The new Gotthard Tunnel – Switzerland through and through.
The centrepiece of the new north-south Gotthard corridor.

With 57 kilometres, the new Gotthard Tunnel is the longest railway tunnel in the world and forms the centrepiece of the New Rail Link through the Alps (NRLA). It embodies Swiss values such as innovation, precision and reliability and connects people and goods in the north and south more quickly and more reliably.

AlpTransit Gotthard AG (ATG), a subsidiary of SBB, built the Gotthard Base Tunnel on behalf of the Federal Government. ATG is also responsible for the construction of the 15-kilometre-long Ceneri Base Tunnel, which is due to go into operation in late 2020. The Gotthard Base Tunnel will be put into operation on schedule on 11 December 2016 after 17 years of construction. Further information is available at www.gottardo2016.ch.

The Ceneri Base Tunnel will create a continuous flat rail route through the Alps and customers will be able to benefit fully from the new north-south Gotthard corridor from late 2020 with the opening of the 4-metre corridor for freight traffic. Goods will be transported more efficiently and in a more environment-friendly manner and passengers will have a faster and more comfortable journey.
Freight traffic is becoming more efficient and more environment-friendly.

When it comes to freight traffic, the new Gotthard Tunnel will bring increased capacity, faster connections and greater reliability. SBB Cargo customers will receive efficient, congestion-free and environment-friendly solutions for their logistics requirements. With up to 750-metre-long trains, SBB Cargo will be able to operate even more efficiently. As of the 2016/2017 timetable change, four freight trains will be able to travel in each direction every hour during the day. Up to three deliveries and collections will thus be made every day at busy operating points in Ticino.

For international transit traffic, the new Gotthard Base Tunnel marks a first major step towards the flat rail route through the Alps. With the Ceneri Base Tunnel and the 4-metre corridor (for transporting 4-metre-high semi-trailers by train), rail will become significantly more competitive on the north-south corridor. From the end of 2020, freight trains will be able to transport up to 2,000 tonnes instead of the 1,600 or so tonnes that they do today.
Passengers will have a faster and more comfortable journey.

Faster, more frequent and more convenient connections as well as new and modernised rolling stock will considerably increase the transport quality on the north-south corridor. Customers will also benefit from more seats. The improvements will take effect gradually from 2016 onwards and provide their full benefit from late 2020.

From late 2016, for example, the journey from Zurich to Lugano will take up to 30 minutes less than it does today. When the Ceneri Base Tunnel is in operation too, you will be able to reach Lugano from Zurich in less than two hours. From late 2020, the journeys between German-speaking Switzerland and Ticino will be around 45 minutes shorter. In addition to long-distance traffic, regional traffic in Ticino will also be significantly increased, the connections between Lugano, Bellinzona and Locarno will be upgraded from late 2020 and travel times will be considerably shorter.

SBB will continue to operate the historic mountain route, which is popular with tourists, and help to boost and develop the tourism industry in the Gotthard region.
Development of the access routes for customers to benefit fully.

In order for customers to benefit fully from the Gotthard corridor, SBB is improving access routes to the base tunnels and, by 2020, will complete a continuous 4-metre corridor from Basel to the Italian border. Therefore, once the Gotthard Base Tunnel comes into operation, construction activity will intensify on the Gotthard corridor. To the north, the priorities are at Lake Zug and Axen, while in the south, they lie in the Bellinzona area. A number of tunnels will also be renovated or constructed. This concentration of construction sites in terms of time and space represents a major challenge for timetable stability and carries the risk of delays and connection problems. The timetable is operating despite these construction sites, but it is more vulnerable. With a range of measures relating to rolling stock, construction and operations, SBB will limit the impact on customers as much as possible until the 25 construction projects are completed.
New standards, including in terms of safety.

The Gotthard Base Tunnel (GBT) has cutting-edge safety equipment:
• Various systems on the access routes detect any defects on the trains before they enter the tunnel.
• The sophisticated operating concept and cutting-edge automatic train safety ensure that the trains run safely at high speeds, three minutes apart from each other.
• The two emergency stop stations at Sedrun and Faido form the basis for rapid evacuations.
• Every 325 metres, passages to the parallel tube provide quick access to a safe space.
• Emergency lighting, handrails and signs help train passengers to get out of danger themselves.
Biasca and Erstfeld have maintenance and intervention centres, from where fire-fighting and rescue trains can enter the tunnel.
Maintaining the longest railway tunnel in the world is a major challenge. The 57-kilometre-long tunnel tubes are only accessible via two entrances. A tunnel tube is closed for three nights each time maintenance work is carried out. During this time, up to eleven workplaces are transferred from the new maintenance and intervention centres (MIC) in Biasca and Erstfeld to the GBT, where they are set up, put into operation and then vacated and transferred back again. SBB has prepared around 3,900 people for the particular challenges in the Gotthard Base Tunnel – and not just those in maintenance work: locomotive drivers, train staff and employees involved in the train services and tunnel management have also been prepared for these challenges.

A “control tower” for the Gotthard Base Tunnel.
Since mid-2014, SBB has controlled and monitored the entire rail operations in Ticino as well as to and from Arth-Goldau from the south operations centre (OC south) in Pollegio. OC south also provides the passenger information in the event of disruptions. The 160 or so employees in Pollegio also control and monitor the operation of passenger and freight traffic as well as the safety systems and the traction power supply in the longest railway tunnel in the world.