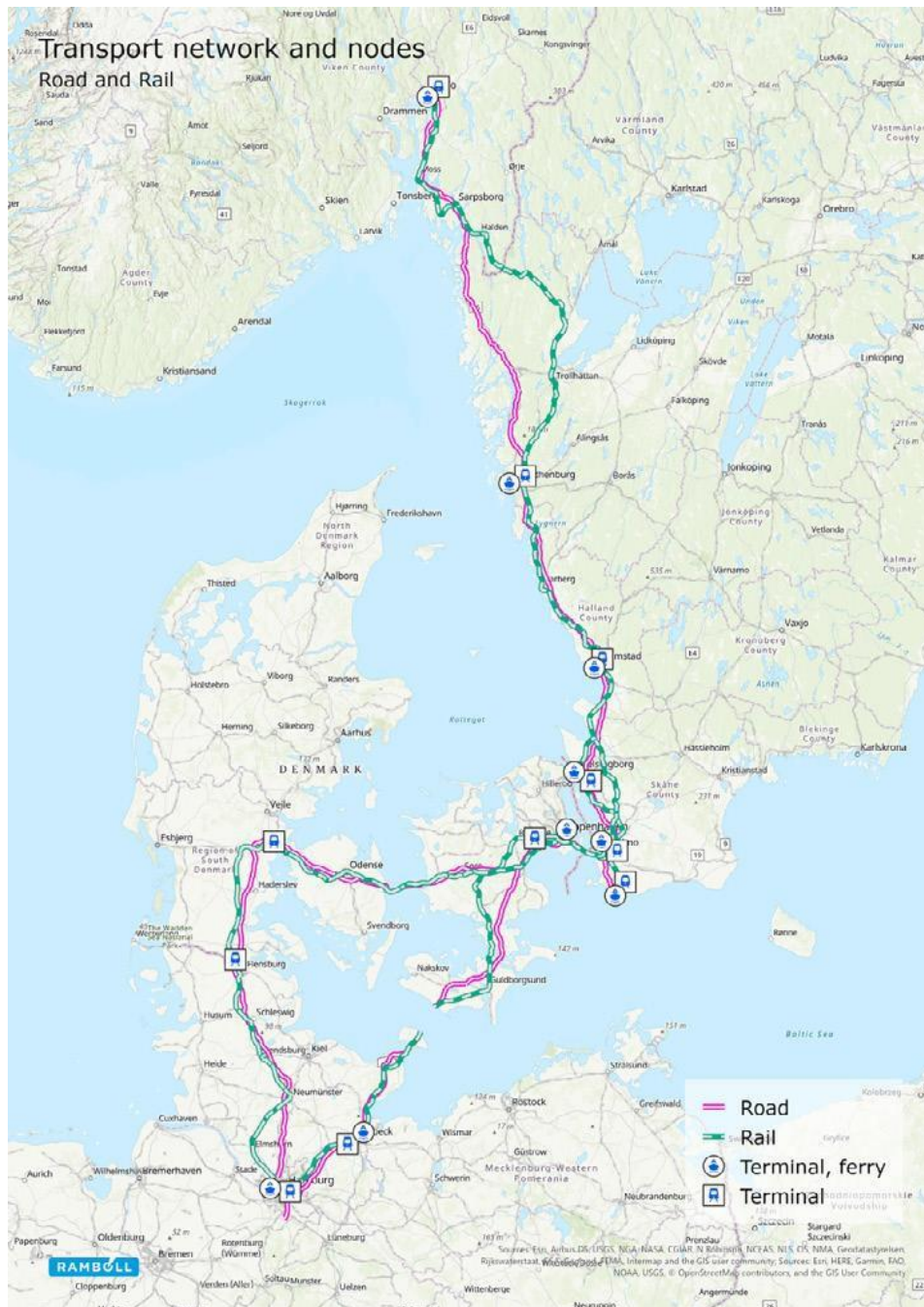


STRING bottleneck analysis for the stretch Oslo – Hamburg

Prepared by KombiConsult GmbH (lead partner), Ramboll Norway, Ramboll Sweden and Ramboll Denmark

Summary February 2021



1 Seamless transportation is a prerequisite for growth

A high-quality transport infrastructure with sufficient capacity and which is managed efficiently is fundamental for the competitiveness of the economies of the Member States of the European Union (EU).

