EUROPEAN COMMISSION

TRANS-EUROPEAN TRANSPORT NETWORK

Work Programmes 2007-2013

CALL FOR PROPOSALS 2011

APPLICATION FORM

for EU financial aid in the field of
the trans-European transport network

PART B.2

Technical and financial information

Title of the proposed action	B2: Bothnian Corridor – East Coast Line – increased capacity. Study new line Stångån-Dingersjö.
TENtec number	**2011-SE-93035-S**

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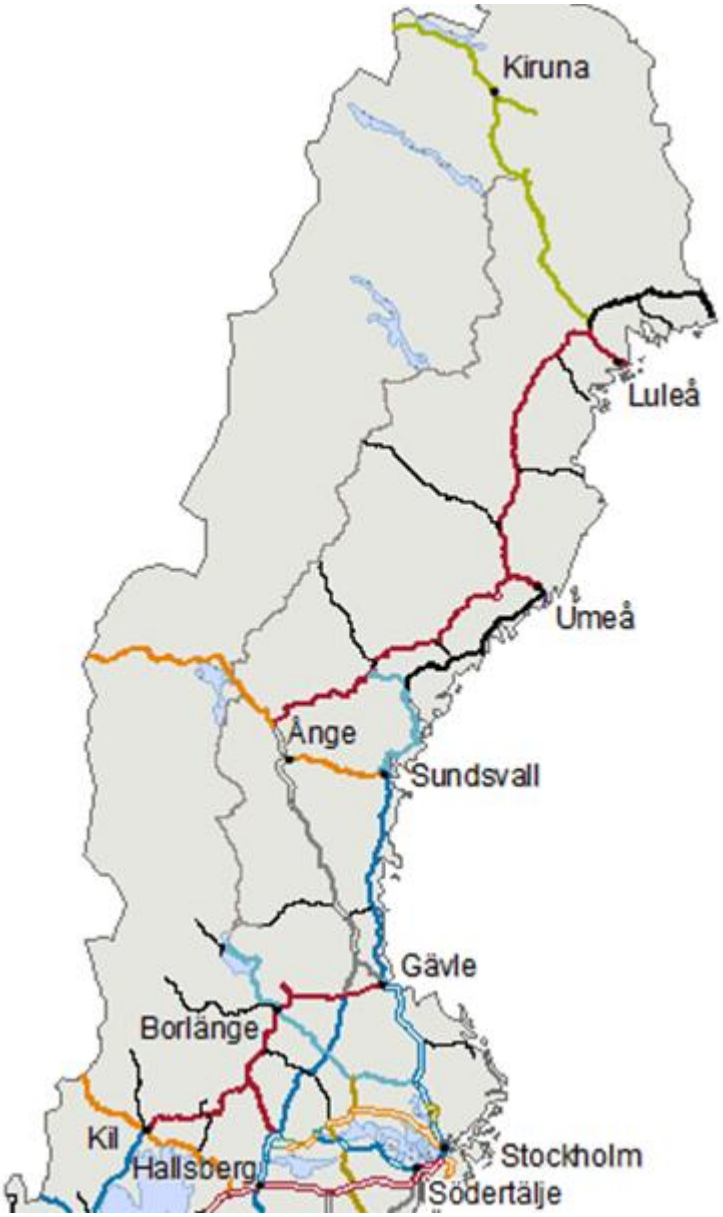
Received on: Number:



The Swedish railway net north of Stockholm

1. GENERAL DESCRIPTION OF THE GLOBAL PROJECT

1.1. General outline of the Global Project

The Bothnian Corridor East Coast Line (Swedish Ostkustbanan) connects the northern part of Sweden with the Nordic Triangle in Stockholm. The line passes the main Swedish airport Stockholm Arlanda, the cities of Uppsala, Gävle, Hudiksvall and Söderhamn. **The East Coast Line is part of the Bothnian Corridor.** The Bothnian Corridor is an established concept which has received EU-funding. The Bothnian Corridor is included in the proposed TEN-T guidelines for the new program period 2014-2020.

Major investments have taken place during the last 10 years. Currently almost the entire line between Stockholm and Uppsala is upgraded to double-track. Arlanda Airport is since year 2000 connected to the East Coast Line. An airport shuttle between Stockholm and Arlanda is in operation. Additional two tracks were added to the section Rosersberg-Stockholm in the beginning of the 1990.

The north part of the East Coast Line, Gävle-Sundsvall, length 220 km, is still a single track line. The line is important for the freight and passenger trains along the Swedish East Cost due to the location of cities, important paper mills and other industrial plants. The train service has increased by some 80 % since year 2000, mainly due to expanded regional rail services and increased freight volumes. This increase will continue thanks to the opening of the new single track Bothnian Line (Nyland-Umeå 190 km) and the upgrading of the Ådalen Line (170 km). A new direct service Stockholm-Umeå will start and the freight traffic will increase in the corridor. According to forecasts made by the Swedish Transport Administration (Trafikverket) the number of trains will grow from 50-60 trains/day to 90-100 the year 2020.

Due to the single track standard, the East Coast Line lacks capacity to absorb the demanded number of trains. If more trains are added, the risk for delays will increase which will not favour the railway as a transport mode. The lack of meeting stations results in several bottlenecks the East Coast Line.

The Global Project for the East Coast Line is a completely new double track between Gävle and Sundsvall. According to this strategy the double tracking should be built step by step from the end points (Gävle and Sundsvall). The total cost of this Global Project is estimated to around 2,5 billion euros.

Pending the launch of the Global Project, Trafikverket has identified different activities in order to upgrade the capacity and reduce the number of bottlenecks on the East Coast Line. The Action of this application comprises a study of a new line Stångån-Dingersjö with a 750 meter meeting station and 2 new bridges.

The line will be dimensioned 250 km/h and 25 tonnes axle load. The study will include a possibility to add another track in the future thus achieving double track standard.

The big picture

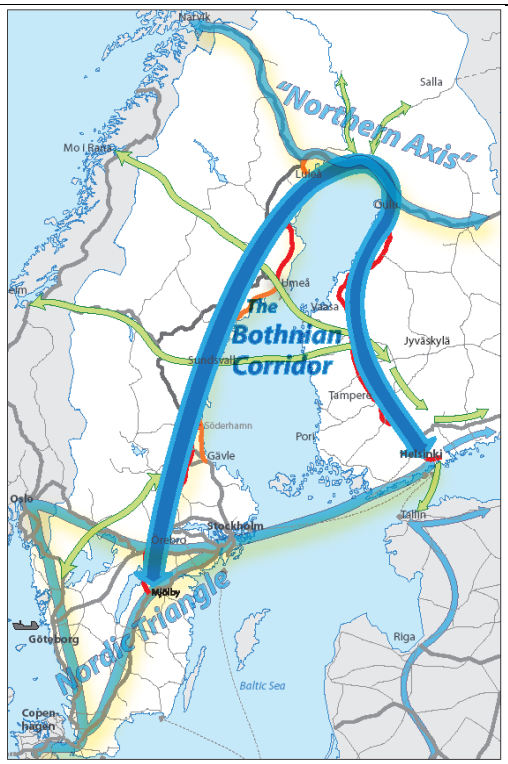
The Bothnian Corridor is a strategically important link within the transnational transport system of goods in Northern Europe. It stretches out on both the Swedish and the Finnish side of the Bothnian Gulf. It connects east-westbound and north-southbound transnational links in Sweden, Finland, Norway and Russia.

The Bothnian Corridor connects the northern part of the Northern Axis with the Nordic Triangle. The corridor is also important for the east-west transport routes Finland Sundsvall-Östersund-Trondheim and Vaasa-Umeå-Mo i Rana. The Bothnian Corridor is currently being proposed in the TEN-T core network for the coming programming period 2014-2020. The corridor connects sea, rail and road in important nodes e.g. Gävle, Sundsvall, Umeå and Luleå.

The pictures below show current and potential freight volumes of minerals, forestry and other products. Norrbotten is the primary mining area in the EU. Steel from the region can be found in most European car brands.

The expansion in the mineral sector is high, and there will be an increased transportation volume from both existing and new mines over the next few years to come. It is estimated that transported mineral products on the Northern Axis Iron Ore Line, will increase approximately by over 150%, from 26 Mton year 2010 to 68 Mton year 2020.

An adequate infrastructure and efficient logistics solutions are of interest not only for the region but for the EU.

