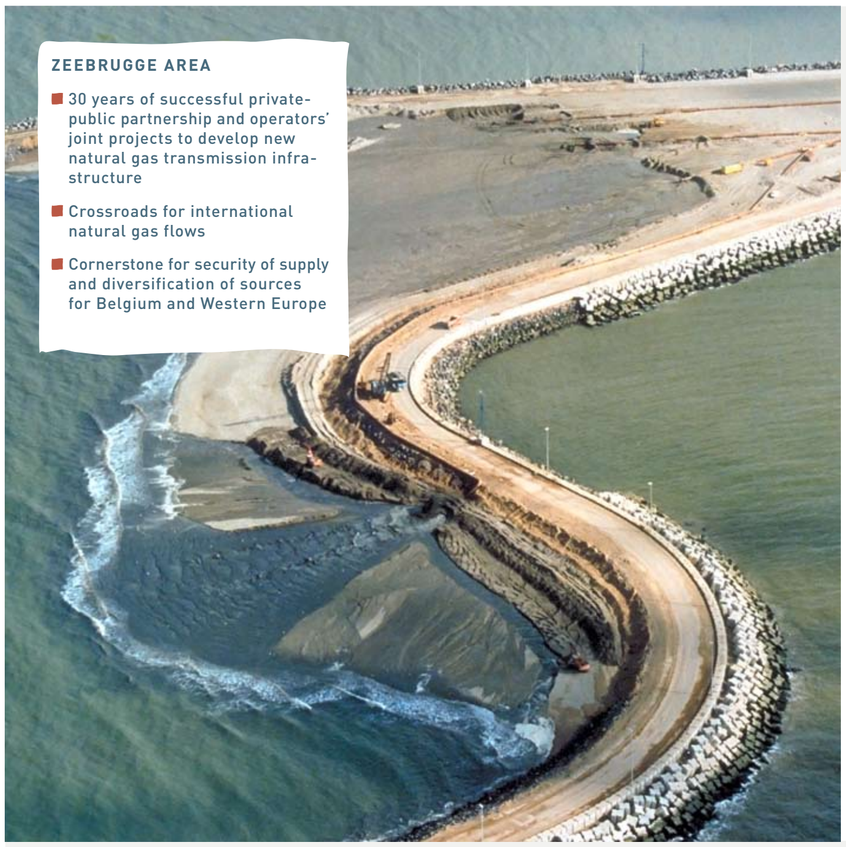
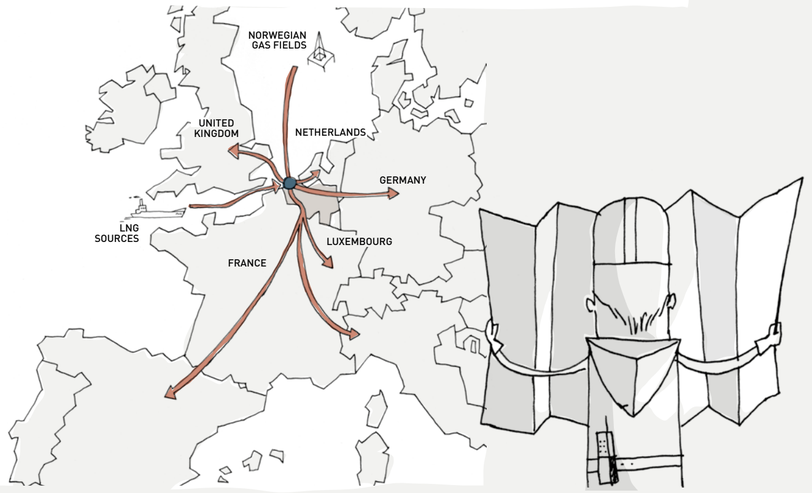


ZEEBRUGGE AREA

- 30 years of successful private-public partnership and operators' joint projects to develop new natural gas transmission infra-structure
- Crossroads for international natural gas flows
- Cornerstone for security of supply and diversification of sources for Belgium and Western Europe

In the space of 30 years, Fluxys has developed the Zeebrugge area into the very heart of both its own natural gas transmission grid and the Western European natural gas system. Natural gas is transported from Zeebrugge for consumption in Belgium or moved to other gas exchange location points at the Belgian border for onward transmission throughout Western Europe.

