SUBSEA CONTROLS 2019

25. - 26. September 2019
Radisson Blu Caledonien Hotel, Kristiansand

Photo: TechnipFMC
The conference “Subsea Controls 2019” will this year aim for an international audience, as we consider this professional arena to be of interest for the whole subsea business, not only for operators and vendors on the Norwegian continental shelf. We have also underlined this year the focus on Subsea Controls and we will address questions on All-electric, Functional Safety and Condition Monitoring in a thorough way through multiple lectures on each subject originating from different point of views, both for new field developments and brownfields perspective.

Actors working with subsea control systems and technology, have lived through a period which has challenged their system solutions and products. However, this has helped to improve both quality and performance of new solutions and products set in operation. Innovations in subsea intervention have come to light, which provide new exciting opportunities in the borderland between field control and field operations.

At the end of day one, we offer an exciting panel discussion on “Future Interfaces” – lead by a representative from a major operator – Equinor – and he will most certainly challenge the participants on how he shall position his business to meet the new technical solutions.

Day two of the conference, is focused around exchanging experiences from different operators. But: at the end of the day we will also take time to try to look more into the future – what awaits the subsea operators in near future – and what technical innovations will be available in a further perspective. Please be welcomed to two interesting days in Kristiansand!

25. SEPTEMBER

09:00 Registration  
09:50 Welcome  
Karin Sundsvik, NFEA

10:00 Subsea picture:  
Chief Researcher’s Reflections  
Cecilie Gotaas Johnsen  
Equinor ASA

11:00 Subsea all-electric:  
Status and way forward  
Egil Dino Hansen  
Equinor ASA

11:30 Break

12:00 Recent applications of electric actuation technology  
Egil M. Skrivervik  
TechnipFMC

12:30 All Electric SPS - Safety System Architectural challenge  
Einar Winther – Larssen  
Aker Solutions AS

13:00 Lunch

14:00 Functional safety in current regulation  
Asbjørn Ueland  
Petroleum Safety Authority Norway

14:15 Part 1: Safety 4.0  
Tore Myhrvold  
DNV GL

Part 2: Experience from other industries on fail-safe design concepts  
Kenneth Kvinnesland  
DNV GL

14:45 Break

15:15 Non SIL implementation of IEC 61508/61511 on Subsea Production Control Systems  
Rory MacKenzie  
Deep Offshore R&D Program  
Subsea Electrical Technologies  
TOTAL

15:45 Subsea SIL sensors experience  
Edgar Vorland  
Siemens Subsea Sensors

16:15 Break

16:30 -17:15  
Panel discussion: Future Interfaces  
Chair: Daniel Abicht, Equinor ASA

Participants:  
Total – Rory Mackenzie  
OneSubsea – Ulrich Kleine  
TechnipFMC – Christian Meum  
Siemens – Endre Brekke  
Blue Logic - Helge Sverre Eide

18:45 Attendance at reception for a common walk to Christiansholm Fortress

19:00 Conference dinner at Christiansholm Festning/Fortress  
(Adress: Østre Strandgate 52B)
### Brownfield
Chair: Einar Winther-Larssen, Aker Solutions

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Balder SCS. Why a simple design has worked longer than expected</td>
<td>Carlos Sayas</td>
<td>Subsea Control Systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vår Energi AS</td>
</tr>
<tr>
<td>09:00</td>
<td>Pierce: Keeping it producing for 30 years</td>
<td>Bruce Gardner</td>
<td>Shell UK</td>
</tr>
<tr>
<td>09:30</td>
<td>Brownfields extended life and enabling new standards</td>
<td>Tore Erntsen, CTO</td>
<td>Proserv Norge AS</td>
</tr>
<tr>
<td>10:00</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### New Solutions
Chair: Asmund Mæland, ABB

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30</td>
<td>Communication and Control for the new Subsea Power Distribution System</td>
<td>Kai Hansen</td>
<td>ABB</td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:45</td>
<td>Modularity – open control solutions</td>
<td>Gjermund Mathisen</td>
<td>Lundin Norway AS</td>
</tr>
<tr>
<td>13:15</td>
<td>Subsea 2.0. A new approach to modularity</td>
<td>Håvard Thuen Jensen</td>
<td>TechnipFMC</td>
</tr>
<tr>
<td>13:45</td>
<td>Underwater Intervention Drone control system</td>
<td>Daniel Abicht</td>
<td>Equinor ASA</td>
</tr>
<tr>
<td>14:15</td>
<td>End of conference</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Practical Information

**Time and place for the conference:**  
25. - 26. September 2019  
Radisson Blu Caledonien Hotel  
Vestre Strandgate 7, 4610 Kristiansand, Norway  

**Registration:** Register for the conference at  
www.nfea.no or email: nfea@nfea.no  

**Cancellation:**  
Cancellation later than three weeks before the conference will be charged with a fee of NOK 2,000,-. Cancellation later than one week will be charged with the full fee. Cancellation needs to be notified in writing to be valid.

**Participant Fee:**  
- Company member: kr. 7,000,-  
- Personal member: kr. 7,000,-  
- Education member: kr. 4,000,-  
- Education Non member: kr. 5,000,-  
- Non member: kr. 9,000,-  

**Exhibition (max 3 m. length)**  
- inclusive one participant:  
  - Members: kr. 12,000,-  
  - Non members: kr. 14,000,-  

**Exhibition incl. logo:**  
- inclusive one participant  
  - Company member: kr. 16,000,-  
  - Non member: kr. 18,000,-  

**Logo in the program:**  
- Members: kr. 5,000,-  
- Non members: kr. 7,500,-  

**Exhibitors can rig up stand from Wednesday at 08:00**

---

**Program Committee:**  
Committee Leader Bjørn Haavengen – TechnipFMC  
Daniel Abicht - Equinor ASA  
Lars Kristian Asbjørnsen – AS Norske Shell  
Endre Brekke – Siemens AS  
Gjermund Mathisen - Lundin Norway AS  
Asmund Mæland - ABB  
Einar Winther-Larssen, Aker Solutions AS  
Tonje Olsen - NFEA  
Karin Sundsvik – NFEA  

**Hotel:**  
We have reserved some rooms at Caledonien Hotel.  
Booking link at the NFEA Eventpage.  
Booking deadline: 4th of September  
Rooms that’s not reserved within the booking deadline will be released. Guests can book rooms according to this agreement after the deadline upon availability for the same room category.  
Rooms are not guaranteed for late arrival.

**Dinner at 25th of September:**  
NFEA will arrange a dinner at “Christiansholm Festning”. Price: NOK 850. We hope you will attend this social gathering.  
Sign up for the dinner latest within 13th of September.

**Exhibition:**  
Exhibition in mingle area outside the conference hall incl. table, chair, power outlet and tablecloths.

**Membership in NFEA:**  
- Company member NOK 5,000,-  
- Personal member NOK 500,-  
- Education/research companies NOK 5,000,-  
- Students are free of charge.

---

**EXHIBITORS:**  
FOSSTECH AS  
C-Kore Systems Ltd  
CDP Technologies AS  
Viper Innovations Ltd  
Blue Logic AS  
Naxys AS  

---

NFEA is not responsible for expenses participants may have in connection with the conference due to unforeseen events like flight cancellations etc.  
The program is subject to change.