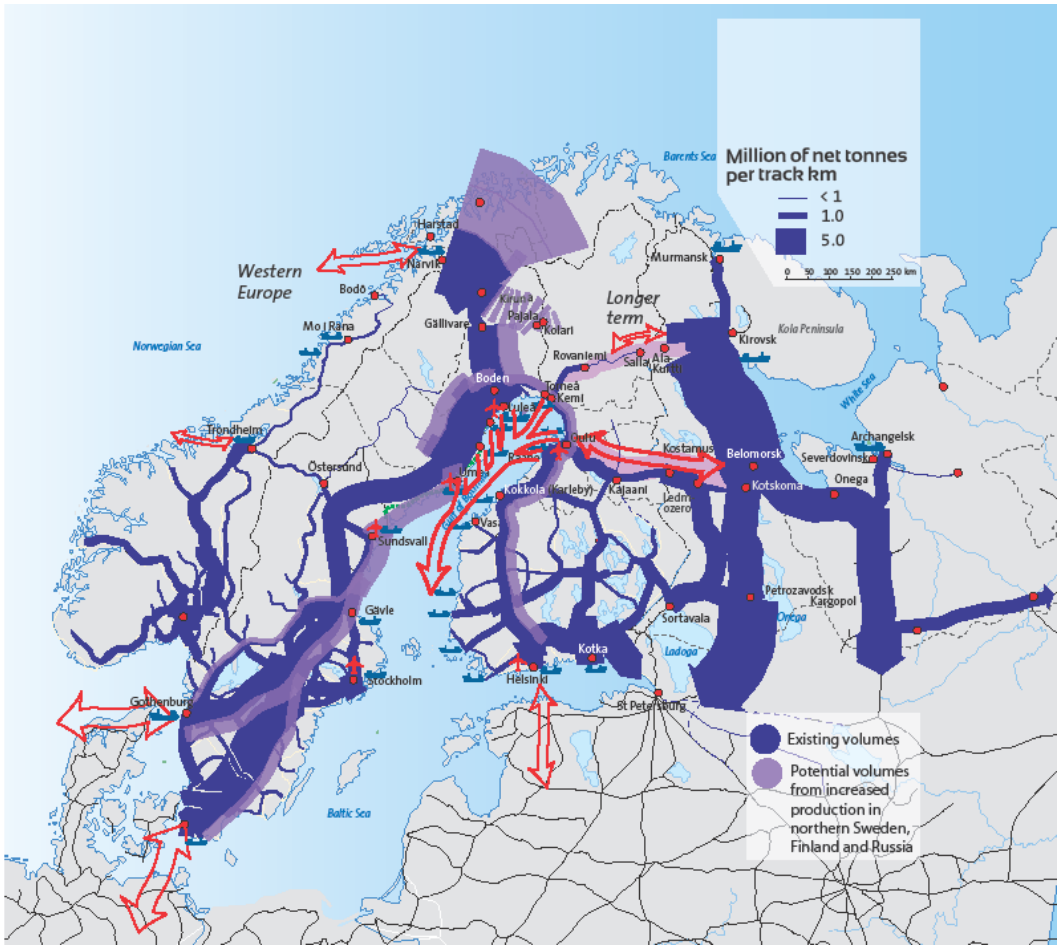


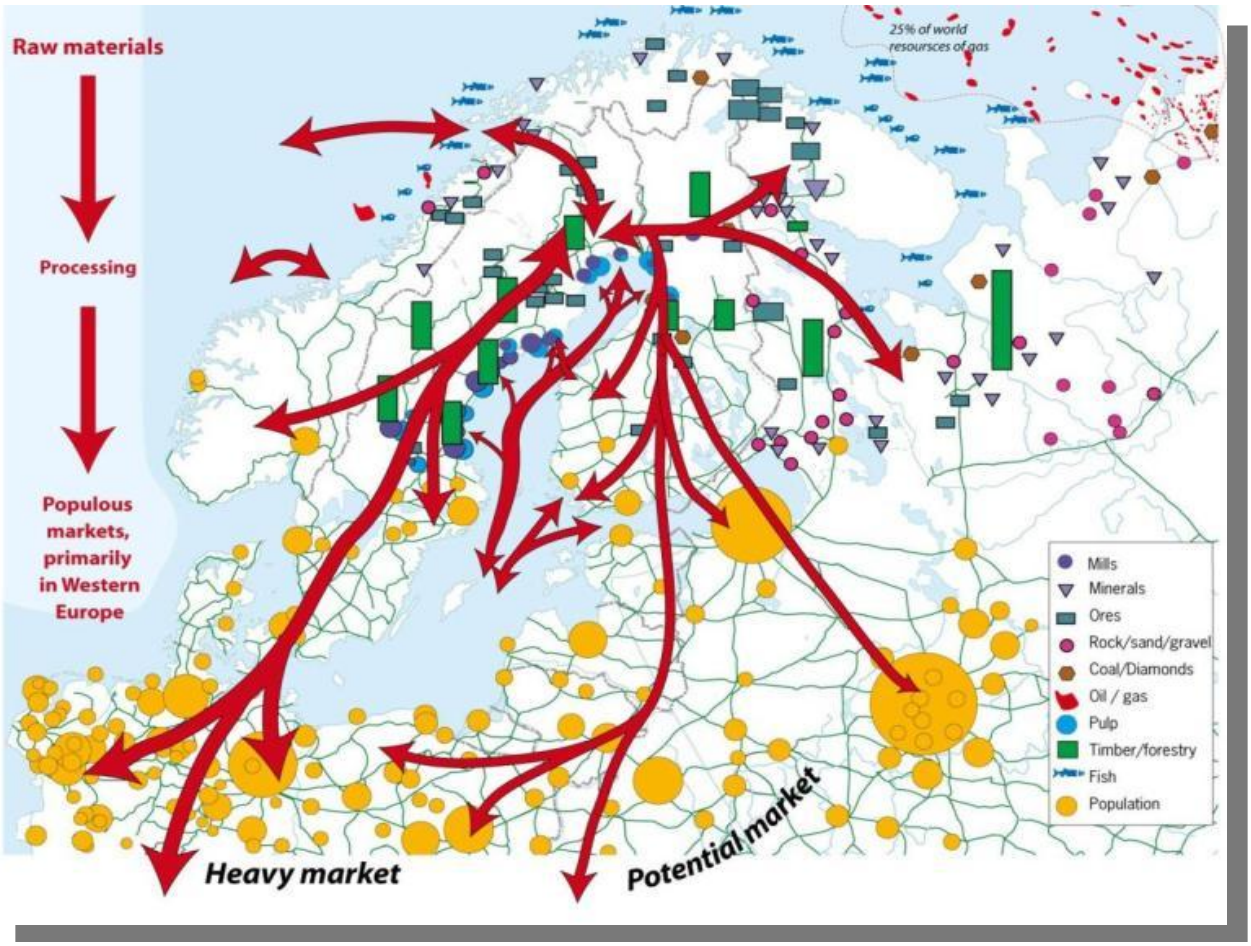
The Bothnian Corridor connects the Nordic Triangle and the northern part of the Northern Axis.

Source: www.bothniancorridor.com

The Northern Axis connects the Trans-Siberian railway with the harbour in Narvik via Haparanda/Tornio and the Iron Ore Line.

Norrbotten and the neighbouring territories (Barents region) is a major raw material base for the EU.





Source: Resources for Europe – the Bothnian Corridor www.bothniancorridor.com

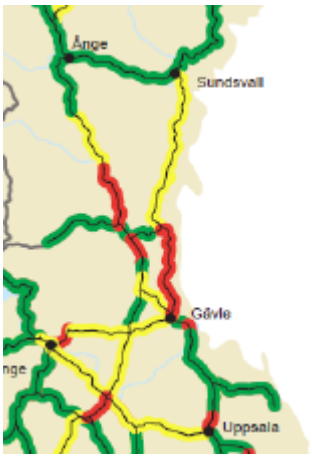
1.2. Current situation and main needs addressed by the Global Project

The major problem is the lack of capacity of the East Coast Line between Sundsvall and Gävle. Currently the line has severe problems to transport goods from north to south. The single track has reached its maximum limit and the industry wants to increase the transportation of goods by 100% in the next 5 years. But the rail system cannot accommodate more traffic. The East Coast line also has a big part of passenger transports. The number of passengers has increased by 350% the last four years.

The Bothnian Corridor, (where the East Coast line is in the middle) carries the biggest freight volumes in the Nordic countries today. It connects the northern parts of Europe, rich in natural resources, with the more densely populated areas of Europe. Freight transports to and from other countries contributes to industrial growth and integration.

A well developed railway system along the coast line of the Gulf of Bothnia is of great importance in order to help achieve the climate goals set for the EU. Investments made by the mining, forestry and other business will increase the transported volumes significantly. Capacity constraints will make it difficult to transport those volumes by rail.

