



Call for Papers

GOING OFFSHORE - Challenges of the future power grid

CIGRÉ International Symposium

Aalborg, Denmark, June 4-7, 2019

SYMPOSIUM THEME

The aim of the 2019 CIGRÉ International Symposium is to provide a forum for recent research results and system operations experience related to the rapid transformation and challenges imposed on networks and markets by increased amounts of renewables in the energy mix.

Perhaps exemplified more than anywhere, Northern Europe is about to increase its already large share of wind power with further **offshore** plants and **offshore** interconnectors.

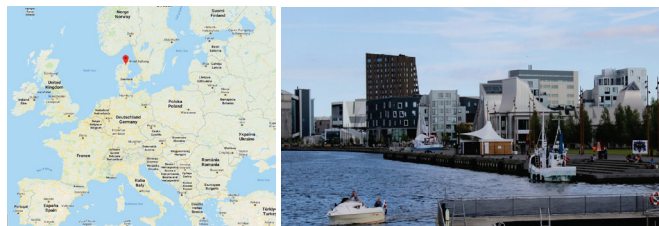
Concurrent wider changes to energy generation and consumption patterns, and challenges to obtain right-of-way for new transmission lines, drive a need to rethink transmission and its coordination with distribution networks. As an example, over 50% of Denmark's electrical energy generation is connected at distribution-level, where the roll-out of electric vehicle charging and electric heating will introduce very large power balancing challenges.

The objective of the symposium is to address recent technical advances and policy that allow transmission and distribution networks to enter their next era, in particular those related to offshore generation, transmission and distribution.

The preferential topics reflect the above, and beyond, across technology, planning, operations and markets. The symposium is intended to bring these important topics to discussion during the technical sessions.

SYMPOSIUM VENUE

Aalborg has a rich and long history, going back to the Vikings. Successful heavy industries have gradually transitioned into an environment of technology-rich enterprises, a feat not least due to the presence of Aalborg University, organizer of the symposium. Aalborg Congress & Culture Centre (uk.akkc.dk) will host all technical sessions, and is located centrally, only 6 km from Aalborg airport.



PROGRAMME

The technical programme sessions opens with keynotes and welcome reception on Tuesday afternoon 4th June, followed by two full days Wednesday 5th and Thursday 6th June. The 32 sessions will run in four parallel tracks. Friday 7th June will offer a visit by boat to the Anholt 400 MW offshore wind farm. A trip to Skagen – one of the loveliest quaint coastal towns in Denmark– will be organized for accompanying persons.

Individual Study Committee meetings and Working Group meetings will take place from Sunday 2nd to Tuesday 4th June.

Information on accompanying persons and social programme available on CigreAalborg2019.dk

PREFERENTIAL SUBJECTS

The principal topics for the symposium are:

- Offshore wind power network connection technologies and equipment: submarine and underground cables; HVAC and HVDC connections; wind farm power quality, transient and harmonic stability.
- Operation and system stability of weak networks with wind penetration, both DC and AC infeeds.
- (Offshore) HVDC technical and economic system perspectives, including multi-terminal DC networks, DC/AC hybrid transmission.
- Submarine cable technology and lifecycle.
- Upgrades and restructuring of onshore networks with mixed usage of HVAC, HVDC, overhead lines, underground and submarine cables.
- Changes and advances to split between roles and functionalities of distribution and transmission networks. Advances in exchange of data and services between DSO and TSO.
- Eco-design and environmental concerns of offshore and onshore transmission solutions, including asset management and public acceptance.

Postgraduate research student participation is encouraged. The symposium hosts a student poster session with best paper awards. As per the instructions, please indicate young authors where appropriate.

PAPER PUBLICATION

Papers will be available to download one month in advance of the symposium for registered participants – see on the symposium website. One month after the symposium, papers can be purchased on CIGRE [online library](#). CIGRÉ Science & Engineering will publish the 5 best papers selected from the symposium. The Technical Committee will produce a summary report of the symposium for publication in Electra.

REGISTRATION

Registration will be opened on 1st September 2018. Together with preliminary programme information, synopsis and paper templates will be available on: CigreAalborg2019.dk

COMMITTEES

The Symposium Technical Committee is composed of the chairmen of the following study committees:

- SC C4 System Technical Performance (lead)
- SC B1 Insulated Cables
- SC B2 Overhead lines
- SC B4 HVDC and Power Electronics
- SC C1 System Development and Economics
- SC C2 System Operation and Control
- SC C3 System Environmental performance
- SC C6 Distribution Systems and Dispersed Generation

The Organizing Committee is chaired by the chairman of the Danish National Committee Jørgen S. Christensen.

The Technical Committee is chaired by Zia Emin, chairman of SC C4.

The Local Committee is chaired by Claus Leth Bak.

SUBMISSION OF SYNOPSES

Participants wishing to present and publish papers should submit synopses by following instructions on CigreAalborg2019.dk, where the synopses and paper templates are also available. All synopses, papers, and presentations must be in English. Please note authors should be available to present at the symposium.

DEADLINES

Receipt of synopsis:	28 th September 2018
Notification of acceptance:	19 nd October 2018
Receipt of full paper:	18 th January 2019
Notification of final acceptance	12 th April 2019