

First plug at sea successfully installed

BRUSSELS – OSTEND – Today, Federal Minister Philippe De Backer and Minister Marie Christine Marghem visited the Modular Offshore Grid (MOG), the switchyard platform in the North Sea that will soon bundle together cables from offshore wind farms and connect them to the mainland. Bart Tommelein and Dirk De Fauw, Mayors of Ostend and Bruges respectively, were also present. In April, the platform's topside was successfully fitted onto the jacket in the North Sea. Moreover, the first of two cables was connected to the mainland at Zeebrugge, meaning that the MOG is nearly ready to fulfil its key role in further developing offshore renewable energy from September onwards.

The Modular Offshore Grid in the North Sea is taking shape. In April, the topside was successfully fitted onto the jacket. The 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 plug is located 40 km off the Belgian coast and will enable wind farms to transmit as much as possible of the electricity generated to the mainland. In total, this will involve 130 km of 220-kV cables, which will be laid under the sea, leading from the offshore platform to Zeebrugge beach.

In early May, the first of two cables was successfully connected to the mainland, where it was then connected to the existing onshore underground cables leading to the Stevin high-voltage substation in Zeebrugge. The second cable is expected to reach the shore later this month. Work is also under way offshore to connect the cables to the platform, which is a major technical feat.

The MOG is needed to transmit the renewable energy generated by wind farms safely and efficiently to the mainland. The project enables 40 km of cable to be saved and will also provide greater security of supply: 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.

Chris Peeters, Chief Executive Officer Elia:

The MOG plays an essential role in the transition towards more renewable energy. We are especially proud that Elia can act as a pioneer in this regard. The project has been completed in record time: the first agreements were made with the authorities in March 2016, and the MOG will be operational this September. That is unheard of.



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MOG II

During the visit, Elia and the political stakeholders also looked ahead to the future. In late April, the federal government approved Elia's 2020-2030 Federal Development Plan, in which Elia outlines its investment plans for the next ten years. Improved integration of offshore energy plays a central role in these plans.

Specifically, Elia plans to expand the offshore network by building MOG II. In future, therefore, Elia will build more platforms in the North Sea to also connect the additional wind farms provided for in the offshore law efficiently to Belgium's high-voltage grid. To make this possible, major onshore projects will also be carried out over the coming years, such as the crucial Ventilus and Boucle du Hainaut projects.

The MOG platform is located 40 km off the coast of Zeebrugge.

- The platform is unmanned and can be fully monitored and controlled remotely.
- The topside rises 41 m above the surface of the water and weighs 2000 tonnes.
- It is anchored to the seabed with four posts at a depth of 60 m.
- A team of 185 people was on board the installation vessel for the installation of both the jacket in early November 2018 and the topside in April 2019.
- 220-kV subsea cables will connect the platform with the Stevin high-voltage substation in Zeebrugge.
- With a diameter of 28 cm, the cables connecting the platform to the Elia grid on the mainland are the thickest cables ever installed in the North Sea.
- To protect subsea cables from anchors and trawls from fishing boats, they are always buried, at a depth of 1 to 3 m.
- Elia's total investment is estimated at €400 million.



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About the Elia Group

ONE OF EUROPE'S TOP FIVE PLAYERS

The Elia Group is active in electricity transmission. We ensure that production and consumption are balanced around the clock, supplying 30 million end users with electricity. With subsidiaries in Belgium (Elia) and north-west 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 99.999%, 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 production, the Elia Group promotes both the integration of the European energy market and the decarbonisation of our society. The Elia Group is also 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.

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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.

www.elia.be/www.eliagroup.eu