The EU has been contributing to ensure the goal above, amongst other instruments¹, through the trans-European transport network (TEN-T) policy. The primary objective for The EU “is to establish a complete and integrated trans-European transport network, covering all Member States and regions and providing the basis for the balanced development of all transport modes in order to facilitate their respective advantages, and thereby maximising the value added for Europe”.

The STRING stretch is an integral part of the TEN-T Core Network Corridor Scandinavian-Mediterranean (Scan-Med)² and already shows a high quality, today. However, and in particular with view on the envisaged completion of the Scan-Med corridor by 2030, still some gaps are expected to remain from today's point of view.

Transport and infrastructure bottlenecks can affect the normal flow of transportation, causing unnecessarily long travel times, delays, congestions, costs etc.

KombiConsult GmbH and Rambøll have analysed the existing bottlenecks in the STRING - geography outlining future recommended priorities. This paper is a summary of the main findings of the analysis.

¹ The White paper 2011 “Roadmap to a single European Transport Area - towards a competitive and resource efficient transport systems with the goal of “A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport”.

² The TEN-T Core Network Corridors are defined in the Regulation (EU) 1316/2013 together with the financial instruments (“Connecting Europe Facility - CEF”) to support their completion by 2030.

2 Characteristics of the STRING stretches

The STRING stretch between Oslo and Hamburg is part of one of the crucial north - south axes for the European economy. It connects Norway, the three EU Member States, Sweden, Denmark, and Germany, and links several major urban centres in those countries.

Mode / Country	Rail	Road	Rail Road Terminals	Main Ports	Urban Nodes
Norway	170 km	111 km	Oslo	Oslo	Oslo
Sweden	620 km	530 km	Gothenburg, Halmstad, Helsingborg, Malmö (2x), Trelleborg	Gothenburg, Halmstad, Helsingborg, Malmö, Trelleborg	Gothenburg, Malmö, Trelleborg
Denmark	525 km	454 km	Copenhagen Taulov Padborg	Copenhagen	Copenhagen, Odense, Fredericia
Germany	330 km	314 km	Lübeck (2x), Hamburg (5x)	Lübeck, Hamburg	Lübeck Hamburg
Total	1.644 km	1.406 km	17	9	9

Table 1: The main characteristics of the STRING stretches

In the STRING region two different routes are defined. From north to south between Oslo and Ringsted near Copenhagen they follow the same line. But between Denmark and Germany one route goes via Fehmarn, and the other via Jutland.

Additionally, the section between Malmö and Trelleborg was analysed. This section has a length of about 30 km of main rail line and about 25 km of main road.

In total counting the overlapping parts of the different routes only once, the STRING stretch covers about 1.600 km of main rail lines and about 1.400 km of main road.

3 Altering the transportation network of Northern Europe



Fehmarn Belt Fixed Link working harbour under construction. January 2021

The bottlenecks and missing links hampering the further development of in particular rail transport for passengers and freight in the STRING stretch of the TEN-T Scan-Med Corridor between Oslo and Hamburg are literally a missing piece of infrastructure.

The Fehmarn Belt Fixed Link is the prominent example where, according to the plan approval, its completion including the hinterland connections in Denmark and Germany would be able to modally shift volume to rail significantly and contribute to a regional integration like the Öresund bridge demonstrated since its completion.

It is considered feasible to overcome the identified bottlenecks on the route between Oslo and Hamburg, which can lead to a reduction of the travel time via Fehmarn by over four hours on the whole route, leading to an estimated travel time of just 9 hours from Oslo to Hamburg. Even more important is the reduction of the travel time for the individual sections such as Oslo - Gothenborg (02 hrs 58) or Copenhagen - Hamburg (2 hrs 37) and thus below the “4 hours” threshold and thereby allowing a day trip.

Section	2020	2020-2030	2030		
	Travel time hh:mm	Reduction hh:mm	Travel time hh:mm	Distance km	Speed km/h
Oslo					
	03:30	00:32	02:58	342	115
Gothenborg					
	03:05	00:00	03:05	300	97
Malmö					
	00:50	00:30	00:20	40	120
Copenhagen					
	02:50	02:00	00:50	170	204
Rødby					
	00:45	00:38	00:07	19	163
Puttgarden					
	02:40	01:00	01:40	157	94
Hamburg					
Total / Ø	13:40	04:40	09:00	1.028	114

Figure 6: Development of travel times for rail 2020 and after implementation of envisaged measures via Fehmarn

As concerns the route via Jutland, there are also significant improvements to be expected. The section between Copenhagen and Fredericia is part of the so-called “The hour Model”, which shall bring down the travel time between the four largest cities of Denmark to one hour by building new or upgrading existing lines to high-speed lines.

