
27 November 2018

State Secretary Philippe De Backer visits Belgium's first 'plug at sea'

BRUSSELS - ZWIJNDRECHT (NL) - State Secretary for the North Sea Philippe De Backer visited the construction site of the Modular Offshore Grid (MOG), the switchyard platform that, as of 2019, will bundle together cables from offshore wind farms and connect them to the mainland. The foundation footing was recently installed on the seabed and construction of the immense switchyard platform is well underway. The MOG will play a key role in further developing renewable energy in the North Sea.

Belgium's first ever 'plug at sea' is one step closer to becoming a reality. Last week, the jacket was successfully installed on the seabed and construction of the immense switchyard platform is running to schedule, making it possible to meet the ambitious goal of installing the switchyard platform offshore in spring 2019. The power plug will bundle the electricity generated by four wind farms (Rentel, Seastar, Mermaid and Northwester 2) and transmit it to the mainland via joint subsea cables. The power plug lies 40 km off the coast.

Today, Philippe De Backer, State Secretary for Social Fraud, Privacy and the North Sea, visited the Zwiindrecht site where the switchyard platform is currently being built.

Philippe De Backer, State Secretary for Social Fraud, Privacy and the North Sea:

The North Sea is essential in the transition towards more renewable energy. North Sea wind provides enough energy to supply half of Belgian households with green electricity. I'm staking the future on this even more by doubling the capacity of wind turbines in the North Sea, which proves this government's commitment to using more renewable energy, both now and in the long term. The development of the MOG is part of this long-term strategy: in time, we will also be able to connect new wind farms to the offshore power plug. I also believe that other European countries will eventually be able to connect their energy to Belgium's offshore power plug, making the North Sea a real energy hub in Western Europe.

130 km of cable

The combined cable infrastructure will enable wind farms to transmit as much as possible of the electricity generated to the mainland. In total, the switchyard platform will connect 130 km of 220-kV cables with the Stevin high-voltage substation in Zeebrugge. The platform will consist of two parts: the top part where the electrical equipment (topside) will be housed and the support infrastructure that will rest on the seabed (jacket).

A lot of progress has already been made on the MOG: the jacket was successfully installed on the seabed in early November, anchoring the platform to the seabed with four posts at a depth of 60 m. In spring 2019, the topside, which is currently being built at the Zwiindrecht site, will be fitted onto the jacket. After this stage is completed, the first cables will be connected in 2019, when some of the wind farms will already be able to be connected to the MOG. The full capacity will be available in 2020.

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Markus Berger, Chief Infrastructure Officer

In March 2016, an agreement was reached with the various authorities. Now, the jacket has already been installed. We are very proud that we can contribute to the further integration of renewable energy with the MOG and thereby help Belgium to meet the European climate objectives. The MOG is an important step for Elia as it will expand our activities in Belgium from onshore towards offshore.