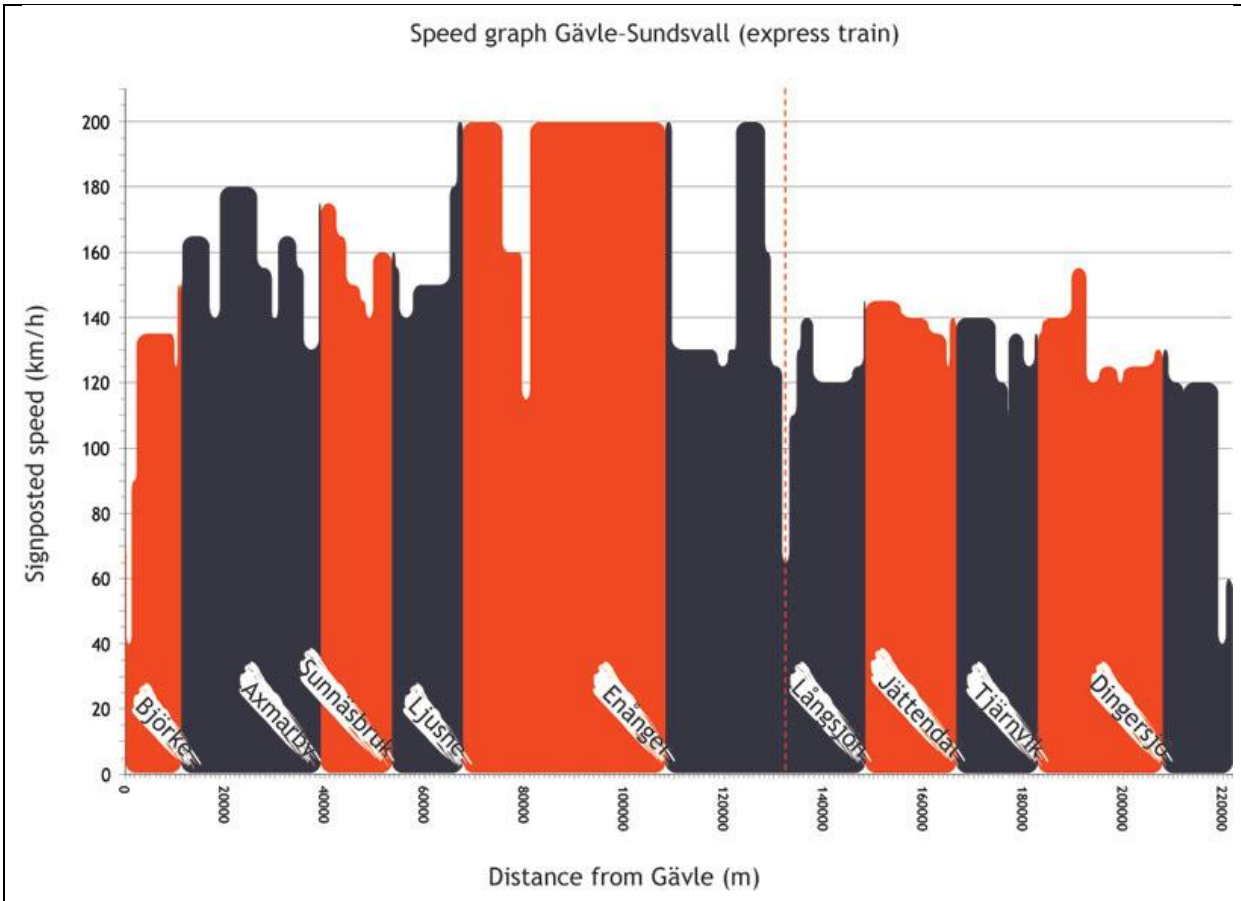
The picture* shows the capacity utilisation (consumed capacity) on the East Coast Line, section between Gävle and Sundsvall, in **2010**. Green (up to 60 %) is the preferred. Yellow means (60-80 %) problems with the capacity and red (more than 80 %) means significant problems with capacity and train punctuality.



A drop in the number of freight trains in the order of 10 per weekday has been recorded in the 2012 time table. This is due to the current economic slowdown. It is expected that a return to normal economic activity will see a pick-up of the number of freight trains. This will be reinforced by the ambition to move freight from road to rail to supply the northern part of Sweden with green energy efficient logistics chains in which rail will be the dominant transport mode. The part of the East Coast Line between Hudiksvall and Gävle has been declared congested. A capacity enhancement plan has been adopted which calls for the building of a number of meeting stations. This will however not be enough to meet the forecasted demand of capacity for the expected growth of freight and passenger trains. This demand can only be met by construction of a new modern double track line dimensioned for 25 tonnes axle load and a line speed of 250 km/h or above. A new line can only be built whilst keeping service on the existing line. Aligning a new line next to the existing one would lead to unacceptable traffic disruptions. Investments in the current line are not sunk since the line will still be used for connecting harbours and as a regional line once a new double track Bothnian Corridor East Coast Line is ready.

** Source: "Situationen i det svenska järnvägssystemet", TRV 2011 10161/A*

http://www.trafikverket.se/PageFiles/47862/situationen_i_det_svenska_jarnvagsnatet_v1.2.pdf



The East Coast Line is designed for a maximum speed of 110 km/h. Gradual adjustments have increased the maximum speed to 200 km/ on shorter sections. The top speed on several parts of the line is 100-130 km/h due to sharp curves. The single track East Coast Line has few meeting stations. This restricts trains from different directions to meet. A delayed north-bound train will also delay other south-bound trains due to the lack of meeting stations.

Due to heavy traffic and poor line segments there is a speed limit on the East coast line. The maximum speed is 200 km/h, but the trains almost never have the possibility to reach their maximum speed. Parts of the line have a speed limit as low as 70 km/h due to the heavy axle load traffic. The demand for longer and heavier trains means that a future new line has to be dimensioned for 25 tonnes axle load to enable freight trains to run at their nominal speed.

1.3 Main objectives of the Global Project

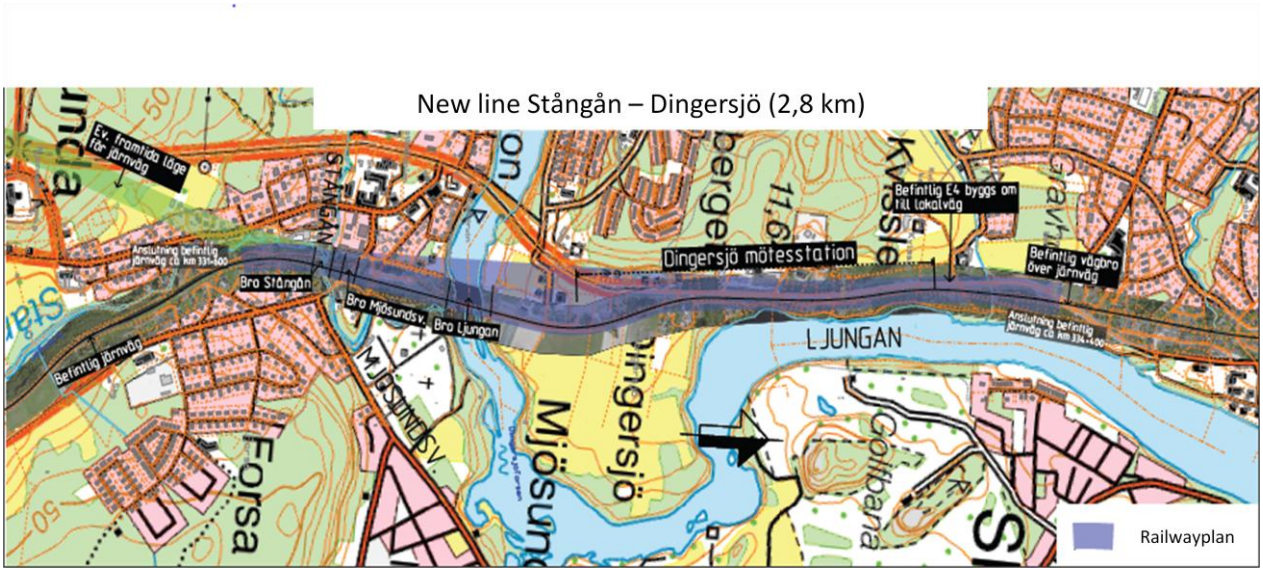
An upgraded East Coast Line to double-track will shorten the travel time from Gävle to Sundsvall from current 1:53 h to 1.34 h (Swedish high speed train X2000) and from 2:16 h to 1:34 h. The shortened travel time will allow introduction of day trains from Stockholm (Nordic Triangle) to the northern part of Sweden. Introduction of more regional rail service will facilitate work commuting in the area. This will enable regional enlargement, connection of labour markets and promote growth and employment. The double-tracking will benefit freight transport by rail to the region. As emphasized in section 1.1 and illustrated by the graphical presentations: Efficient logistical solutions for transport of raw materials, steel, pulp, paper as well as consumer goods to the region require a modern new performing East Coast Line with connections to logistic hubs and ports. The situation will become more pressing once the Bothnia Line and Ådalen Line enter full operation.

2. DESCRIPTION OF THE PROPOSED ACTION

2.1. General outline and context of the proposed Action

The main outline of the Action is to carry studies in order to get necessary permits in order construct a new line between Stångån and Dingersjö. The Action consists of the following parts:

- Railway plan and technical studies for a new 2,8 km single track line between Stångån and Dingersjö. The railway plan will contain the possibility to expand to double track. Meeting station at Dingersjö.
- Technical design documents for two new bridges dimensioned for double track in a new location.
- Road Feasibility Study and Work Plan (combined) including technical studies for a modified alignment of the old E4 road. This is necessary for the new railway line. The Action includes a pedestrian and bicycle path to facilitate access for travellers to a new rail stop for regional trains at Njurundabommen. The old E4 will be used as a local road.



Trafikverket is the beneficiary, implementing body and responsible for carrying out the project. Trafikverket is engaging external consultants and contractors for the implementation of work. All external resources are tendered. Supervising bodies (competent authorities) are engaged for approvals, i.e. environmental impacts analysis TSD approvals (notified bodies). Other stakeholders are the public, local and county administrations, bodies responsible for public transport and the railway operators.

2.2. Main objectives of the proposed Action

The main objective of the Action is to increase the capacity of the line. It will also be possible to expand the line from a single track to a future double track. It is possible that Trafikverket will decide to build a double track without delay, since the added costs for this compared to a single line with a 750 meters meeting station is estimated to be around 2 million Euros. The railway plan together with the feasibility study and work plan for the modified old E4 section, the pedestrian and bicycle path and the technical studies precede the call for tenders for construction works. The new line will be opened for traffic in 2017. The technical documents are used in the tendering procedure. The new tracing of the line include the construction of 2 new bridges. If financial means are available 2015-17. The Action will mitigate some of the existing bottleneck problems.