Section	2020	2020-2030	2030		
	Travel time hh:mm	Reduction hh:mm	Travel time hh:mm	Distance km	Speed km/h
Oslo					
	03:30	00:32	02:58	342	115
Gothenborg					
	03:05	00:00	03:05	300	97
Malmö					
	00:50	00:30	00:20	40	120
Copenhagen					
	01:26	00:26	01:00	170	170
Odense					
	00:44	00:00	00:44	70	95
Kolding					
	00:51	00:00	00:51	100	118
Padborg					
	02:14	00:00	02:14	178	80
Hamburg					
Total / Ø	12:40	01:28	11:12	1.200	107

Table 19: Development of travel times for rail 2020 and after implementation of envisaged measures via Jutland

Further CO₂ footprint on the Oslo-Hamburg route will also benefit from the planned measures and projects.

Early forecasts by Femern A/S expect that 74 freight trains per day are using the Fixed Link in 2035. Kombiverkehr states that for every truckload on average about 60 g of greenhouse gas emissions will be reduced per tonne-kilometre by shifting from road to rail. If we assume only one intermodal service with two departures per day in each direction with an average of 40 intermodal loading units between Oslo and Hamburg, over 61.000 tonnes of CO₂ equivalents per year would be saved by shifting from road to rail on that route.

CO2 savings per tkm (g)*	Trains per day both directions	Trains per year both directions	loading units per train	loading units per year	loading weight per unit (t)	shifted tonnes per year	shifted tkm per year for 1.028 km	CO2 savings per year (t)
(g)	(trains)	(trains)	(LU)	(LU)	(t)	(t)	(tkm)	(t)
60	4	1.000	40	40.000	25	1 million	1.028 million	61.680

Table 18: CO2-savings for intermodal rail/road connection Oslo - Hamburg

As a consequence of the positive impact of the Öresund bridge, and the capacity issues it will experience due to the construction of the Fehmarnbelt Fixed Link, stakeholders in the Öresund region have put forward the concept of further fixed links between Sweden and Denmark.

Namely the “HH connection” which is a road and a rail connection between Helsingborg and Helsingør and the “Öresund Metro”, which would be a dedicated regional rail passenger line between Copenhagen and Malmö aimed at relieving capacity constraints on the Öresund bridge.

Similarly, the Oslo-Gothenburg railway stretch is also identified as an important bottleneck to solve in order to ease traffic flows in the wake of increased freight flows stemming from the Fehmarn Belt.

Building the Fehmarn Belt Fixed Link itself is absolutely necessary in order to make the route via Fehmarn work at all. As the construction of the Fehmarn Belt Fixed Link is generally secured, even more after the positive decision of the Bundesverwaltungsgericht in Leipzig in November 2020, focus should hereby lie on keeping the deadline for its realisation, which is currently 2029.

4 Continued focus on the Fehmarn Belt Fixed link and surrounding measures is key

To make the corridor via Fehmarn route work efficiently and not having the Fehmarn Belt Fixed Link as an isolated solution after it has been realised, there are surrounding infrastructure measures which are essential and need to be done simultaneously.

Focus should hereby lie on

- Keeping the same deadline until 2029 for the finalisation of the projects as for the Fehmarn Belt Fixed Link
- Eliminating non-electrified rail sections: Northern and southern access to the Fixed Fehmarn Belt Link in Denmark and Germany at Ringsted - Rodby, Puttgarden - Lübeck
- Eliminating single-track rail sections: Northern and southern access to the Fixed Fehmarn Belt Link in Denmark at Vordingborg - Nykøbing F and Germany at Puttgarden - Bad Schwartau, and at further sections in Norway: Sandbukta - Moss - Sastad, Haug - Sarpsborg - Halden (currently only until 2034 for the last section!), and Sweden: Ängelholm - Maria - Helsingborg

Comprehensive measures

- Improving cross border services, regional or local/commuter passenger services, interconnected with urban mobility, in nodes or sections with current or expected future capacity limitations can help also relieving capacity issues for long-distance traffic.
- High speed measures such as Follobanen.