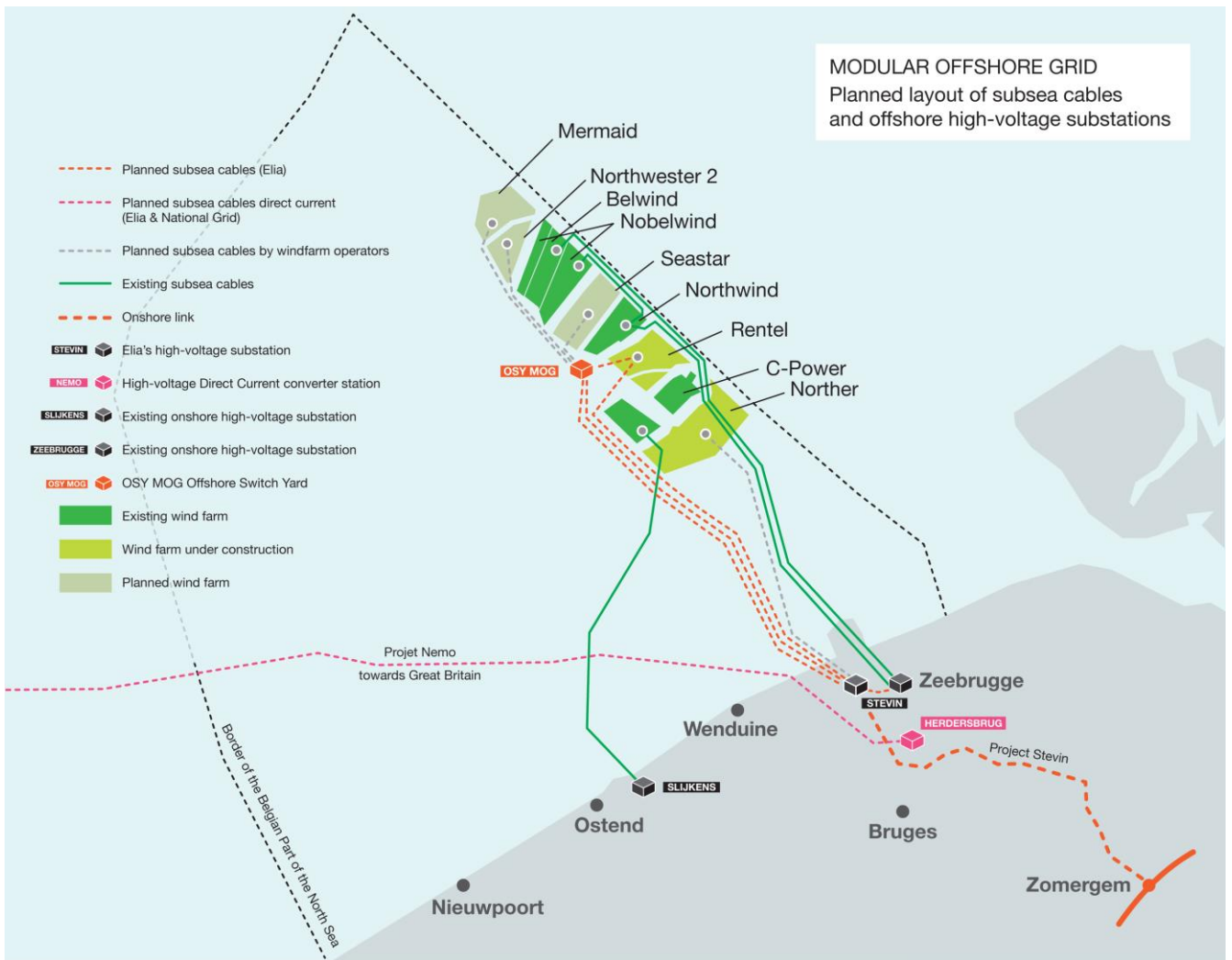
Advantages of the MOG

Bundling together the cables from several wind farms will save around 40 km of cable, significantly reducing the impact on the seabed and maritime environment. Furthermore, the MOG will increase the availability of energy generated offshore. If one of the offshore cables fails or is faulty, the wind farms will still be able to inject their energy into Belgium's grid.

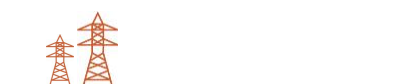
The power plug in the North Sea in figures

- The MOG platform lies **40 km** off the coast of Zeebrugge.
- The platform will be **unmanned** and will be able to be fully monitored and controlled remotely.
- The topside of the platform will rise **41 m** above the surface of the water and weigh **2000 tonnes**.
- The platform is anchored to the seabed with four posts at a **depth of 60 m**.
- When the jacket was installed in early November, a team of **185 people** was on board the installation vessel.
- **220-kV** subsea cables will connect the platform with the Stevin high-voltage substation in Zeebrugge.
- With a diameter of **28 cm**, the cables that will connect the platform to the Elia grid on the mainland will be the thickest cables ever installed in the North Sea.
- To protect subsea cables from anchors and trawls from fishing boats, they are always buried, usually at a depth of **1 to 3 m**.
- Elia's total investment is estimated at **€400 million**.



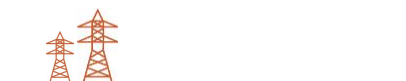


The MOG platform - located 40 km off the coast of Zeebrugge - will be connected to the Stevin substation and will transmit electricity from Rentel, Seastar, Mermaid and Northwester 2 to the mainland via subsea cables.





The Modular Offshore Grid consists of two main parts. The jacket is anchored the seabed via four foundation posts at a depth of 60 m. On top of that is the topside, consisting of a cable room, where cables feed in and out, a switch room and a control room.



About Elia Group

ONE OF EUROPE'S TOP FIVE PLAYERS

The Elia Group is active in electricity transmission. We ensure that generation and consumption are balanced around the clock, supplying 30 million end users with electricity. With subsidiaries in Belgium (Elia) and north-east Germany (50Hertz), we operate 18,600 km of high-voltage connections. As such, our group is one of Europe's top 5. With a reliability level of 99.99%, we give society a robust power grid, which is important for socio-economic prosperity. We also aspire to be a catalyst for a successful energy transition towards a reliable, sustainable and affordable energy system.

WE MAKE THE ENERGY TRANSITION HAPPEN

By expanding international high-voltage connections and integrating ever-increasing amounts of renewable energy generation, the Elia Group promotes both the integration of the European energy market and the decarbonisation of our society. At the same time, the Elia Group is innovating its operational systems and developing market products so that new technologies and market parties can access our grid, thus making the energy transition happen.



IN THE INTEREST OF SOCIETY

As a key player in the energy system, the Elia Group is committed to working in the interest of society. We respond to the rapidly changing energy mix, i.e. the increase in renewable energy, and constantly adapt our transmission grid. We also ensure that investments are made on time and within budget, with a maximum focus on safety. When we carry out our projects, we manage stakeholders proactively by establishing two-way communication with all affected parties very early on in the development process. We also offer our expertise to our sector and relevant authorities to build the energy system of the future.

INTERNATIONAL FOCUS

In addition to its activities as a transmission system operator, the Elia Group provides various consulting services to international customers through its subsidiary Elia Grid International (EGI). Elia is also part of the Nemo Link consortium that is building the first subsea electrical interconnector between Belgium and the UK.

The Group operates under the legal entity Elia System Operator, a listed company whose core shareholder is the municipal holding company Publi-T.

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