Introduction

A new era of rail freight transport

Seventeen years after the first blasting cycle for the main gallery, the longest rail tunnel in the world will soon be ready to come into operation.

On 1 June 2016, the Gotthard Base Tunnel will be officially opened. Scheduled operation will begin on 11 December 2016.

With the construction of the level route through the Alps, Switzerland is writing a new chapter in transport history. We are very proud of this tremendous achievement and shall be duly celebrating it next year. In the end, however, what matters is that the longest rail tunnel in the world fulfils the purpose for which it was built. As far as freight traffic is concerned, this means that the level route under the Gotthard, which from 2020 will be completed in the south by the Ceneri Base Tunnel, will allow efficient, reliable – and thus competitive – freight transport through the Swiss Alps to become a reality.

The tunnel is without doubt a masterpiece of the art of engineering, but this is no cathedral in the wilderness: it is a structure built to serve domestic and foreign logistics companies, their customers and, by extension, all the people of Europe.

To achieve this goal – together with our partners in the countries along the north-south transit axis, namely the Netherlands, Belgium, Germany, France and Italy – we need to think beyond the year 2016. This was the purpose of the International Corridor Rhine-Alpine Conference 2015 in Antwerp on 21 October, which the Federal Office of Transport organised, together with those in charge of the Rhine-Alpine and North Sea-Mediterranean rail freight corridors.

With the Gotthard Base Tunnel, Switzerland is providing a key element of the north-south rail corridor, which will not be complete without corresponding additions to infrastructure in the neighbouring countries. But even this
hardware will not be enough without the software that will assure interoperability of rail freight traffic following the cross-border harmonisation of standards. There is therefore still much to do, but it will only be possible to achieve if we hand over national competences to Europe.

In recent years, the Rhine-Alpine rail freight corridor has generated pioneering work towards the achievement of competitive rail freight transport in Europe. When the Gotthard Base Tunnel becomes part of this freight corridor in 2016, we shall be launching a new era. The Swiss people’s acceptance of the Alpine Initiative in 1994 also indicated their acceptance of the need to protect the Alps from the negative effects of transit freight traffic. Now, with the Gotthard Base Tunnel – and with the Lötschberg Base Tunnel having been opened in 2007 – Switzerland is providing the rail transport capacity that is needed. I’m hoping we’ll see many – very many – trains from our European neighbours; after all, it’s for them that we built the tunnel.

The conference on 21 October 2015 in Antwerp was the fifth International Corridor Rhine-Alpine Conference, having been held in previous years in Rotterdam, Cologne, Thun and Genoa. It is a platform for dialogue that has been worth establishing, as a «spirit of corridor» has developed among the decision-makers, and a commitment on the part of all the players from the corridor to pull together on the issue of rail freight transport – and this makes me very happy.

Swiss Federal Office of Transport

Dr. Peter Füglistaler
Director
The longest railway tunnel in the world
Countdown to the Gotthard Base Tunnel

The Gotthard Base Tunnel is to be officially opened on 1 June 2016, with scheduled freight and passenger services through the 57 km long structure starting on 11 December 2016. The level route through the Alps was hailed as a milestone by EU and Swiss transport experts alike at the International Corridor Rhine-Alpine Conference 2015 in Antwerp, where they discussed how the new rail capacities could be exploited to the full.

The opening of the Gotthard Base Tunnel in 2016 will eliminate a bottleneck on the most important north-south rail transport axis. The tunnel will open up considerable potential for transalpine rail freight traffic, perfectly in line with Swiss transport policy, on which Christian Meuwly, Swiss ambassador-designate to Brussels, reported at the Corridor Conference.

Addressing transport experts from Belgium, Holland, Germany, France, Italy and Switzerland assembled in Antwerp, the Belgian transport minister, Jacqueline Galant, stressed how «crossing the Alps is of strategic importance to transportation in Europe». Hellen van Dongen from the Dutch ministry for infrastructure and the environment stated that the Rhine-Alpine corridor already makes an appreciable contribution to the improvement of rail freight transport, stating: «Since the official opening of the Rhine-Alpine Rail Freight Corridor there has been positive growth in the transportation of freight by rail.» International cooperation in rail freight transport is bearing fruit, as various speakers in Antwerp testified. At the same time, however, they made reference to the major challenges involved in fully exploiting the translocation potential of all nine European rail freight corridors.