It should furthermore be a priority for Sweden and Norway to focus on achieving a general compliance up to 740 m train length to be allowed on the rail network.

Second priority should be to achieve a harmonisation between all the countries on the corridor for the same train length.

5 Developing a green transportation network and increasing green investments in the geography

The TEN-T Regulation requires an availability of clean fuels along corridor roads which to date is achieved at a rate of 89% on the STRING stretch. Thus, clean fuel is at least available in each country.

Nevertheless, the availability of clean fuels on the corridor is relatively good and there are certain measures to improve the situation on the corridor for the availability of clean fuels.

For clean fuels, e.g. project MECOR under the patronage of the of Swedish and Danish governments, achieved the availability of clean fuels connecting two urban nodes of Malmo and Copenhagen as multimodal e-Mobility hubs.

In Denmark electricity is the most common type of clean fuel. Recently, the GREAT project, which originated from STRING and was CEF-financed, has deployed 69 new fast chargers in Sweden, Denmark and northern Germany alongside the TEN-T infrastructure.

The green transportation network can be strengthened further by

- Besides alternative fuels (CNG,LNG),further promoting zero emission techniques such as electricity and electric vehicles.
- If all the STRING countries were to increase the share of electric vehicles and number of charging stations in a more harmonized way. And notonly at or near urban nodes, but also for enabling long distance traffic on the whole route.

6 Priorities in eliminating bottlenecks in the STRING-geography

The European Rail Traffic Management System (ERTMS) is the system of standards for management and interoperation of signalling for railways by the European Union (EU).

Though an ERTMS deployment is planned in all four countries, their maturity and planning status is quite different. Literally, the European Deployment Plan includes no progress by 2023, and consequently all measures are delayed after that date. Therefore, priority should hereby lie on three things:

- Definition of projects for installation of ERTMS on the corridor other than those single sections which are integrated in other projects as mentioned before.
- A better harmonisation in terms of timing between the different countries in order to ensure that trains can run-through the whole stretch using ERTMS relatively at the same time and thus allowing higher frequencies, making journeys safer etc. for all sections and not as isolated solutions.
- Update national Transport Master Plans to make sure that existing projects/measures are maintained and new projects are integrated with high priority and that their financing is secured from National Budget, Resilience and Recovery Facility (RRF) and Connecting Europe Facility (CEF II) as well as innovative financial instruments.

7 Conclusion

In the years to come the infrastructure in the STRING geography will be significantly improved through planned projects and initiatives. However, several projects remain to be realised. The STRING transport connectivity bottleneck analysis for the stretch Oslo - Hamburg points to the following issues that needs to be prioritised to solve:

Priorities from the corridor perspective via Fehmarn route

- Fehmarn Belt Fixed Link
- Eliminating non-electrified sections
- Eliminating single-track sections

Priorities from the corridor perspective via Jutland route

- The development of the high-speed railway line between Ringsted and Kauslunde

Priorities from the corridor perspective via Fehmarn & Jutland route

- High speed measures such as Follobanen between Oslo and Ski
- Further measures for relieving (current, future) capacity bottlenecks such as:
 - Flackarp-Arlöv-Lund (upgrade to four tracks)
 - Gothenburg - Älvängen
 - Several measure in Gothenburg area / Western Swedish Rail package
 - Land connections to the the Öresund bridge on both sides
 - Missing fixed links between Sweden and Denmark (Öresund Metro, HH Tunnel)
 - New Storström bridge
 - Fehmarn Sound bridge replacement
 - Bad Oldesloe - Hamburg

Priorities from the corridor perspective from and to Trelleborg

Extension of single-track sections to double-track between Lockarp and Trelleborg and increasing capacity of the two lane-road at Trelleborg to the port.

