

# NEW LINE LYON – TURIN AT THE HEART OF MED RFC: FUTURE PERSPECTIVES

## Enhancement of access line to the new Turin Lyon tunnel

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# Turin - Lyons itinerary: overview of the interventions

## TELT investment (ongoing - under construction)

### International Section Main work

Base tunnel with connection to the RFI network in Susa  
Intervention implemented by TELT and not included in the MIMS-RFI CdP-I: work in progress

## RFI investment (Priority Step)

Adaptation of the existing Turin Modane line on the Bussoleno - Avigliana section

Cost: 200 M €, funding for the realization of a 1st phase of priority interventions

Authorization process in progress



## TELT investment (next steps)

### International Section Completion Works

New section from Susa to Chiusa S. Michele

Intervention implemented by TELT and not included in the MIMS-RFI CdP-I: in planning

## RFI investment (priority step)

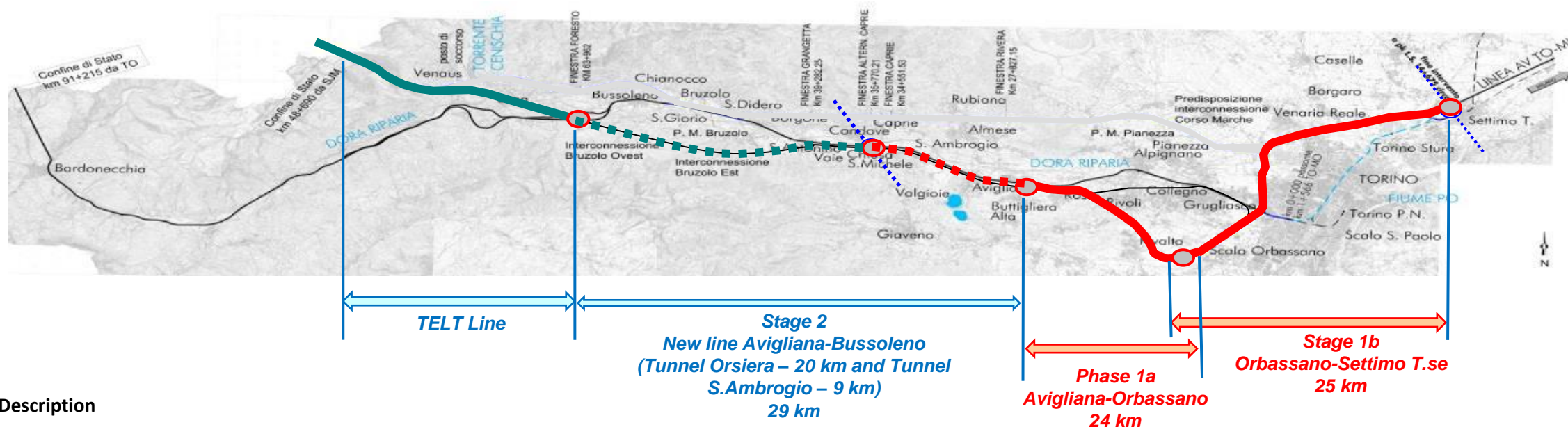
Turin belt and connection to the Turin - Lyon connection Priority works (Avigliana Orbassano and Scalo di Orbassano section)

Cost: 1,700 M €, funding for final design

Final design to start

- Investment TELT (ongoing)
- - - Investment TELT (next steps)
- Investment RFI (priority step)
- - - Investment RFI (next steps)

# The national section of Turin-Lyon: phasing of interventions



## Description

The route defined in the Preliminary Project runs in the territory of 14 Municipalities of the Province of Turin with interconnections with the existing line near Chiusa San Michele, Avigliana and through the Orbassano freight yard.

