

Alternatives of financing of rail infrastructure

Per Olof Lingwall

Independent senior advisor

Cloling AB

Stockholm 30 January 2024

Planning and financing of transport infrastructure

A few reflections

- Large maintenance debt
- Very large investment needs
- The Swedish planning model is cumbersome

a lot happens in four years

Planning and financing of transport infrastructure

Challenges

- Rapid changes in the world around us, e.g. Norrbotten
- The importance of the Armed Forces is growing in an uncertain world
- Major industrial investments in northern Sweden
- Interest in testing new forms of building new transport infrastructure
- In international comparison, Sweden is a prominent industrial nation in an elongated country in northern Europe and therefore has reason to secure long transport routes in the entire chain from raw material to finished product
- A NATO membership requires that alternative transport routes must be secured with evidence from Ukraine that has shown the railway's uniquely capable civil and military role

The government gives the go-ahead for two new tracks Lund-Hässleholm

A new double track Lund-Hässleholm will be completed in 2040 at the earliest - eleven years after the Fehmarn-Belt link...

To get more capacity, decisions are required...

Järnvägens framtid

Regeringen ger klartecken för två nya spår Lund-Hässleholm

26 oktober 2023 14:07

Regeringen vill komplettera dubbelspåret längs Södra stambanan i Mellanskåne med ett nytt dubbelspår. Trafikverket ska nu planera för utbyggnaden. Ett nytt dubbelspår Lund-Hässleholm blir klart tidigast 2040 – elva år efter det att en fast förbindelse över Fehmarn Bält tas i bruk.



Erik Magnusson
Text





Four track Lund-Hässleholm

Investment Cost: 22 to 37 billions SEK
Schedule: Opens for traffic 2043-2050

Approx. 60 km of new railway

Öresund fixed link

9 years from decision to traffic



1991 Decision



1995 Start construction



2000 1 July
inauguration

Denmark invests 100 billions DKK

Germany -Copenhagen

Denmark

Financing with loans
without burdening the
national transport plan



Denmark

Financing with loans
without burdening the
national transport plan

Construction costs (at opening)	DKK (bn)	EUR (bn)
The Øresund fixed link*	19,5	2,7
Danish land-connections	7,9	1,0
Swedish land-connections	2,6	0,4
Total investment	30	4,0

*EU support(TEN-T, CEF) of 5% of the construction cost

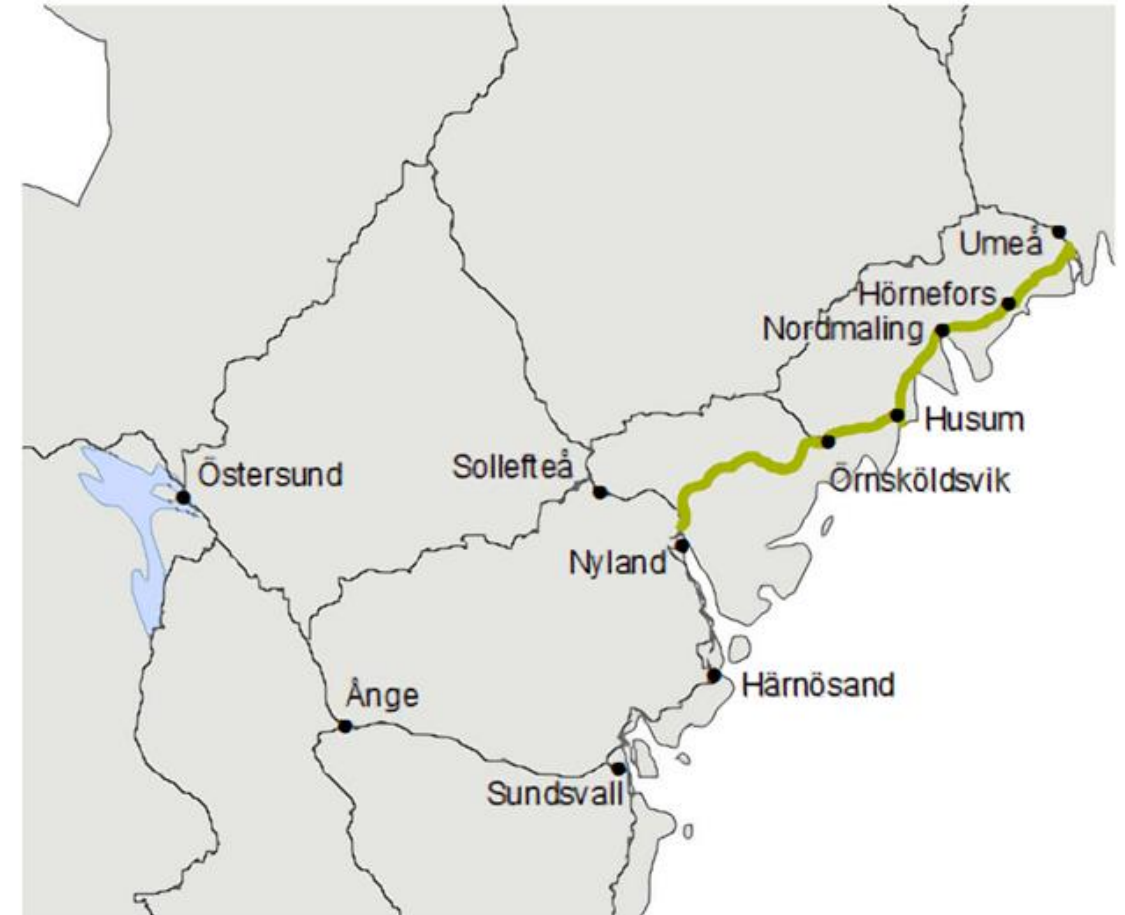


Options for implementing projects

1. Trafikverket investigates, plans, designs, procures implementation and manages all or part of the new facility
2. Project companies take on the role of project owner for the entire project or parts of the project
3. Intermediate forms with different implementation and financing solutions
4. Examples
 - SVEDAB - ÖRESUNDSKONSORTIET - ÖRESUND AS
 - MIAB – STATEN genom Trafikverket; Mäljarbanan
 - Botniabanan AB (project company)
 - Metropolitan agreements, i.e.Västsvenska paketet

Independent constructor – the example Botniabanan

- Single track railway, 190 km lång.
 - 1996 Decision
 - 2000 Construction start
 - 2010 Inauguration
- Banverket responsible för planning
 - Pre-studies
 - Railway plan including EIA
 - Land purchase
- Botniabanan AB, owned by the state (91 %) and the municipalities/regions/regioner:
 - Technical design
 - Construction
 - Financing
- Financed by loan (state guarantees)
- The municipalities financed stations.
- The loan is repaid by Trafikverket
- Strong focus on costs and timeplan



Financing

Some examples

Trafikverket as the client

- Traditional annual grant financing from the state budget
 - The traditional way
 - Creates a jerkiness and dependence on other projects in Trafikverket's project portfolio.
- Loan from the National Debt Office (NDO-lending)
 - Provides greater flexibility, the project managers are not as dependent on annual budget allocations
 - The model is used very restrictively

Other financing

- Lending from the market or NDO-lending
 - An external party takes out loans that are transferred to Trafikverket
- Financing through track fees
 - Unproven model in Sweden, however applied for e.g. Arlanda Line
- Financing via the Öresund Bridge
 - The "Danish model"
- EU-funding
 - Connecting Europe Facilities