Dutch tulips cross the Gotthard

Anton Bril gave the conference a graphic description of how cross-border rail freight transport is becoming competitive. He is Manager of Trade Services at the VGB, the trade association that represents 200 Dutch flower and plant wholesalers. Nowadays, these companies ship their precious fresh goods by rail to Sweden, Spain and Poland, as well as to northern Italy via Switzerland. Every day, two trains with specially designed refrigerated containers travel to Milan. The journey from Holland to
northern Italy currently takes freight trains approximately 32 hours, including stops in transshipment terminals. Lorries cover the same route in around 17 hours. With the opening of the level route through the Gotthard and the Ceneri, the speed of rail transport will catch up with that of road to some extent, but won’t equal it. Bril therefore pleaded the case for financial incentives: «To get freight off the road and onto rail, the railways must be able to offer their transport services for 20 per cent less.»

**The quadrupling of combined transport**

With the increase in rail freight transport, combined transport now plays a special role. Speaking to a high-calibre panel, Ákos Érsek, chief policy consultant at the International Union for Road-Rail Combined Transport (UIRR) in Brussels, explained the goals behind current EU transport policy: by 2030, 30 per cent – and by 2050, 50 per cent – of freight transported over long distances must be transferred from road to rail. He estimates that «for this goal to be achieved, by 2050 the capacity of combined transport will have to be four times that of today.» That the Gotthard line creates one of the prerequisites for the achievement of this ambitious goal was something all the panel members were agreed upon. Bernhard Kunz, Managing Director of the combined transport provider Hupac Intermodal AG (Chiasso) stressed, however, that the tunnel alone would not be sufficient, saying: «We must improve our infrastructure, including the transshipment terminals in both northern and southern Europe, in order to fully reap the benefits of the Gotthard Base Tunnel.»
The Port of Antwerp relies on the rail

In the south, rail freight transport will only be able to fully reach its potential in the medium term. In 2020, the Ceneri Base Tunnel will complete the level route through the Alps. The extension of the approach line in northern Italy is progressing, but not everywhere at the desired speed. As Mauro Pessano, CEO of SNCF’s logistics subsidiary Captrain Italia (Milan) dryly remarked: «As things stand, we won’t have a Rotterdam-Genoa corridor, only a Rotterdam-Milan corridor.» Luc Arnouts, Chief Commercial Officer at the Port of Antwerp, was able to report on more pleasing developments. In 2014, a 16 km long railway tunnel passing under the Scheldt was brought into operation in order to better open up the port area. According to the harbour manager, more track extensions will further improve rail transport over the next few years: «We are pursuing the goal of increasing rail capacity at the port by 30 per cent by 2018.»

«Our hinterland is the whole of Europe. The new Gotthard tunnel is of crucial importance to us in strengthening our Europe-wide connections.»

Luc Arnouts, Chief Commercial Officer, Member of the management board of Antwerp Port Authority, Antwerp/B
«In The Netherlands, we believe that rail freight traffic has great potential.»
Hellen van Dongen, Director for Public Transport and Rail, Ministry of Infrastructure and the Environment, The Hague/NL

«The transport of freight by rail is attractive for distances of 900 km and over.»
Anton Bril, Manager of Trade Services, Dutch Association of Wholesalers in Flowers and Plants, VGB, Aalsmeer/NL

«The EU states need to do their homework on transport policy – the Swiss have already done theirs.»
Ákos Érsek, Chief Policy Advisor, International Union for Road-Rail Combined Transport (UIRR), Brussels/B
«The opening of the Gotthard Base Tunnel will bring forward the shift to rail of freight transport.»
Bernhard Kunz, Managing Director, Hupac Intermodal, Chiasso/CH

«In Italy, it will mainly be the North that will benefit from the good transport links to Germany, Switzerland and other states north of the Alps.»
Mauro Pessano, Chief Executive Officer, Captrain Italia, Milan/I
Impressions
Afternoon

Connecting Europe

The afternoon session of the Antwerp corridor conference was all about European transport policy. The Rhine-Alpine Rail Freight Corridor has been successfully implemented. The north-south connection will serve as a model for the further extension of the North Sea-Mediterranean corridor running parallel to it, but also for the eight other rail freight corridors in the Trans-European Network TEN-T.