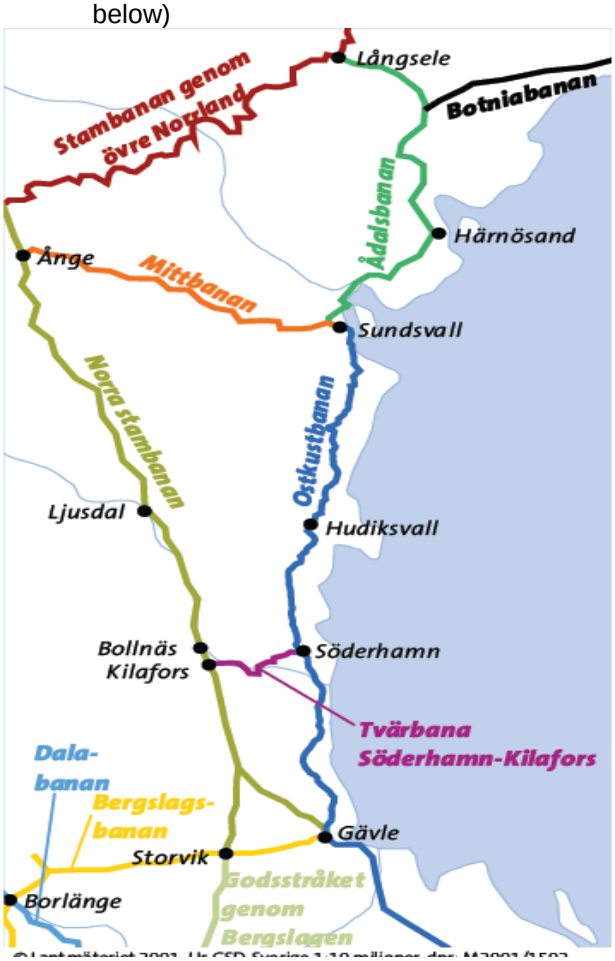
2.3. Contribution of the proposed Action to the Global Project

A new Bothnian Corridor East Coast Line will mostly be traced in a new location. **This action however will be part of a new line. The Action is necessary for the realisation of the Global Project i.e. a new double track between Gävle and Sundsvall.** The quality of the rail services will be enhanced with fewer delays. The Action will facilitate design of competitive timetables. The new line will have a platform at Njurundabommen, where regional trains can stop. This means that the local municipality will be connected with other cities along the line, the Bothnian corridor and the general railway system. The Action will support regional enlargement and development.

2.4. Indicators on proposed Action's implementation

Indicators

- Approved Railway Plan
- Approved Road Feasibility Study and Work Plan
- Construction documents
- ECO management plan
- Time table system studies Bothnian Corridor East Coast Line and connecting lines (see graph below)



2.5. Description of the Activities of the proposed Action (including their interdependencies)

Activity 1: Coordinated Railway Plan and Road Feasibility Study and Work Plan for a modified old E4 road section and a pedestrian and bicycle path

- Design and final tracing of the line/E4 road, pedestrian and bicycle path
- Specification of land requirements and buildings that are impacted
- Environmental Impact Assessment and approval thereof
- Public consultation with locals, the municipality other authorities
- Railway system specifications (detailed technical specifications)
- Approval of the railway plan/work plan

Trafikverket is together with the counties of Gävleborg and Västernorrland piloting a new approach to infrastructure planning. Municipalities and the regions are on an early stage coordinating the planning activities on together with Trafikverket. This means that time is saved in the planning stage. The risk of conflicts between different stakeholders as regards tracing, environmental concerns is greatly diminished down-stream the process.

Activity 2: Technical study – system specifications and construction documents

- Construction documents detailing the final technical design in conformity with the railway plan
- ECO management plan for monitoring and steering the construction work

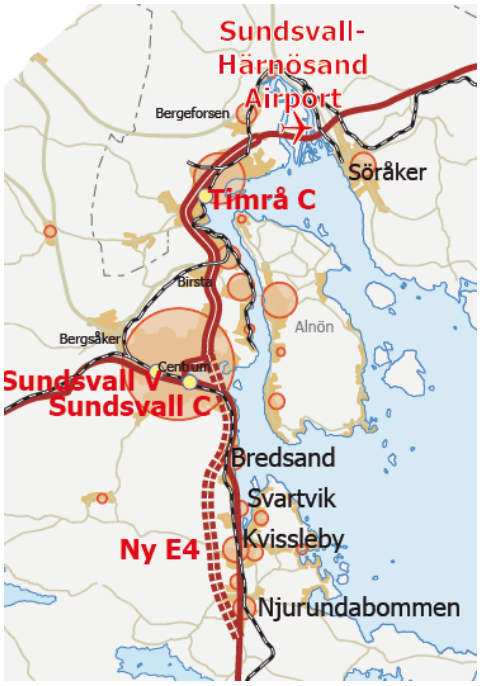
Activity 2 is necessary for the development of the call for tenders' documents.

2.6. Action Plan (graphic representations)

Please provide a Gantt chart detailing the critical path and including the milestones of the proposed Action and their interdependencies.

Activities	Gant Scheme	2012			2013				2014				2015		
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Activity 1	Railway Plan														
	Road Feasibility Study														
	Road Work Plan*														
Sub Activity 1.1	Environmental Impact Assessment														
	ECO Management Plan														
Sub Activity 1.2	Public Stakeholder Consultation														
Activity 2	System Specifications														
	Construction Documents														
	Call for tender construction**														
	Construction**														
	* Including construction documents **Not included in application														

2.7. Location of the proposed Action



Stångån – Dingersjö:

17°22'46"E
66°17'15"N

17°22'50"E
62°16'00"N

Mid-point Dingersjö meeting station:

17°22'46"E
62°17'06"N

Picture showing location of Njurundabommen where a new platform for passenger exchange will be built. The new E4 road bypass is also shown (dotted line to the left).

Source: Stationslokaliseringar för lokal tågtrafik, rapport 2011:22

http://www.lansstyrelsen.se/vasternorrland/SiteCollectionDocuments/Sv/publikationer/rapporter/2011/2011-22-stationslokaliseringar-for-lokal-tagtrafik.pdf

2.8. Overview of the Action

Activities	Expected Results	Milestones	On critical path (yes/ no)	Means of Verification
Activity 1: Study New Line Stångån-Dingersjö consisting of: - Railway Plan - Road Feasibility Study - Work Plan for a modification of a section of the existing E4* road and construction of a pedestrian and bicycle path to a new train stop at Njurundabommen. The Railway Feasibility Study has already been done. ** A bypass is under construction. The existing E4 will be used as a local road.*	- Final tracing of the new railway line - Final tracing of rerouted E4 - Final tracing of pedestrian and bicycle path	- Signature of contract for Railway plan 2012 Q2 - Signature of contract for Road Feasibility Study 2012 Q2 - Signature of contract for Road Work Plan 2012 Q2 - Railway Plan 2014 Q3 - Road Feasibility Study 2013 Q4 - Road Work Plan 2014 Q3	yes	- Signed contracts - Railway plan approved by Trafikverket - Road Feasibility Study approved by Trafikverket - Road Work plan approved by Trafikverket
Subactivity 1.1:Environmental Impact Assessment (EIA) and Ecological (ECO) management plan	- Environmental Impact Assessment - ECO management plan	- EIA 2014 Q2 - ECO Plan 2014 Q2	yes	- EIA approved by the county government - ECO management plan
Subactivity 1.2:Public stakeholder consultation	Public consultations with stakeholders	Continuously along the development of the plans and by official publication of the plans for public review with the possibility for anyone to object to the plans by an appeal 2012 Q3-2014 Q2.	yes	Information about the plans available on Trafikverkets homepage and advertised in local media.
Activity 2: System specifications (railway specific), construction documents to be used for the tendering procedures.	- Technical specifications for the 2,8 km long line and the meeting station including 2 new bridges - Construction Documents	Documentation for procurement of works 2014 Q4	yes	- Specification and Construction Documents approved by Trafikverket

2.9 Risk Assessment Grid by activities

Activity N°	Risk	Impact	Likelihood	Control	Mitigating measure(s)
Activity 1: Railway plan, Road Feasibility Study and Work Plan	Objection to the Railway Plan and Road Work Plan by the public	Rail and Road Work Plans have to be revised. This causes delays in building of the new line and the pedestrian and bicycle path. Normal delay time is 6-12 months	Medium	Beyond	Consultations with the municipality and local citizens. This work has already started.
Subactivity 1: Environmental Impact Assessment ECO management plan	The technical specifications will be for a line speed of 250 km/h. This generates noise when trains in the future run at line speed.	Noise and vibrations not contained within limits	Low	Under	Noise barriers, noise resistant windows, isolation of facades
Activity 2: System specifications rail and road	No risk	N/A	N/A	N/A	N/A

3. RELEVANCE: CONTRIBUTION OF THE PROPOSED ACTION TO THE TEN-T POLICY OBJECTIVES AND EU DIMENSION

3.1. Contribution of the proposed Action to TEN-T priority projects, or classification as a project of common interest

The East Coast Line is a part of the TEN-T but it is also part of the Bothnian Corridor which aims to connect the priority project Nordic Triangle with the proposed Northern Axis. The Actions will increase the possibilities of mobility for people and goods in the region

The East Coast Line directly connects with the Ådalen Line (opening for traffic august 2012) and the Bothnian Line (see graph section 2.4). The lines are equipped with ERTMS. According to Trafikverket's Implementation Plan, notified to the European Commission, the Bothnian Corridor East Coast Line will be equipped with ERTMS before 2020.