**Within the Observatory, 3 functional phases for the national section (Project Review) have been identified, in line with the Italy - France agreement of 2012 and Legislative Decree 71/2014:**

**Stage 1a** (scenario consistent with the Base Tunnel):

- adaptation of the existing line Avigliana - Bussoleno: planned interventions on the train distancing and command-control systems (digital interlocking and implementation of ERTMS L2);
- adaptation of the overhead contact line, 2 new SSEs (sottostazioni) in Avigliana and Borgone, 2 Movement Posts with priority 750 meters module, removal of the last 2 LCs remaining on the Borgone section;
- adaptation interventions for PRM in the Bruzolo, Borgone and S.Ambrogio stations;
- new line Avigliana - Orbassano (Phase 1a);
- upgrading of the Orbassano Freight Yard;

**Stage 1b** (scenario after Base Tunnel): new Orbassano - Settimo Torinese line (Gronda Merci di Torino);

**Stage 2** (scenario after Base Tunnel): new Avigliana - Bussoleno line;

# Works on the Bussoleno - Avigliana section

The project includes the following interventions:

- 1. Implementation of the ERTMS Level 2** system with the simultaneous creation of new technological equipment for the management of traffic on the Bussoleno - Avigliana section;
- 2. Removal of 2 level crossings** in the Municipality of Borgone Susa;
- 3. Adaptation to the interoperability specifications** of People with Reduced Mobility (PRM TSI) of the Sant'Ambrogio, Borgone and Bruzolo stations;
- 4. Construction of 2 precedencies with 750 m module** in Condove and Bruzolo;
- 5. Adaptation of the power supply system and overhead contact line (OCL)** through the construction of two new electrical substations in Avigliana and Borgone;
- 6. Demolition of the primary line;**
- 7. Acoustic rehabilitation of the section;**
- 8. OCL renewal.**

With the current funding of € 81 million, the implementation of interventions no. 1, 2, 3, 5 and 6 is envisaged.



work	Cost	Available resources
Adaptation of the historic Turin - Modane line, Bussoleno - Avigliana section	200 M€	81 M€



# The national section of Turin-Lyon: phasing of interventions

## Stage 1a: Avigliana - Scalo di Orbassano

### Project Description

The project involves the construction of a new line in a variant of the route from Avigliana to the Orbassano terminal, for an overall development of about 24 km, including changes to the terminal's PRG at the entrance to the new tracks. The route runs in a tunnel below the Morainic Hill for an extension of about 14 km, followed by an artificial tunnel section of about 3 km and an uncovered section to get access and cross the terminal, and then joins the existing line access to the Turin's hub.

### State of implementation

The final design of the new variant section between Avigliana and Orbassano will begin in 2022.

