.91%	3.91%
EBC ratio	3.4	1.5	0.4
EIMRR	3.43%	2.96%	2.13%

All the indexes calculated show a deterioration. However, they remain overall in an area of acceptability, confirming the robustness of the results obtained.

ANNEXES

Annex I

NET BENEFITS

€/million

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Consumer Surplus	92.4	97.2	99.2	101.0	102.9	103.9	105.0	106.0	107.1	108.1	109.8	111.1	112.7	114.4	116.0	117.6
Externalities	63.4	73.9	75.9	77.0	78.2	81.4	85.4	89.4	93.4	97.5	101.8	105.2	109.4	113.7	118.0	122.2
Total Benefits	155.9	171.1	175.0	178.0	181.1	185.2	190.3	195.4	200.5	205.6	211.5	216.3	222.2	228.1	234.0	239.9
Producer Surplus	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)
Net Benefits	**146.8**	**162.1**	**165.9**	**169.0**	**172.0**	**176.2**	**181.3**	**186.3**	**191.4**	**196.5**	**202.4**	**207.2**	**213.1**	**219.0**	**224.9**	**230.8**

€/million

	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Consumer Surplus	119.3	120.9	122.9	124.5	126.5	128.1	130.1	132.1	134.0	134.5	135.1	135.7	136.2	136.8	137.3	138.0
Externalities	126.5	130.8	135.9	140.2	145.3	149.5	154.7	159.8	164.9	169.7	174.4	180.0	184.8	190.3	195.1	200.7
Total Benefits	245.8	251.7	258.8	264.7	271.8	277.7	284.7	291.8	298.9	304.2	309.5	315.7	321.0	327.2	332.5	338.6
Producer Surplus	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)
Net Benefits	**236.7**	**242.6**	**249.7**	**255.6**	**262.7**	**268.6**	**275.7**	**282.8**	**289.8**	**295.1**	**300.4**	**306.6**	**311.9**	**318.1**	**323.4**	**329.6**

Annex I

NET BENEFITS

€/million

	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068
Consumer Surplus	138.6	139.2	139.8	140.5	141.1	141.8	142.5	143.1	143.9	144.6	145.3	146.1	146.8	146.9	146.9	146.9
Externalities	206.2	211.8	217.4	223.7	229.3	235.7	242.0	247.6	254.8	261.1	267.5	274.6	281.0	282.6	282.6	282.6
Total Benefits	344.8	351.0	357.2	364.2	370.4	377.5	384.5	390.7	398.6	405.7	412.8	420.7	427.8	429.5	429.5	429.5
Producer Surplus	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)	(9.1)
Net Benefits	**335.7**	**341.9**	**348.1**	**355.1**	**361.3**	**368.4**	**375.4**	**381.6**	**389.6**	**396.6**	**403.7**	**411.6**	**418.7**	**420.5**	**420.5**	**420.5**

€/million

	2069	2070
Consumer Surplus	146.9	146.9
Externalities	282.6	282.6
Total Benefits	429.5	429.5
Producer Surplus	(9.1)	(9.1)
Net Benefits	**420.5**	**420.5**

TOTAL ECONOMIC FLOWS