The East Coast Line is linked to the TEN-category A port of Sundsvall.

3.2. Contribution of the proposed Action to TEN-T priorities

Article 5a
Establishment and development of the key links and interconnections needed to eliminate bottlenecks, fill in missing sections and complete the main routes, especially their cross-border sections, cross natural barriers, and improve interoperability on major routes:

The singe-track East Coast Line is due to the increased and forecastted expansion in traffic volumes in all aspects a bottleneck. Due to the congestion, Trafikverket has declared part of the line overloaded. A future double-track line is needed. Pending this decision capacity is increased through new meeting stations.

Article 5b
Establishment and development of infrastructure which promotes the interconnection of national networks in order to facilitate the linkage of islands, or areas similar to islands, and landlocked, peripheral and outermost regions on the one hand and the central regions of the Community on the other, in particular to reduce the high transport costs of these areas

In many cases in the northern parts of Sweden, transportation via train is the only option, mainly due to economics. Lowering of standards or capacity leads to companies losing vital competitiveness. Lack of capacity threatens the economic growth. The northern part of the country is far away from the big markets of industrial goods in central Europe.

Article 5c)
The necessary measures for the gradual achievement of an interoperable rail network, including, where feasible, routes adapted for freight transport:

The East Coast Line is important for freight and passenger traffic. It has a conncection to the TEN category A port of Sundsvall. New and upgraded stations have been constructed in Gävle and Söderhamn in order to facilitate the interface to other modes of transport (mainly buses but also cars). The increasing rail commuting is dependant on modern rail stations. The rail station of Sundsvall will be upgraded in the coming years.

Article 5d)
The necessry measures to promote long-distance,short sea and inland shipping

This Action does not include any specific measures directly connected to the port of Sundsvall. However due to the importance of the East Coast Line for the rail freight, all measures aimed to contribute to better capacity will also strengthen the integration between rail and other modes.

Article 5e)
The necessary measures to integrate rail and air transport, especially through rail access to airports, whenever appropriate, and the infrastructures and installations needed

The East Coast line has a rail connection to Stockholm Arlanda airport (the main Swedish airport). Enabling capacity Actions that strengthen passenger rail services between Gävle and Sundsvall means that more people from the regione can travel by train to Arlanda.

Article 5f)
Optimisation of the capacity and efficiency of existing and new infrastructure, promotion of intermodality and improvement of the safety and reliability of the network by establishing and improving intermodal terminals and their access infrastructure and/or by deploying intelligent systems.

The high frequency of trains on the East Coast Line currently suffer from constant delays as a result of the overloaded railway. Adding more meeting stations and "tuning" the signalling system will improve the network reliability.

(1) A new intermodal terminal connected to the East Coast line is planned north of Sundsvall. This will enable new efficient intermodal supply chains using rail for the long haul.

Article 5g)
Integration of safety and environmental concerns in the design and implementation of the trans-European transport network

The East Coast Line is not situated in an environmentally sensitive area (Natura 2000). All environmental aspects will be considered within the construction work. By developing the european railway network, of which the East Coast Line is a part, the competitiveness and use of rail transport is expected to increase, compared to road and air transport. Rail transport is a more environmentally friendly means of transport.

Article 5h
Development of sustainable mobility of persons and goods in accordance with the objectives of the European Union on sustainable development

Sustainable development consists of environmental, economical and social dimensions. The upgrading of the East Coast Line is assessed to have the following impact on those respectively:

Environmental: a railway with higher capacity is likely to attract more customers, passengers as well as freight trains. The railway is considered perhaps the most environmentally friendly means of transport.

Economical: a railway with higher capacity will facilitate for the industry, e g in export and international trade, as well as for people, especially commuters in the area. Thereby, the labour market and the region will be enlarged and result in more jobs in the area.

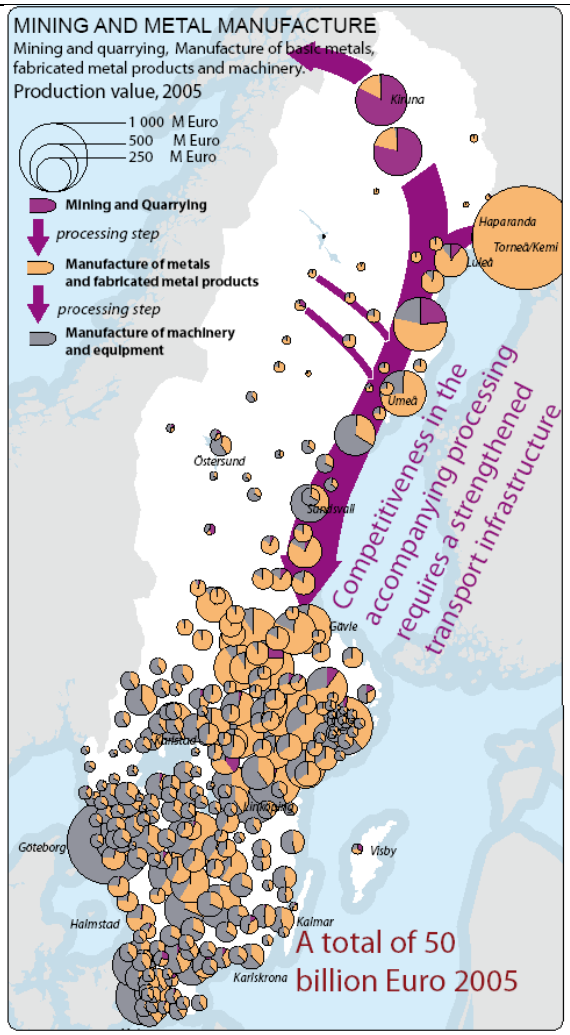
Social: these measures are likely to have impact on the attractiveness of the region e g in people´s choices of where to live and work.

3.3. Contribution of the proposed Action to the objectives of the (sub-) priority under which the proposal is submitted.

This Action contributes to the objectives of the Call for proposal outlined in the annual work programme 2011. By the upgrading of the East Coast Line, a modern transport infrastructures is supported. Thereby people and goods are enabled to move faster and more easily between Member States and it will add to the overall competitiveness of the EU.

3.4. Contribution of the proposed Action to the internal market, the cohesion policy and the Europe 2020 strategy

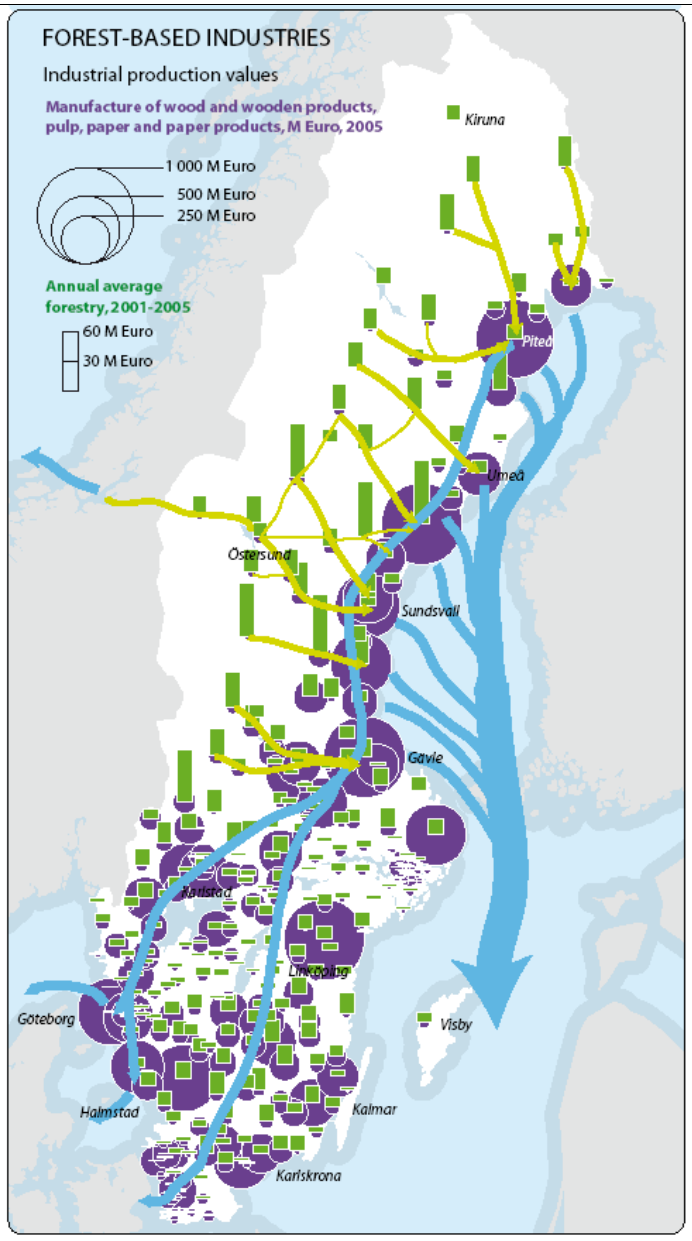
The East Coast line is an asset for EU.
Sweden has the most important mining industry in the European Union. 90 percent of EU's total supply of iron ore is extracted in Norrbotten. Sweden is the leading supplier of gold and the second largest of silver, lead and copper. 12 out of Sweden's 15 mines are located in the north and the Swedish mining related industry annually processes iron ore and metal for a value of 50 billion Euros. An additional 50 billion Euros is produced in other parts of Europe. In the northern counties of Finland, the mines annually produce a value of about 300 million Euros. 70 percent of the ore is exported to the rest of Europe.