Zeebrugge harbours a reception terminal for ships carrying liquefied natural gas (LNG) and serves as a crossroads of two major axes in European natural gas flows: the east/west axis from Russia to the United Kingdom and the north/south axis from Norway to Southern Europe. Zeebrugge also has a key commercial role in the natural gas trade: the Zeebrugge Hub is one of Europe's leading international natural gas spot markets.



1977

1977

- Fluxys is building the **peak shaving facility** in the Inner Port at Zeebrugge. The facility will be used to meet peak demand in winter by regasifying liquefied natural gas and sending it out into the transmission network.
- In 1976 the Belgian government had decided that Belgium needed its own **liquefied natural gas (LNG) reception terminal** so as to diversify its energy portfolio and enhance the country's security of supply. The Ministry of Public Works is to start work on creating a peninsula in Zeebrugge's Outer Port in 1978 and construction of the LNG Terminal on the peninsula will begin in 1982.

1987

1987

- The **LNG Terminal** is being completed and in the autumn the first LNG ship unloads its cargo.
- While the LNG Terminal was still being built, plans were already being made for a new project and in 1986, following a feasibility study, Norway chose Zeebrugge as the landing point for the Zeepipe, a subsea pipeline to move natural gas from the Troll and Sleipner fields to continental Europe. In 1988 Belgium and Norway will sign an agreement relating to laying the pipeline and in 1993 the Norwegian operator is to commission the **Zeepipe and the Zeepipe Terminal** in Zeebrugge. In the meantinme, Fluxys will lay the **Troll pipeline** from the Zeepipe Terminal to the French border at Blaregnies for transit flows from Norwegian natural gas to France and Southern Europe. The Zeepipe Terminal also will supply the Belgian market with Norwegian natural gas.

1997

1997

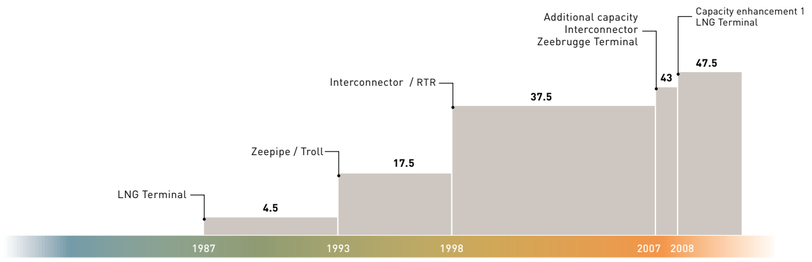
- Belgium and the UK sign an agreement relating to laying a subsea **Interconnector pipeline** between Bacton and Zeebrugge, a project that is to connect the British and continental European markets for the first time. The project's foundations had been laid in 1992, when the Zeepipe was still being built. Interconnector UK lays the pipeline between 1996 and 1998, and at the same time Fluxys lays the **RTR pipeline** from Zeebrugge to the German border at Eynatten with a branch in Zelzate for moving natural gas to the Netherlands. The Interconnector/RTR can carry natural gas in two directions: from the UK to continental Europe and vice versa. The transmission pipeline also provides the Belgian market with natural gas.
- Following commissioning of the RTR and the Interconnector in 1998, price differentials between the British and continental natural gas markets encourage short-term natural gas trading. Fluxys sets up the subsidiary **Huberator** to facilitate this trade, leading to the creation of the **Zeebrugge Hub**. The Zeebrugge Hub short-term market grows year on year and on-line screen trading is to be introduced in 2004.