Priorities from the non-compliance infrastructure perspective

- Double tracks for the remaining single-track sections without current plans for elimination:
 - Norway: Halden - Kornsjø, and
 - Sweden: Kornsjø - Öxnered, Maria - Helsingborg, Ängelholm - Arlöv via Åstorp, Lockarp - Trelleborg
 - Tinglev-Padborg
- Train length
- ERMTS
- Clean fuels
- Transport master plans

Annex I

Identified Projects/Measures on the STRING stretch - Rail

TEN-T ID	Section	Project name / short description	Project Promoter	Project end date	Budget (Mill. €)	Funding source incl. potential	Approval Status
NO	Oslo - Ski	Follobanen, new double track	Norwegian Railway Directorate	12/2022	2.800	State budget	Approved
NO	Ski - Halden	Implementation of ERTMS system	Norwegian Railway Directorate	12/2034	3.050	State budget	Potential
NO	Sandbukta - Moss - Såstad	Extension to double-track railway and reconstruction Moss railway station	Norwegian Railway Directorate	12/2024	1.050	State budget	Approved
NO	Haug(Råde) - Sarpsborg - Halden	Double-track railway, capacity improvements in 4 railway stations	Norwegian Railway Directorate	12/2029 12/2034	6.300	State budget	Potential
SE	Trollhättan-Gothenburg	Norge-Vänerbanan, additional track at Älvängen	Swedish Transport Administration	12/2026	15	State budget	Approved
SE	Gothenburg	West Sweden railway package	Swedish Transport Administration	12/2026	2.598	State budget Region/ municipality CEF	Approved
SE	Gothenburg	Reconstruction of the track system in Olskroken including grade separation	Swedish Transport Administration	12/2026	268	State budget Region/ municipality	Approved
SE	Gothenburg	Upgrade to double track on the port line and the Marieholm bridge	Swedish Transport Administration	12/2023	376	State budget Region/ municipality CEF	Approved
SE	Varberg	Upgrade to double track	Swedish Transport Administration	12/2024	519	State budget Regions, Municipalities	Approved
SE	Halmstad C/ bangård	Upgrade of the Halmstad node for increased capacity and safety	Swedish Transport Administration	12/2026	36	State budget Regions, Municipalities	Approved
SE	Ångelholm - Helsingborg	Upgrade to double track and grade-separated crossings. Reconstruction of Maria station.	Swedish Transport Administration	12/2023	259	State budget Regions, Municipalities	Approved
SE	Maria - Helsingborg C	Upgrade to double track	Swedish Transport Administration	Unknown	392,81	State budget Regions, Municipalities	Approved
SE	Helsingborg - Helsingør	HH Tunnel. Two tunnels under the Öresund, one for passenger railway traffic (9 km) and one for road traffic (14 km)	Swedish and Danish Transport Administration	12/2035	3.300	State budget	-

SE	5169	Åstorp - Teckomatorp	Expansion of sidings, increased line speed, introduction of modern signalling systems and new stations for passenger services.	Swedish Transport Administration	12/2022	66	State budget Municipalities	Approved
SE	5167	Lund (Högevall)- Flackarp	Expansion from two to four tracks between Flackarp and Högevall. New signals along the route and new station for commuter trains to be built at Klostergården.	Swedish Transport Administration	12/2023	120	State budget	Approved
SE	5401	Kävlinge - Arlöv	Capacity enhancements and new stations for passenger service	Swedish Transport Administration	12/2022	30	State budget Municipalities	Approved
SE	5657	Kävlinge - Arlöv	Etapp 2 (Malmöpendeln Lommabanan). New sidings on single track for increased capacity	Swedish Transport Administration	12/2026	21,66	State budget Regions, Municipalities	Approved
SE	5166	Flackarp - Arlöv	Two new tracks on between Flackarp- Arlöv, ~75% of the route Lund-Arlöv	Swedish Transport Administration	12/2023	444	State budget Regions, Municipalities CEF/TEN-T	Approved
SE	-	Trelleborg/Malmö - Korsjö (Oslo)/ Hallsberg/St ockholm	Measures for longer trains (750 meter)	Swedish Transport Administration	12/2029	175	State budget	Approved
SE	5153	Stockholm (Älvsjö) - Malmö/(DK) Border	ERTMS ScanMed East Etapp 1	Swedish Transport Administration	12/2029	642	State budget	Approved
SE	5559	Kontinentalbanan Malmö.	Upgrade noise reduction measures. Upgrade for passenger traffic.	Swedish Transport Administration	12/2020	52	State budget Region	Approved
SE / DK	5998	The Öresund Metro Phase 4	Preliminary study phase 4 contains communication activities and analysis of international, regional and local benefits of an Öresund Metro	City of Malmö and City of Copenhagen	09/2020	0,6	City of Malmö, City of Copenhagen ERDF	Approved
SE / DK	-	Peberholm - Kalvebod	Upgrade of Kastrup Station due to the limited capacity, which only is expected to get worse	-	12/2025	-	-	-
DK		Kalvebod Bridge	Analysis on-going, but in very early stages	-	-	-	-	-
DK		Køge station, combi terminal and Ringsted junction	Development of double tracks at Køge station, increasing capacity at Køge combi terminal. Improvement of the Ringsted junction	-	12/2028	-	-	-