Strong forest-based industry

Northern Sweden represents 40 percent of the Swedish forestry production. The forest-based industry's annual production value: 5,5 billion Euros. More than 80 percent of Sweden's paper and pulp export goes to Europe. The forest-based industry represents 12 percent of Sweden's total export. A number of big paper mills are situated along the East Coast Line and deliver goods to EU.

The Forest based industry's largest harbour in Scandinavia is situated in Sundsvall and has railway connections to west (Norway) and north and south. The railway connections to the forest harbour from the East coast link, is essential for the forest based industry and to support EU with paper- and forest products.



Great shortage of railway capacity - lack of capacity threatens economic growth

Very large volumes of goods from the industries located along the coast of northern Sweden are transported by train, and the volumes increase every year. A prediction of future railway transports was made by Trafikanalys* in 2000. The volumes predicted for 2020 was reached 2006, 14 years earlier than forecasted! The large companies in the region predict a 50 percent extra traffic increase until 2020.

The Finnish Main Line links the northern suppliers of raw material with the most important markets in the south. The industrial export has increased with 50 percent and industrial turnover with 54 percent along the Main Line since 2000. The Finnish national increase is 34 and 37 percent during the same period of time. The amount of transported goods in Finland is predicted to increase with 40-65 percent until 2030, varying between sections. Planned mining and extraction along the Main Line will increase the annual transport demand with about 18 million tonnes. The northern parts of the Main Line are Finland's most important transport corridor and increased transports in the north will affect the southern parts.

*The Swedish Agency for Transport Analysis http://www.trafa.se/Hem/

3.5. Socio-economic benefits of the proposed Action at macro level

A socio-economic analysis was made in the feasibility study "Double track East Coast Line Gävle-Sundsvall final report November 2010"*. It shows a break even net present value. The study compares the present situation with a fully built modern double track line where some sections will be built in new locations. The quantified benefits consist of producer and consumer surplus (increased ticket revenues, reduced operating costs, shorter travel times, reduced costs for freight owners and the like), environmental gains, investment costs and costs for maintaining the line.

The basis for the calculations is national forecasts on travel demand and estimated transport demand from the industry. It is important to keep in mind that the socio-economic analysis is an approximate calculation that omits several elements that would improve the net economic benefit. The calculations do not include the demand for additional capacity that will be generated by the Ådalen Line and the Bothnia Line. The on-going investments in new meeting stations will increase the available capacity but they will not solve the forecasted capacity requirements and hence the provision of an infrastructure that satisfies customer needs for reliable and punctual train services.

The proposed Action is fully compatible with the end objective to gradually upgrade the Bothnian Corridor East Coast Line to a double track standard. No separate socio economic calculation has been done for the Stångån-Dingersjö new line as it is a step towards achieving the long term goal of a modern double track East Coast Line.

**Förstudie dubbelspår Gävle-Sundsvall, slutrapport November 2010*.

http://www.trafikverket.se/PageFiles/29351/1-41.pdf

3.6. Added-value of EU funding on the financing of the proposed Action and the commitment of the different stakeholders

The prospects of an EU funding will guarantee the execution of the Action and positively influence decisions to build the new line. **The EU amount will free financial means to undertake railway inquiries for double tracks in other parts of the East Coast Line. This will speed up the process to realise a modern high performing East Coast Line being a part of the Bothnian Corridor.**

3.7. Cross-border section

This section aims at verifying whether or not any section of the proposed Action corresponds to the definition of cross-border sections[1].

A. Does the Action require actions/construction works on both sides of the borders between two Member States? ☐ Yes ☒ No

If yes, indicate which Member States are directly concerned and which activities each of them will be carrying out.

B. Does the Action ensure, via a third country, continuity of a priority action between two Member States? ☐ Yes ☒ No

If yes, indicate which Member States and third country are directly concerned and which activities each of them will be carrying out.

[1] http://tentea.ec.europa.eu/download/calls_2009/definition_cross_border_sections_en.pdf

C. Is the Action located on the territory or largely on the territory of a single Member State in the proximity of the border but not actually crossing it, and is this Action necessary to link the network to the neighbouring Member State or a third country?

☐ Yes
☒ No

If yes, provide justification for classifying the Action (or part of the Action) as cross-border and explain which activities the Member State(s) will be carrying out.

D. Has a written agreement been concluded between the Member States concerned or between the Member States and third countries concerned relating to the completion of the cross border section, in accordance with Article 3.3 of the TEN Regulation?

☐ Yes
☒ No

If yes, describe the main elements of this agreement and attach a copy of it in annex.

E. Have the Member States concerned made a joint commitment regarding the action, i.e. (a) concluded a formal written agreement at appropriate level, (b) agreed a common financial plan or coordinated financial plans, (c) agreed on a common timetable for studies and works, including a coordinated date of opening to service, (d) agreed on how the Member States concerned coordinate their procedures for assessing environmental effects and socio-economic effects thereof, and how the use their best endeavours to conduct a trans-national enquiry prior to the granting of the building permit?

☐ Yes
☒ No

Clarify and detail as appropriate, and attach copies of the related documents

F. Have the Member States (and potentially third countries) concerned created a common, technically and financially indivisible structure for the implementation of the action?

☐ Yes
☒ No

If Yes, explain the role and legal status of this structure, and attach the relevant legally binding agreement(s).

☐ Yes

G. Provide information on the financial viability of the cross-border action and on the timetable for carrying it out. Explain which guarantees are issued - preferably jointly - by the Member State(s) to ensure this viability and the timetable. This applies also if the applicant is not a Member State. Attach these guarantees in annex.

☒ No

H. Have the Member States concerned already notified to the Commission that this Action has been identified as a cross-border section, in accordance with Article 19 b of the TEN-T Guidelines?

☐ Yes
☒ No

If Yes, attach in annex the related document. If No: shall this application for EU financial support at the maximum rate of 30 % be considered as a notification of the Action as a cross-border section?

4. MATURITY OF THE PROPOSED ACTION

4.1. Approval of the proposed Action

The studies that precedes the call for tender and construction of the new line at Dingersjö and the modification of the existing E4 road* and a pedestrian and bicycle path to the railway station is included in Trafikverket's investment plan 2010-2021. The Action is also included in the current budget for 2012-2014.

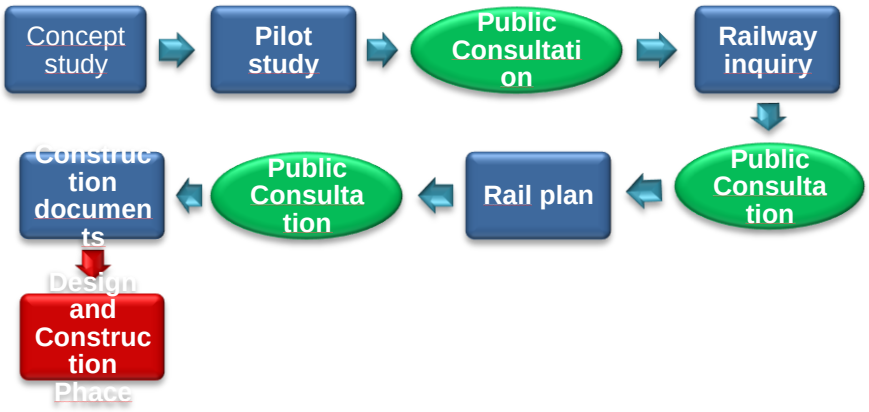
**A new by-pass section of the E4 is being built outside the agglomeration. When it is ready the current E4 will be a local road. The new E4 road is not connected with the Action.*
http://www.trafikverket.se/Privat/Projekt/Vasternorrland/E4-Sundsvall/Om-projektet/

4.2. Political commitments to the proposed Action (and Global Project)

The Action is included in Trafikverket's investment plan 2010-2021 which was approved by the Swedish government in April 2010. There is a strong regional interest in capacity reinforcements of the line. There is a strong regional cooperation by the municipalities and counties concerned by the line. The line is a part of strategic outlooks in EU funded Interreg III projects such as the Bothnian Green Logistics Corridor, the Mid Nordic Green Transport Corridor, Green Highway and also included in the Swedish Governments Baltic Sea strategy.

4.3. Public consultation

Trafikverket has already started a consultation with the local authorities and residents affected by the Action about the new tracing of the line. The consultation process runs throughout the entire planning process, from ex-ante evaluation to the Rail Plan. It is governed by the environmental code and the code on construction of railways and roads. At a consultation, those who are assumed to be affected/interested shall be given the opportunity to put forward their opinion and have the possibility to influence the future Environmental Impact Assessment as well as the establishment and the design itself. This work will be a part of the Railway Plan and the Feasibility Study/Road Work Plan for the bicycle and pedestrian path. The graph to the left describes the process. This Action is currently in the phase that precedes the railway plan.



Since there are no alternatives to the chosen line – there is no need to make a Railway Inquiry*.

Pilot study is synonymous with Feasibility Study

** The purpose of a railway inquiry is to select one corridor from the pilot/feasibility study.*

4.4. Readiness / technical maturity of the proposed Action

The Action is ready and technologically mature.