2007

2007

- Work is going on at the **LNG Terminal** to build a fourth storage tank and extra regasification facilities: during a market survey in 2003, three terminal users jointly booked capacity totalling twice the existing capacity, effective from 2007. The LNG terminal receives cargos under the new contracts as of April 2007, and the capacity enhancement work is to be completed in April 2008.
- In late 2007 a new market survey is launched with a view to a **second LNG Terminal capacity enhancement** project. By mid-February 2008, there were 15 parties who had expressed an interest in the project. The aim is to make additional capacity available from 2015-2016.
- **Huberator** membership rises to 70 and the ZEE Platform Service is progressively being built up. This new service enables natural gas to be exchanged without capacity restrictions between all the entry points in the Zeebrugge area – the Zeepipe Terminal, the Interconnector Terminal, Hub Zeebrugge and the LNG Terminal.
- Interconnector UK completes its project to triple the **Interconnector's capacity** for flows towards the UK: in the period 2004-2007 four compressor facilities were commissioned at the Interconnector Zeebrugge Terminal.
- Fluxys is making preparations to create extra capacity on the **East/West transmission** route from **Zeebrugge to Zelzate/Eynatten**: in a market survey launched in 2005, contracts were signed for new transit flows in both directions. The new pipeline capacity is due to be commissioned in 2010.

DEVELOPMENT OF RECEPTION AND TRANSMISSION CAPACITY IN THE ZEEBRUGGE AREA (IN BILLION M³)



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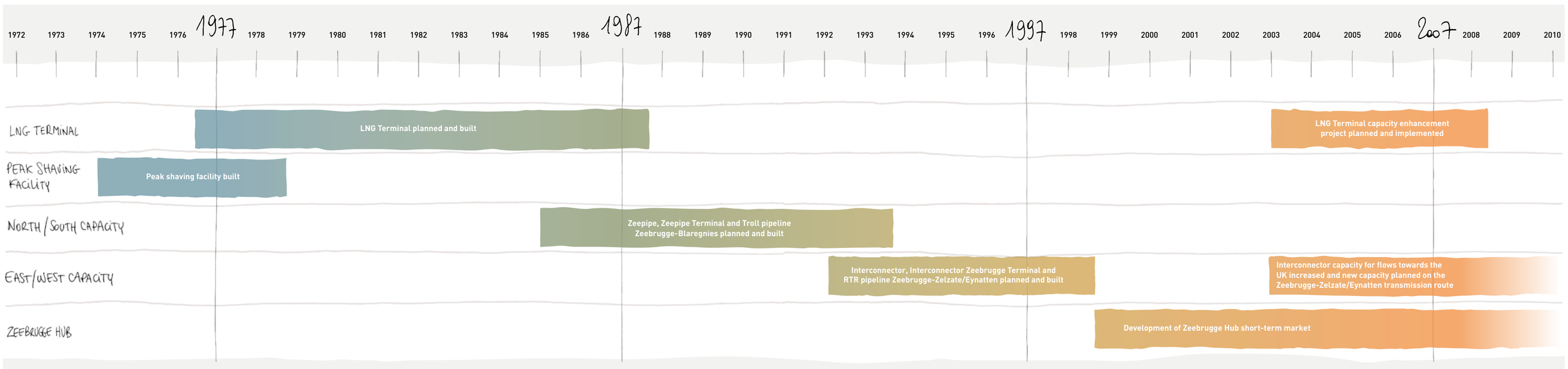


ZEEBRUGGE LNG TERMINAL

ZEEBRUGGE LNG TERMINAL

- 20 years of operations without incident
- More than 1000 LNG cargoes unloaded
- First capacity enhancement put into operation
- Market consultation for a second capacity enhancement

1. UNLOADING

During unloading, LNG is pumped from the ship's tanks into the terminal storage tanks. An unloading slot lasts around 12 hours. One ship carries enough natural gas to meet the heating and cooking needs of the inhabitants of a medium-sized town for one year. Today, most LNG carriers berthing at Zeebrugge come from Qatar.