DK	5395	Ringsted - Odense	Speed increase to up to 200 km/h. Various upgrades in Ringsted, Sorø, Slagelse, and at the Great Belt Bridge etc. [pending political decision on preferred technical solution]	Rail Net Denmark	12/2023	65,10	State budget	Approved
DK	5396	Odense - Kaulunde	The construction of a new 35 km high speed railway line (250 km/h) across Western Funen	The Danish Road Directorate	12/2023	624	State budget	Approved
DK	5135	New Storstrøm Bridge	New double track 4 km railway bridge	The Danish Road Directorate	12/2022	493,14	State Budget CEF/TEN-T	Approved
DK	-	Tinglev - Padborg	Development of double tracks	-	-	-	-	-
DK	5134	Ringsted - Rødby	Development of electrified double tracks	Rail Net Denmark	12/2028	1.275	Tolls and railway charges CEF	Approved
DK / DE	5390	Fehmarn Belt	Fehmarn Belt Fixed Link with an electrified double track	Femern A/S	12/2028	7.060	State budget CEF/TEN-T	Approved
DE	5000	Puttgarden - Lübeck	Development of electrified double- tracks	BMVI (DB Netz)	12/2028	1.518	State budget CEF/TEN-T	Approved
DE	5096	Fehmarn sound	New bridge/tunnel (southern access to Fehmarn Belt Fixed Link)	BMVI (SH)	12/2028	700	State budget	Not all approved
DE	5077	Bad Oldesloe - Hamburg	Upgrade of railway tracks (S4)	Federal states of Hamburg, Schleswig-Holstein (DB Netz)	12/2027/2028	1.847	State budget Federal states of Hamburg, Schleswig-Holstein (DB Netz) CEF/TEN-T	Approved
DE	5764 5472	Elmshorn - Hamburg	Upgrade of railway tracks (S4 and S4 West) and stations	Federal states of Hamburg, Schleswig-Holstein (DB Netz)			State budget CEF/TEN-T	Approved
DE	-	Hamburg central station	Hamburg main station - building of five new access stairs to the platforms	DB Station und Service	12/2023	-	-	-
DE	-	Hamburg central station	Hamburg main station - extension of station hall	DB Station und Service	12/2030	-	-	-
DE	-	Hamburg Altona	Relocation of Hamburg Altona to new station Diesteich Hamburg Altona station	Land Hamburg	12/2027		DB Netz	-

Source: KombiConsult/Ramböll analysis; Fehmarn Belt Fixed link and Fehmarn Sound included in Rail and Road list due to their nature of a multimodal infrastructures.