4.5. Building permits

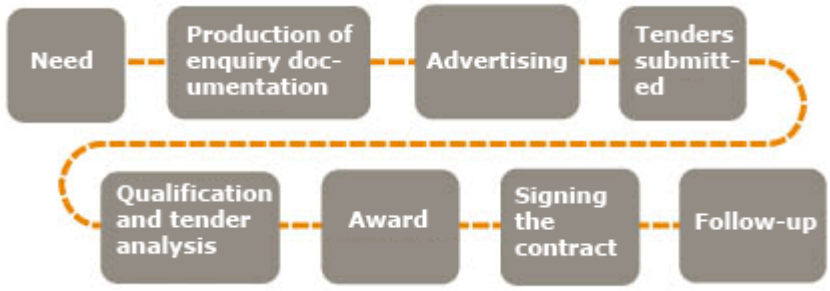
Subject of building permit procedure	Date of award of building permit	If relevant, foreseen date of award of building permit	Foreseen start date of works
Approved Railway Plan		2014-09-30	2015-01-01
Approved Road Work Plan		2014-09-30	2015-01-01

4.6. Procurement

4.6.1 Procurement in general

Trafikverket is an authority and by law must endeavour to procure goods, services and contracts in competition.

The Trafikverket has to follow the Public Procurement Act (LOU) and the Act on Procurement in the Water, Energy, Transport and Postal Services Sectors (LUF). These acts are based on EU Procurement Directives. A number of fundamental EU principles must therefore be observed when carrying out public procurement in the EU. It means that all suppliers have to be treated in a similar and non-discriminatory way. The procurement has to be carried out in an open way.



Need

A need for a product, service or contract arises within Trafikverket. This need is defined in enquiry documentation.

Production of enquiry documentation

Enquiry documentation is the collective documentation that describes what is to be procured, what requirements are placed on the tendered and the subject of the procurement, as well as how the tenders will be evaluated.

The enquiry documentation consists of several documents, e.g. procurement regulations, administrative regulations, technical specifications of requirements, a contract proposal, appendices that may have to be filled in, and standard conditions.

Advertising

Procurement is advertised in a publicly accessible database* and on Trafikverket's website. Procurements under certain threshold values, known as direct procurements, do not have to be advertised. A prequalification system, TransQ, is used for procurements over the threshold values and procurements in accordance with LUF; in these instances, the procurements do not have to be advertised.

* Link to Ongoing Public tenders: http://www.eu-supply.com/transactions.asp?B=TRAFIKVERKET&PS=1&SD=2011-11-02&ED=2012-05-30&FB=0&FT=0&FS=0&FC=0&FCPV=0&H=0

Tenders submitted

The supplier sends in their tender. Deadlines must be respected.

Qualification and tender analysis

Tenders are evaluated in accordance with the evaluation criteria set out in the enquiry documentation. Trafikverket invite qualified suppliers to a call for competition. The selection is based on the tenders that best correspond to the goods, services or works that is being procured. Trafikverket may negotiate the contract with one or several of the suppliers.

Award

Notification is sent to all tenders setting out which supplier(s) has (have) been awarded the contract. The contract can be signed at the earliest ten days after the award notification has been sent.

Signing the contract

The contract is signed with the winning supplier(s).

Follow-up

The contract is continually followed up during the term of the contract.

4.6.2 Contracts already awarded and procedure(s) applied

A signed contract for the studies with the selected winner of the procurement is planned for May 2012. The tendering procedure is currently on-going.

4.6.3 Procurements planned during implementation

Procurements for the railway plan, Road Work Plan for road and construction documents will be executed according to Swedish law. No additional procurements are foreseen during the project.

4.7. Pending legal/administrative/technical issues

No specific problems of a legal/administrative/technical/other nature are foreseen.

4.8. Information on funding sources (state budget(s), regional / local budget(s), applicant's self financing, EIB loan(s), other loan(s))

The project is financed by annual government grants.

4.9. Other sources of EU funding

Neither the Action nor the Global project benefit from any other source of Community funding besides TEN-T. Neither the Action nor the Global project have applied for any Community financial aid other than the TEN-T.

4.10. Public-private partnership

The Action will only receive public financing. One of the reasons for that is that traditionally in Sweden only public financing is used for infrastructure. Trafikverket is purely financed by government grants and NDO (National Debt Office) financing.

No measures have been taken towards a public-private partnership.

4.11. Revenues of the proposed Action

The Action is not expected to generate any revenues.

5. IMPACT OF THE PROPOSED ACTION

5.1. Impact of the study as a decision-making tool

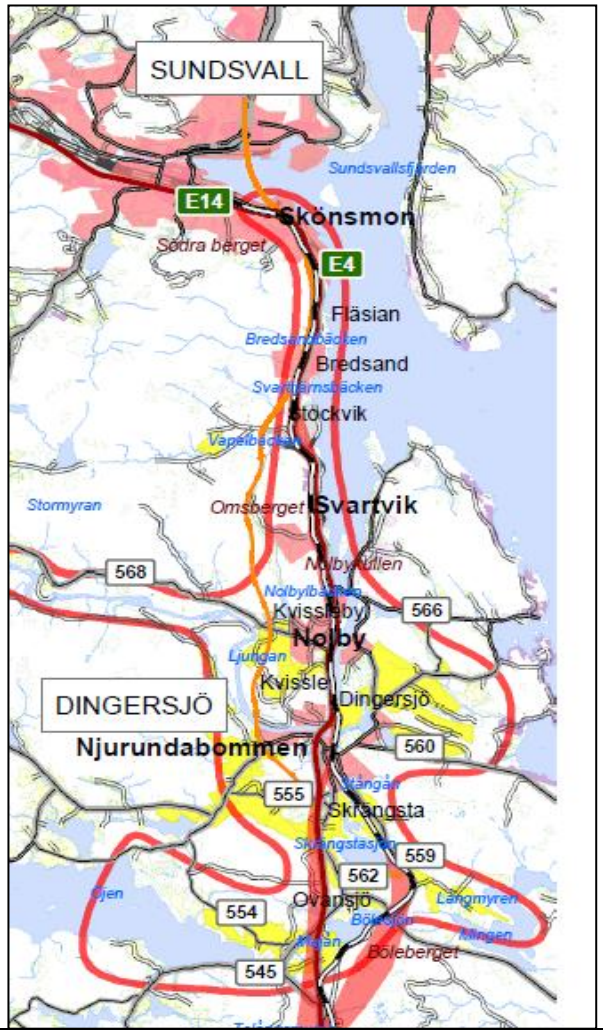
The Railway Plan, Road Work Plan and construction documents are a part of the process for the construction of infrastructure. Trafikverket will decide on the construction of the line when these documents have been produced and approved. The decision to build the line is made by the head of Trafikverket's Market and Planning Department. The foreseen start of the construction is January 2015.

5.2. Impact of the study in terms of policy-making and developing best practices

The Action is pioneering a new approach for planning of new railways. Local authorities and residents are more deeply involved in the process and at an earlier stage than what has been common practice. The Action coordinates the Railway Plan with a Road Work Plan to realign the E4 and the building of a bicycle and pedestrian path to a new station for regional trains. Construction documents, necessary for the tendering, will be produced simultaneously with the Railway Plan and Road Work Plan.

5.3. Ex-ante evaluation(s)

The Action has been thoroughly evaluated in a feasibility study* on a double track line from Gävle to Sundsvall. The picture shows the part of the existing East Coast line from Dingersjö to Sundsvall (20 km) which was evaluated in the feasibility study. Except the new line Stångån-Dingersjö a future double track will be built adjacent to the existing line onwards north of Dingersjö where the new line connects to the existing one. No separate evaluation has been made for this Action. It is to be seen in the global perspective of a new complete double tracked East Coast line which is a part of the Bothnian Corridor.



The feasibility study compares a double track with an upgrading of the existing line with more meeting stations. This will not be sufficient to accommodate the expected traffic increases based on demands for more regional trains and additional trains that will be generated by the opening of the Botnia line and Ådalen line. Problems with traffic disturbances and uncompetitive travel times will remain.

A double track East Coast line will be able to accommodate the expected demand for additional traffic. It will allow the passenger trains to run at competitive speeds. The time between Gävle and Sundsvall for an express train with no in between stops will be cut from 2 hours to 1 hour. Journey times for regional trains with intermediate stops will be 1,5 hour that is less than the time for today's express trains.

Due to the high costs for building a double track line the chosen approach is to achieve this step by step. The proposed Action is an example of this.

**Förstudie dubbelspår Gävle-Sundsvall, slutrapport November 2010*.

http://www.trafikverket.se/PageFiles/29351/1-41.pdf

5.4. Financial analysis

No separate financial analysis has been made for the Action. A socio economic cost benefit analysis was made in the feasibility study for a complete double track between Gävle and Sundsvall. The net present value was calculated to be -0,03. A quantification of the benefits on the quality of the rail traffic with i.e. robustness, reliability and punctuality has not been made in the analysis. The existing line also needs an upgrade to 25 tonnes axle load to be able to accommodate heavier trains from the Bothnia and Ådalen line. This is problematic to do on an existing single track and means additional costs in the reference alternative not considered by the socio economic analysis.

5.5. Social and economic impact

The feasibility study analyses the social and economic impact of a fully double tracked line. No separate analysis has been made for the Action.