«Without the port there’d be no town.» It was with this brief statement that Antwerp’s deputy mayor, Marc van Peel, began his speech welcoming the 180 or so delegates to the International Corridor Rhine-Alpine Conference on 21 October 2015. In the Flemish metropolis, around 150,000 people depend for their living, either directly or indirectly, on this, the second-largest port in Europe, which is proud of the five per cent contribution it makes to Belgium’s gross national product. Around 200 million tonnes of freight arrive there annually, to be transshipped – mostly onto rail freight wagons and lorries – and transported to consumers across the continent. One of the key transport routes used is the Rhine-Alpine Rail Freight Corridor, which runs from Antwerp – or Rotterdam – via Germany and Switzerland to northern Italy. For the last five years, the EU has been pressing ahead with the construction of nine rail freight corridors through the middle of Europe. The aim is to create a cross-border infrastructure capable of handling the growing volumes of freight. The freight corridors are a long-term project that will take years, perhaps decades, to be fully implemented. The Gotthard Base Tunnel is also a long-term project. The initial sketches date back to 1947, and even the concrete plans are a quarter of a century old. When the tunnel goes into operation in 2016, it will have been in construction for seventeen years. As Herald Ruijters, Head of Unit, MOVE.B1 – Trans-European Network, Directorate-General for Mobility and Transport, European Commission, Brussels, said when advocating long-term thinking in relation to the construction of transport infrastructure: «The Gotthard Base Tunnel is a prime example of such a long-term vision.»

«Everything that stands in the way of roads, railways and rivers, whether it’s topographical obstacles, regulations or taxes, must be removed.»

Marc Van Peel, Vice-Mayor of the City of Antwerp, Alderman for the Port, Industry and Employment, President Antwerp Port Authority, Antwerp/B
Increasing demand for the transportation of freight by rail

The implementation of Europe-wide rail freight corridors is worth the cost. Experience with the North Sea-Mediterranean Rail Freight Corridor has shown this to be the case. According to Guillaume Confais-Morieux, Managing Director at the European Economic Interest Grouping (EEIG), responsible for the corridor: «We are observing increasing demand, as well as more customers, along our corridor.» The number of customers has risen from three to eleven in one year.

The European Coordinator of the Rhine-Alpine Core Network Corridor, Pawel Wojciechowski, put the freight transport axes in the context of the core network corridors being established at European level since 2013. He explained that, unlike the rail freight corridors, these corridors also include roads, waterways and air transport routes. This means that, in addition to rail routes and transshipment terminals, the Rhine-Alpine Core Network Corridor along the north-south axis between Rotterdam and Genoa also comprises thirty sea and inland ports and eleven airports. «We have identified 175 projects for the further development of the Rhine-Alpine Core Network Corridor by 2030, thirty of which are in Switzerland», Wojciechowski said.

The need for more flexible pre-arrangement of paths

A solid infrastructure is a necessary, though not the only condition, for the transshipment of rail freight consignments. One tool that should make transportation by rail more attractive is cross-border train paths for freight
Slovakia’s rail freight transport is still in its infancy, with the country’s rail network relying on the existing infrastructure of the Czech Republic and Hungary. Nevertheless, there is a growing interest in rail transport, driven by the need to reduce transport costs and improve environmental performance.

The role of rail freight transport in the Slovak Republic is to connect the country with the rest of Europe, particularly with the Czech Republic and Hungary, where rail freight transport is well developed. The Slovak government has set ambitious targets for rail freight transport, including a 30% increase in the volume of goods transported by rail by 2020.

However, there are several challenges that need to be addressed to achieve these targets. One of the main challenges is the lack of investment in rail freight transport infrastructure. The Slovak Republic’s rail network is老化 and requires significant investment to modernize and improve its capacity. Another challenge is the competition from other modes of transport, particularly road transport, which is currently the most cost-effective mode of transport for short to medium distance movements.

Despite these challenges, the Slovak government is taking steps to promote the development of rail freight transport. It is working closely with the EU to secure funding for infrastructure projects and is also investing in the development of new rail freight transport routes. If these efforts are successful, rail freight transport could become a more attractive option for shippers in the Slovak Republic, driving further growth in rail freight transport in the future.
tives and quiet wagons. Philippe Bihouix, of SNCF Logistics, Freight Management, remarked that they were up against cost increases. The main aim of much investment is to get to interoperability, a bundle of technical and organisational measures that will assure unhindered passage for all freight traffic across national borders. As Guus de Mol, President of the EEIG responsible for the Rhine-Alpine Rail Freight Corridor, said: «We must ensure that freight trains equipped with modern train control systems don’t, in practice, have to rely on national safety systems». Another aspect of interoperability is the need to overcome the problem of linguistic diversity in Europe. It causes considerable administrative costs, of which Markus Bangen, a member of the management board of Duisburger Hafen AG, was able to give some good examples: «We have to keep all the papers for lorry drivers in eighteen languages», he said. Also, at the moment, train drivers can only drive in countries where they have a good command of the language. The reason for this is that they have to be able to communicate with the relevant control stations. Johan Gemels, CEO of Belgian combined transport company Inter Ferry Boats, finds this an outdated practice in an age when the whole world speaks English: «It’s absolutely ridiculous that train drivers have to be able to speak the languages of all the countries they pass through.»