Annex II

Identified Projects/Measures on the STRING stretch - Road

TEN-T ID	Section	Project name / short description	Project Promoter	Project end date	Budget (Mill. €)	Funding source (incl. potential)	Approval Status	
SE	5452	8 stations	Nordic Hydrogen Corridor: zero emission transport between the capitals of the Nordic countries with fuel cell vehicles	Vätgas Sverige Ideell Förening (Hydrogen Sweden Association) (Sweden)	12/2022	19,37	CEF/TEN-T Private	Approved
SE/DK	5698	Several stations	High speed electric mobility across Europe	CLEVER A/S (Denmark)	12/2022	9,69	CEF/TEN-T Private	Approved
DK	5498	Copenhagen	H2Bus Europe	Everfuel A/S (Denmark)	12/2023	39,63	CEF/TEN-T Private	Approved
DK	-	Kalvebod Bridge	Bridge with 2 x 2 lanes and annual traffic at 110,000 vehicles is over capacity	-	-	-	-	-
DK	-	Copenhagen Eastern Ring Road	A feasibility study is finalised analysing how this ring road can relieve traffic congestion. Can possibly add more traffic to the STRING corridor and strain capacity	Municipality of Copenhagen	203?	3.000	Land value capture	Not Approved
DK	-	Odense SØ - Odense V	Widening from 2 x 2 to 3 x 3 lanes. EIA and Construction Act has been completed. Only funding is still pending before construction.	The Danish Road Directorate	-	-	-	-
DK	-	Road Bridge across Little Belt	Peak hour congestion over the current motorway bridge across Little Belt is expected in near future. Several options have been studied, and an additional parallel bridge is the preferred option when the need will arise.	The Danish Road Directorate	-	-	-	-
DK	-	Fredericia - Kolding	Widening from 4/6 lanes to 6/8 lanes. EIA for widening of the 6 km long section around Kolding where E20 and E45 is running jointly has been carried out. Construction Act and funding is outstanding.	The Danish Road Directorate	-	-	-	-
DK	-	Haderslev-Hobro	New Mid-Jutland Motorway. EIA for the southern section has been completed, will relieve E20/E45 around Kolding when completed. Construction Act and funding is pending.	The Danish Road Directorate	-	-	-	-
DK	5393	Odense West - Middelfart	Extension from 4 to 6 lanes	The Danish Road Directorate	12/2022	365,00	State budget	Approved

DK	5394	Jutland Fredericia - Kolding	Extension from 4 to 6 lanes on a section of 19 km. The EIA was concluded in 2011, but no construction works so far and funding is not yet secured either	The Danish Road Directorate	-	80,53	-	Not secured
DK/DE	5390	Fehmarn Belt	Fehmarn Belt Fixed Link with four lanes	Femern A/S	12/2028	7.060	State budget CEF/TEN-T	Approved
DE	5096	Fehmarn Sound	New bridge/tunnel (southern access to Fehmarn Belt Fixed Link)	BMVI (SH)	12/2028	700	State budget	Partly approved
DE	5010-	Puttgarden - Heiligenhafen	Extension of lanes to four lanes	BMVI (SH)	12/2022	249,4	State budget	Approved
DE	5018, 5019	Hamburg	A 7 motorway: upgrade to 6-8 lanes between Hamburg/Schleswig-Holstein border and Hamburg/NW (A 23) / Othmarschen	BMVI (HH)	12/2028, 12/2020	26,6, 307,55	State budget	Approved
DE	5026	Hamburg	A7: South of the Elbe Tunnel, on a stretch of 4.2 kilometres, the motorway A7 will be extended from six to eight lanes	BMVI (HH)	12/2023	240,00	State budget	Approved
DE	5021	Hamburg	A1: On a stretch of 8.2 kilometres between the triangle-junction Hamburg-Southeast and Hamburg- Harburg, the motorway will be extended from six to eight lanes until 2030.	BMVI (HH)	12/2030	295,40	State budget	Approved
DE	5719	Hamburg	A26 (east): On a stretch of 9.2 kilometres the motorway will be prolonged connecting the motorway A7 and A1. This route shall be an efficient east-west connection which also improves the accessibility of the port of Hamburg.	BMVI (HH)	12/2025	942,00	State budget	Approved
DE	-	Hamburg	Koehlbrand Bridge: As an important connection to the port of Hamburg and also partly connecting A7 and A1 shall be replaced by a tunnel.	BMVI (HH), BMVI (Bund)	-	-	-	-

Source: KombiConsult/Ramböll analysis; Fehmarn Belt Fixed link and Fehmarn Sound included in Rail and Road list due to their nature of a multimodal infrastructures.

Annex II

Identified Projects/Measures on the STRING stretch - Maritime

TEN-T ID	Section	Project name / short description	Project Promoter	Project end date	Budget (Mill. €)	Funding source (incl. potential)	Approval Status
SE 5547	Trelleborg	Long-term achievements (LARS): Construction of a new berth № 13 and quay № 14, Land filling works Removal of a current port bottleneck with a road crossing solution	Trelleborgs Hamn AB (Sweden)	12/2021	43,9	Private CEF/TEN-T	Approved
SE 5571	Trelleborg	Studies for the development and relocation within and towards the port of Trelleborg, with a view of alleviating the existing congestion through the city centre.	Zarząd Morskich Portów Szczecin i Świnoujście S.A. (Poland)	12/2021	4,9	Private CEF/TEN-T	Approved