5.6. Impact of the proposed Action on traffic management, congestion, modal split, inter-operability, service quality, safety and security

The Action will increase the capacity of the existing line. The line will comply with the EU technical specifications for interoperability. The new meeting stations will be dimensioned for 25 tonnes axle load. The meeting stations allow better scheduling of existing train traffic and expected additional traffic. Causes for disturbances in the train traffic can be sabotage, break down of trains or the infrastructure (land-slides, rail defects ... .). The risk for sabotage is considered low. Mitigation of the other problems will only be accomplished when a substantial part of the East Coast line has double tracks.

5.7. Impact of the proposed Action on regional and / or local development and land use

The Action will support the objective of enlarging the region of Sundsvall, support green rail transport of people and goods and contribute to the competitiveness of the region, hence job creation and the supply of labour to businesses in the area.

5.8. Impact on competition

All Actions that increase the capacity on the line is strengthening the rail vis à vis the road and contributing to modal shift and to EU white paper targets of shifting long distance transport of people and goods to rail.

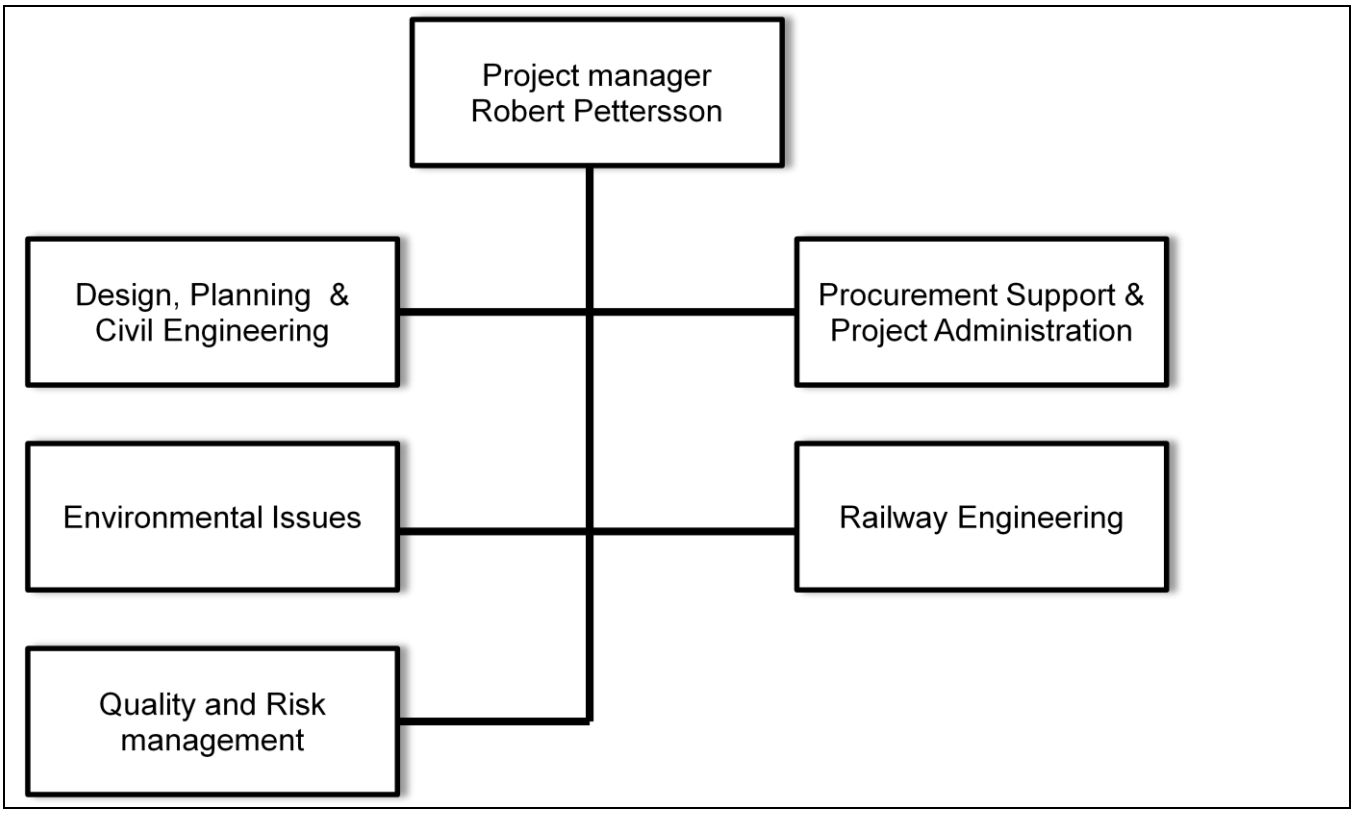
5.9. Impact on the environment

During the construction phase there will be disturbances on the surrounding environment. An ECO management plan will be used to monitor and control the disturbances. When the line is commissioned for traffic there will be noise. The noise mitigation is handled by walls and new windows in houses where the limit value is exceeded. The noise mitigation measures will be dimensioned for the maximum line speed of 250 km/h. This line speed will not be exploited until a significant part of the track are upgraded and new passenger trains able to run at that speed are introduced by the operators. The Action increases the capacity on the East Coast line which positively impacts modal shift from road to rail with resulting reductions of CO2 emissions.

6. QUALITY OF THE PROPOSED ACTION

The breakdown of eligible costs is part of the quality of the proposed Action. As this information is provided in section A 3.3 of the application form it is not duplicated here.

6.1. Organisational structure



6.2. Control procedures and quality management during implementation

Quality management will be performed according to Trafikverkets internal regulations and in accordance with existing legislation. Trafikverket has a management system – Our way to work – which set outs the strategy to meet stated targets and achieve desirable results.

All projects are implemented according to the Trafikverket's project model, which helps to structure tasks and ensures effective preparation, organization and implementation. The model can be used flexibly according to the prerequisites and conditions of different projects. For every project, Trafikverket identifies objectives, reviews progress and conducts evaluations and analysis of final results.

The Trafikverket's project model has three levels – an operations management level, a project management level and an activity level. Work in projects is divided into four phases – initiation phase, preparatory phase, implementation phase and a concluding phase.

Initiation phase: The project begins with an initiation phase which includes the operations management level. A formal decision to start the project starts the initiation phase (decision 1). During the initiation phase, the project initiator is responsible for drawing up a project description, selecting a project leader and establishing the project in their organization.

The initiation phase ends with a decision to begin the preparatory phase (decision 2) and the handover of the project description to the project manager.

Preparatory phase: The preparatory phase is the first of three phases in the project management level. The project manager should be in place when the preparatory phase begins. At this point, the project description is used to develop the project plan, which is the detailed guidance document for project work.

At the beginning of the preparatory phase, the project manager establishes a project organization. To assure the quality of the project, detailed descriptions of work are prepared, describing how the project shall be implemented.

The preparatory phase ends when the initiator approves the project plan and the implementation phase starts (decision 3).

Implementation phase: Implementation begins when the project initiator decides to begin the project (decision 3) and when the initiator and project manager formally agree the project plan.

During the implementation phase, project work is carried out according to the project plan and the management system's processes. The project management activities involve coordinating project activities and resources to guide the work towards the agreed targets. The implementation phase involves managing changes, assessing how and if the project impacts upon other projects and interests, identifying boundaries to work, and ensuring progressive and continual updating of the project's time plan.

The implementation phase is concluded when the project's results are approved (decision 4).

Concluding phase: The concluding phase is the part of the project in which experiences are reported and analysis takes place. The actual results are analyzed in comparison to the planned results in terms of time, cost and quality. The quality of both the project work and project results is assessed.

The phase ends when the customer has received and approved the final report and formally concludes the project (decision 5).

6.3. Risk management methods and procedures

A risk and ECO management plan is part of the Railway Plan and Road Work Plan. Risk management is an integrated part of project work and comprises the identification, evaluation and management of risk which may impact upon the achievement of project objectives.

Project management risks are those risks and opportunities which are related to the project organization's internal risks, such as organizational, financial and administrative risks and general risks relating to contractors.

Project management risks are, during the procurement process, handled according to Trafikverket's recommendations and template for risk management. However, certain project adaptations may take place with regard to the project's organization and purpose.

Contractor risks: Contractor risks relate to risk in the project development, implementation and operation phases.

Continuous consultation during the project development phase (receipt of tenders) leads to identification and assessment of contractor risks. Cases where risks cannot be assessed and planned for are sent to the Trafikverket for further evaluation. Risks which the customer should inform the contractor about are addressed within the tender process and those which occur in the operations phase are transferred to the contractor that will manage the facilities.

According to contracts, the contractors will develop routines for assessment of risk and shall continually work to assess their own and the customer's transferred risks. Any outstanding risks which cannot be addressed by the contractor during the building phase will be transferred to the customer and thereafter to the operator of the facilities.

6.4. Ex-post monitoring and audits

As Trafikverket is quality certified, the organization is subject to recurring audits from the certification body. Trafikverket's head office undertakes audits of Trafikverket's project organizations and participating consultants.

6.5. Communication and visibility given to the TEN-T co-financing

EU information and logotypes will be visible in the Railway Plan and Road Feasibility Study and Work Plan and in other public media used by the Action i.e. Trafikverket's website and in accordance with EU regulations.

6.6. Other information

The Action has not been submitted in a previous call.

7. ANNEXES

All relevant information for assessing the proposal must be provided in the Application Form. The purpose of annexes is to provide additional, supporting information. Annexes or their specific relevant sections should be referred to in the application's relevant parts