2. STORAGE

The four storage tanks can hold about three shiploads of liquefied natural gas. LNG is pumped from the storage tanks into the regasification unit. LNG can also be transferred from storage into LNG tanker trucks for supplying a.o. the peak shaving facility in the port of Zeebrugge.

Cogeneration plant

A large proportion of the heat used to regasify liquefied natural gas comes from the cogeneration plant. This plant consists of two units:

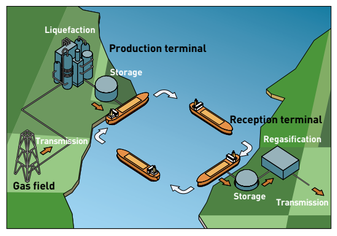
- Electrabel's natural gas turbine at the terminal generates Electricity for the port of Zeebrugge and neighbouring towns.
- The Fluxys heat recovery unit reuses nearly all of the combustion heat from the turbine as energy for regasifying liquefied natural gas.

Focus on safety

Due to the quantity of natural gas held in storage the LNG Terminal is classified as a Seveso facility and needs to comply with specific safety requirements. The terminal has an outstanding safety record. Since its commissioning in 1987 it has not had a single accident involving LNG or natural gas that led to fire.

LNG: Liquefied Natural Gas

Natural gas is liquefied to allow transportation by ship over longer distances from a source country to end-customer markets. During the liquefaction process, natural gas is cooled to -160 °C, thus reducing its volume 600 times. This enables a large quantity of energy to be transported in a compact volume.



There are 20 LNG production terminals, 58 LNG reception terminals and 253 LNG carriers in operation worldwide. LNG currently covers about 24 % of international natural gas trade and LNG demand increases sharply. This is due in part to the fact that LNG – when compared with pipeline gas – allows for greater flexibility in choosing the shipping destination. Another reason is the ever increasing distance between end-user markets and available natural gas sources.

3. REGASIFICATION

The regasification units convert the liquefied natural gas into gaseous form before it is sent out into the grid. A whole LNG cargo can be regasefied and injected into the grid in about 2 days.

2008
First capacity enhancement put into service

Between the end of 2004 and the spring of 2008, a fourth storage tank and additional send-out capacity were built at the LNG Terminal. This enhancement has doubled the terminal's throughput capacity to 9 billion cubic metres of natural gas per year, allowing reception of 110 ships per year instead of 66 ships per year previously.

Natural gas suppliers are interested in extra capacity at the terminal since it allows them to boost their gas exports via Zeebrugge to other European countries, specifically the United Kingdom, which has been importing increasingly larger quantities of natural gas as from 2005-2006. Belgian consumers will also benefit from extra capacity: as the capacity enhancement increases the number of possible supply sources, it will strengthen the country's security of supply.

2015-2016
Possible second LNG terminal capacity enhancement

A pre-feasibility study has shown that, in line with the strategic plan for the port of Zeebrugge, the LNG Terminal's throughput capacity can be increased further after the first capacity enhancement project.

Considering the rising importance of LNG in Europe's security of supply, Fluxys LNG launched in late 2007 an international market survey to assess the level of demand for additional capacity at the Zeebrugge LNG Terminal. 15 parties have expressed interest in the project.

Depending on the results of the market survey, the project may include building a range of facilities to provide extra LNG terminalling capacity. For example, building a second jetty, two storage tanks able to hold 155,000 cubic metres of LNG each and adequate extra regasification capacity would increase throughput capacity by some 9 billion cubic metres of natural gas per year. This would lead to another doubling of throughput capacity.

The aim is to make extra capacity available from 2015-2016. The actual commissioning date will depend of course on the level and type of new investments needed and the permit procedures.

Heist bay: first beach reserve in Belgium

The man-made peninsula where the LNG Terminal is located has become one of the favourite coastal haunts for bird-watchers: Belgium's first beach reserve has developed in the bay of the peninsula. From the bird-watching hide you will have a chance to see a number of special birds, such as Kentish plovers, little terns, ringed plovers, greenshanks, red-throated divers, fulmars and gannets, etc.