

Princess Elisabeth Island, reliable electro-technical infrastructure @sea

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On 17 May 2023, Sirris, KBVE, Agoria Energy Technology Club and OWI-Lab are organising a technical seminar, featuring the Princess Elisabeth Island as a world-class example of a reliable AC/DC infrastructure in a harsh offshore environment. The seminar will cover the challenges and best practices for developing, preparing, and maintaining such electrical infrastructures.

The electrical infrastructure is a critical component of modern industrial operations, but it can be particularly challenging to operate in harsh environments, especially at sea. In these environments, electro-technical equipment can be exposed to extreme temperatures, humidity and rain, salt water, vibrations and shocks, corrosion and other harsh conditions that can cause significant damage or even failures, if not managed properly. Due to climate change, even in moderate climates extreme weather conditions (will) occur more frequently.

The Princess Elisabeth Island is a world first. The artificial energy island is an extension of the electricity grid in the North Sea. As an international power hub it will connect wind farms from the sea to the mainland and create new connections with other European countries with AC and DC technologies. Hence the energy island will play a vital role in the Belgian energy transition. During the seminar, Belgium’s high-voltage transmission system operator Elia will let you discover the project, its ambitions and innovations.

The seminar will also present several other expert speakers from Marlinks, Sirris and others to be confirmed, who will share their experiences and insights on how to design, install and maintain electro-technical infrastructure to ensure reliable operation in harsh environments, such as offshore wind turbines.

Among the topics covered:

- The AC and DC technologies connecting the energy hub
- The importance of robust design and engineering to withstand extreme conditions for offshore energy assets
- Strategies for mitigating the effects of extreme conditions
- Best practices for monitoring, maintaining and servicing equipment in remote or difficult-to-access locations
- Technologies and innovations at the energy island

The seminar will also offer Q&A opportunities and networking opportunities.



Princess Elisabeth Island

Authors



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