Conflict between freight and passenger traffic

A hot potato for many years has been the issue of whether passenger or freight traffic should be given priority in the event of conflicting schedules. Ann Billiau, «Our customers should be able to run 740 m long trains every day, even when there are obstacles such as construction sites or maintenance work on the line.»

Guus de Mol, President, EEIG RFC Rhine-Alpine, Utrecht/NL
President of the EEIG responsible for the North Sea-Mediterranean Rail Freight Corridor, said she has noticed that public pressure makes politicians only too happy to give priority to passenger traffic. She would like to take steps to counter this unfavourable treatment of freight traffic and said they must change the mentality of the public. Dirk Stahl, CEO of BLS Cargo AG (Bern) also ventured into the fray between passenger and freight traffic, in relation to the Gotthard Base Tunnel in particular. Care should be taken, he said, that the tunnel be actually able to fulfil its purpose of getting trans-alpine freight traffic onto rail, adding: «The Gotthard Base Tunnel will become so attractive for passenger traffic that I’m already wondering how we’re going to be able to ensure that the planned number of freight trains passes through it.»

A new era of rail transport

At the end of the conference, Peter Füglistaler was keen to point out that now, with the key element that was the Gotthard Base Tunnel – and with the Lötschberg Base Tunnel having been opened in 2007 – Switzerland provided the necessary rail transport capacity. In addition, there is a growing «spirit of corridor» among the decision-makers, and a commitment on the part of all the players from the corridor to pull together on the issue of rail freight transport. Mr. Füglistaler, who is Director of the Swiss Federal Office of Transport, said he hoped he would see «many – very many» – trains from other parts of Europe crossing the Alps in future, as it was for this purpose that Switzerland had built the longest railway tunnel in the world – the Gotthard Base Tunnel.
«We are great supporters of point-to-point rail links over long distances.»
Johan Gemels, Chief Executive Officer, Inter Ferry Boats, Antwerp/B

«I’m not expecting the big bang in December 2016; it’s more likely there’ll simply be continuing further development.»
Dirk Stahl, Chief Executive Officer, BLS Cargo AG, Bern/CH

«Liberalisation was a necessary, but not a sufficient, condition for the success of rail freight traffic.»
Philippe Bihouix, Director of International Rail Activities, SNCF Logistics – Direction Fret, Clichy La Garenne/F
«The railway is the heart of a sustainable transport system in Europe.»
Ad Toet, Executive Director, Koninklijk Nederlands Vervoer KNV, The Hague/NL

«We must move faster with the continuing development of rail freight transport.»
Ann Billiau, President, EEIG RFC North Sea-Mediterranean, Brussels/B

«Thanks to the Gotthard Base Tunnel, we in Duisburg shall be able to handle rail traffic to Italy and southern Europe more efficiently than is currently the case.»
Markus Bangen, Member of the Executive Board, Duisburger Hafen AG, Duisburg/D
Impressions
Facts and Figures

The Gotthard Base Tunnel

Seventeen years after the first blasting cycle for the main gallery, the longest rail tunnel in the world will be ready to come into operation.

The Gotthard Base Tunnel...
• …is a level rail route and will shorten the travelling distance across the Swiss Alps by 30 kilometres
• … will increase transport capacity: as many as 260 trains will be able to pass through the Gotthard Base Tunnel every day (historic mountain route: max. 180 trains)
• … will therefore be more efficient and more competitive
• … will be able to absorb the expected increase in the volume of goods being transported on the north–south route
• … brings major benefits for freight traffic, allowing for longer, heavier trains, fewer locomotives and shorter journey times
• …will allow passengers to travel more quickly from north to south and from south to north. Top speeds of up to 250 km/h will be possible for passenger trains.

We are ready for the new era of rail freight transport in Europe.
Thank you.

The Federal Office of Transport (FOT) would like to thank not only all the participants, but also all those who helped to bring about the 5th International Corridor Rhine-Alpine Conference in Antwerp for their interest and active participation.

Thank you to the active people at the European Economic Interest Groupings (EEIG), Rail Freight Corridors (RFC) 1 and 2 for their outstanding support and for being such a pleasure to work with on the organisation of this conference.

We would also like to thank the Port of Antwerp for the interesting and impressive tour of the harbour, for which we were privileged to have a professional guide.

Published by:
Federal Office of Transport (FOT)
3003 Bern
Image copyright: FOT

Texts: Dr. Vogel Kommunikation
Design: EPR Event Partner Rheinmain / Ilona Hirth