The Öresund Metro – improves green climate-friendly freight transport

The EU is aiming at shifting 30% of road freight over 300 km to rail or water-borne transport by 2030 and more than 50% by 2050. To meet this goal will also require appropriate infrastructure to be developed.

The number of freight trains that transport goods between Scandinavia and central Europe will double when the Fehmarn Belt Fixed Link between Denmark and Germany opens in 2028.

According to Danish and Swedish authorities, this will require that the European TEN-T ScanMed Corridor can accommodate three freight trains an hour in each direction on the Fehmarnbelt Fixed Link and the Öresund Fixed Link. This will cause capacity issues for passenger transport across the Öresund Fixed Link.

An Öresund Metro between Copenhagen and Malmö could shift the high number of passenger journeys from regional trains to the fast and high-frequency metro connection. The number of regional trains crossing the Öresund Fixed Link will be adjusted and the catchment area will be enlarged. This will increase accessibility to the two cities and the Copenhagen Airport. In overall terms, this implies that there will be more capacity for freight and high-speed trains across the Öresund Fixed Link.

A shift from road to rail will ensure greener and more climate-friendly freight transport between Scandinavia and Central Europe. Increasing railway freight transport can also reduce the number of lorries and heavy goods trucks on motorways in Denmark and Sweden. This can cause less capacity issues and cleaner air.
By 2035 the Öresund Metro will be a fast and high-frequency connection between the cities of Copenhagen and Malmö running on climate-friendly power. Copenhagen and Malmö aim to be carbon-neutral by 2025 and 2030 respectively.

The high-frequency and punctuality of the Öresund Metro will further increase sustainable and public transport mobility between Denmark and Sweden.

Extensive building projects carry the risk of adverse environmental impacts. The Öresund Metro will be constructed as a drilled tunnel, as this method has the least environmental impact.

An environmental impact analysis of the coast-to-coast stretch shows that the construction and operation of the Öresund Metro will have no impact on water quality, flora, fauna, air, climate, fish, birds or the seabed (Seacon A/S, 2015).

Soil from the tunnel excavation can be reused in new urban developments in Copenhagen and Malmö, similar to the way soil from the Cityring Metro line was used in the Nordhavn development in Copenhagen.

Financing
Construction costs are estimated at EUR 4 billion (incl. 50% uncertainty add-on). The project will primarily be user-financed through ticket revenues, estimated at a little more than EUR 2.6 billion, with possible EU support as well as support from both the Danish and Swedish governments. Both countries can apply the ticket revenues from the Öresund Fixed Link as state financing from 2035, when the Öresund Fixed Link will be paid off.