### Benefits

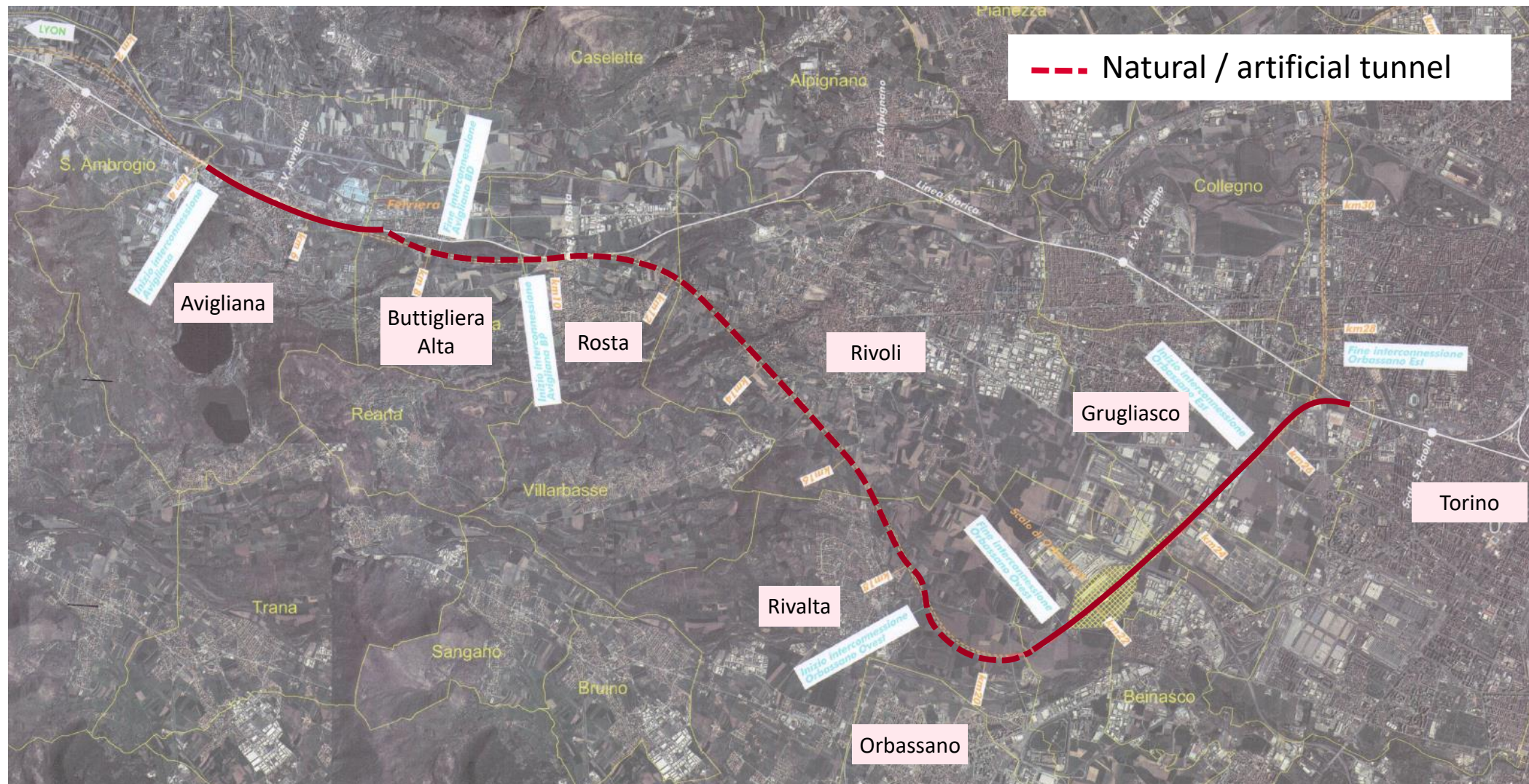
- Elimination of freight flows between Avigliana and Orbassano, which will allow an increase in the regional and suburban operating model;
- Access to the Orbassano freight terminal for freight trains involving the Mediterranean corridor.



works	Cost	Available resources
Turin belt and connection to the Turin - Lyon connection priority works	1.700 M€	66 M€

# Route (Preliminary Project 2010)

## General map





# Activity in progress or to be started

## Route Bussoleno - Avigliana

### **Technological interventions:**

Authorizations obtained, call for tenders to follow (2022)

### **Suppression of level crossings in the Municipality of Borgone:**

EIA (Environmental Impact Assessment) eligibility check underway, Services Conference to follow (2022);

### **PRM TSI's fulfillment in the stations of Borgone, Sant'Ambrogio and Bruzolo**

Contract awarded, final design in progress (by the contractor), followed by construction of the work (start of works 2023);

### **New SSEs (sottostazioni) in Borgone and Avigliana with disposal of the primary line**

Environmental Impact Assessment in progress, followed by the Services Conference (2022);

### **Module construction at 750 m (to be financed)**

EIA eligibility check to be started (2022);

### **Noise reduction interventions (to be financed)**

Launch of the Final Project (2022).

# Activity in progress or to be started

## Route Avigliana – Orbassano

### **Preparatory actions for the final design:**

Meetings are underway with the Municipalities, Bodies and Administrations involved in the work aimed at consolidating project choices as much as possible shared with the territory in preparation for the subsequent design phase.

### **Final design:**

By Italferr downstream of the aforementioned process (completion 2023).

### **Construction work:**

Start of works scheduled for 2025 and commissioning will be defined upon completion of the final design and upon completion of financial availability. To date, it can be estimated at 2030-2032, in line with the timing of the opening of the new Mont Cenis tunnel.

## Terminal in Orbassano

### **In progress:**

Implementation of the first refurbishment interventions (as part of these interventions a new digital interlocking system will be created to replace the existing one, financed for € 13M) with the commissioning scheduled for 2023.