

Note

National Report Denmark 2017

1. General

Sund & Bælt Holding A/S owns - through its subsidiaries A/S Storebælt and Øresundsbro Konsortiet - the only two user paid infrastructure roads in Denmark, viz. the two large bridge links: the Storebælt link connecting the two biggest islands in Denmark and the Øresund link connecting Denmark and Sweden.

Both links are combined road and rail links and fees are paid by both road users and railway operators.

2. The year 2017

2.1. Network length

The Storebælt link is 18 km long and the Øresund link is 16 km long, totalling 34 km user paid motorway. This is unchanged from 2016.

The Danish motorway road network totals 1,246 km. Apart from the above bridges, the motorways are not user paid.

2.2. Financing

The two infrastructure links have been financed by loans raised in the capital markets. The Danish state guarantees for the affiliated companies' commitments and in the case of Øresundsbro Konsortiet the guarantee is shared by the Swedish and the Danish states.

2.3. Traffic

The traffic growth has been calculated on the basis of the number of vehicles crossing the bridge links cf. the below specification for the two bridges.

Table 1. Growth in traffic 2013 – 2017 (percentage)

	2013	2014	2015	2016	2017
Storebælt	+0.2	+4.4	+4.6	+4.4	+3.0
Øresund	-1.2	+3.4	+1.8	+5.1	+1.7
The Danish road network	+0.7/+2.6 ¹⁾	+2.5/5.0 ¹⁾	+2.9/+4.8 ¹⁾	+2.8	+1.7/4.1 ¹⁾

Note: 1) Motorways

For comparison, growth in the Danish economy is expected to total 2.0 per cent for 2017.

2.4. Tolling system and tolling technologies used

The tolling systems are barrier-based single lane systems. The payments are primarily done by using DSRC (70-85%) and secondarily by card or cash.

The tolling system is also equipped with ANPR for enforcement purposes and to allow operating the Toll Plaza without the use of barriers during peak traffic. From 2018 ANPR will be used actively as a system for toll collection – branded as PayByPlate®

The DSRC used is based on 5.8 GHz. All the 5.8 GHz DSRC profiles used for communication in EasyGo® are currently accepted by the road side equipment. The profiles are: PISTA, BroBizz, ØresundBizz, AutoPASS and EN15509. The RSE supports EN15509 with both security level 0 and 1. All new OBE must be according to EN 15509.

2.5. Tolls

Below are stated the price per passage and the price per driven km for private cars and HGVs, respectively. It should be noted that the price per km is very high as it covers infrastructures comprising bridges and tunnels for which construction costs have been very high. The construction cost for Storebælt inclusive of land works totalled DKK 36 billion (EUR 4.8 billion) and for Øresund exclusive of land works DKK 19.6 billion (EUR 2.6 billion).

Table 2. Fees 2017

EUR	Storebælt		Øresund	
	Price per passage	Price per km	Price per passage	Price per km
Private cars	32*	1.8	52***	3.2
HGVs 10-20 m	152**	8.4	146****	9.1

Notes: * A 5 pct. reduction is granted in ETC lanes. Further, reductions of up to 40 pct. can be obtained on special days, and for periods during the day. Special commuter products offer reductions of up to 75 pct.
 ** A 5 pct. reduction is granted in ETC lanes. Further, special quantity discounts of up to 8 pct. are granted.
 *** Different products are offered granting discounts of up to 53 pct. Commuters may obtain reductions of up to 90 pct.
 **** Reductions of up to 65 pct. are granted.

2.6. Revenues

Table 3. Revenues 2017/2016

Million	2017		2016		Growth pct. (basis DKK)
	DKK	EUR	DKK	EUR	
Storebælt	3,164	425	3,069	413	+3.1
Øresund	1,406	189	1,346	181	+4.5
Total	4,570	614	4,415	594	+3.5

Note: The figures in EUR are based on the rate of exchange late 2016 of 743.44 and late 2017 of 744.49, respectively

2.7. Safety

Table 4. Safety 2017/2016

Number for 10 million km. travelled	Storebælt		Øresund	
	2017	2016	2017	2016
Personal injury rate	0.09	0.13	0.08	0.04
Fatal accident rate	0	0	0	0
Rate of dead	0	0	0	0

2.8. Long-term forecasts and tendencies

2.8.1. Fehmarnbelt

Femern A/S, which is a 100 per cent owned subsidiary of the Sund & Bælt Group, is responsible for the planning and construction of a fixed link between Denmark and Germany across the Fehmarnbelt. The link will be the world's longest immersed road/rail tunnel.

The Fehmarnbelt project was approved by a Construction Act passed by the Danish parliament in 2015. Therefore, all permits, including environmental permits, are in place on the Danish side.

A large political majority in Germany adopted the Fehmarnbelt project, but the tunnel project lacks the administrative building permission from the authorities in Schleswig-Holstein. The application for the Fehmarn link was in hearing for the first time in 2014. The second round of hearings was completed in 2017.

Femern A/S has collaborated with 25 of the leading German advisory companies in the fields of law, environment, navigational conditions and safety to ensure that the German application is of the highest quality. 150, mainly German experts and specialists, have worked at responding to the German objections, and all parts of the response have been verified by one of the leading law firms in Germany.

The German authorities and the regional government in Kiel, estimate that the final approval will be issued by 2018. Regulatory plan approval must subsequently be tested by a court of law. According to the plans, this will take two years.

In 2016, conditional civil works contracts were concluded with two major international contractor consortia consisting of Danish, German, French and Dutch companies. The contracts cover approximately 75 percent of the construction. The major tunnel contracts were concluded in 2016 and are conditional upon German plan approval. The contracts will be activated when approval is final.

The Fehmarn link is expected to open in 2028.

The total construction budget incl. reserves in 2015 prices amounts to DKK 52.2 billion for the cost-to-coast link and DKK 9.5 billion for the Danish landworks. Based on the assumptions for traffic, revenue, cost of operation, and financing expenses, the prepayment period for the entire facility is expected to be 36 years.

The Danish state will extend state guarantees to cover the companies loans and other financial liabilities and moreover, without further notification of each individual case, the Danish state guarantees the companies' other ongoing liabilities in connection with the construction project

3. Main ASECAP key figures

Table 5. Key figures 2016 Denmark

	2016
Network length – 2x lanes	34 km
No. of km under construction	0 km
Forecasts of opening motorway sections	0
Annual toll revenue	614 million EUR
Permanent staff	291
Average daily traffic (LV)	50,142 vehicles
Average daily traffic (HV)	5,502 vehicles
Average daily traffic (LV+HV)	55,644 vehicles
Total number of accidents	36
No. of personal injury accidents	3
Personal injury rate per 10 million km	0
No. of dead	0
Km travelled (1.000.000 km.)	350
No. of toll plazas	2
No. of lanes	46
No. of teletoll equipped lanes	36
No. of teletoll subscribers	1,447,000
No. of rest areas with station services	0
No. of rest areas	0
No. of restaurants	0
No. of hotels	0