

# OCEAN x SPACE

ESA BUSINESS APPLICATIONS, SPACEPORT NORWAY 2018  
AND NORWEGIAN SPACE CENTRE CONFERENCE

## WELCOME & RECEPTION DAY - 22 MAY 2018

- 14:00 - 17:00 **Check in and registration, Clarion Hotel Energy**
- 17:00 - 21:30 **Welcome and opening reception for Ocean x Space:  
A special cruise and dining experience on the spectacular Lysefjord**

## DAY ONE - 23 MAY 2018

- 8:00 - 9:00 **Morning coffee & Expo, Stavanger Forum**
- 9:00 - 9:15 **Welcome to Ocean x Space by Spaceport Norway, ESA Business Applications & Norwegian Space Centre**
- [Spaceport Norway](#) (Ole Dokka, Executive Director)  
[ESA Business Applications](#) (Nick Appleyard, Head of ESA Business Applications)  
[Norwegian Space Centre](#) (Terje Wahl, Deputy Director General)
- Setting the scene for Day One:**  
Sebastian Straube  
Spaceport Norway host & Founder of Interstellar Ventures
- KEYNOTES
- 9:15 - 9:30 **“Space infrastructure and ocean industry in Norway - strong legacy and future growth”**  
Daniel Bjarmann-Simonsen  
State secretary, Ministry of Trade and Industry, Norwegian Government
- 9:30 - 9:55 **“Space: the Mariner's greatest resource”**  
Nick Appleyard  
Head of ESA Business Applications
- 9:55 - 10:15 **“The overview effect - an astronaut's perspective on the ocean”**  
Paolo Nespoli  
ESA Astronaut

- 10:15-10:30    **“Satellites – The key enabler for autonomous operations at sea?”**  
 Gard Ueland  
 President, Kongsberg Seatex AS  
 Chairman, Galileo Services
- 10:30 - 10:45    **“Digitalisation, Satellites and Data Driven Operations in Statoil”**  
 Bernt E. Tysseand, Vice President Operations  
 COO Digital Centre of Excellence, Statoil ASA
- 10:45 - 11:00    **“AutoNavigation - artificial intelligence at sea and on other planets”**  
 Richard Rieber  
 Mars Mobility Flight Systems Engineer, NASA Jet Propulsion Laboratory
- 11:00 - 11:10    **INTERACTIVE: Q&A**  
 Moderated by Terje Wahl, Deputy Director General  
 Norwegian Space Centre
- 11:10 - 11:35    **Coffee Break & Expo**
- WORKSHOPS
- 11:35 - 11:50    **ESA Business Applications: Introduction to funding opportunities**  
 Rita Rinaldo  
 Head of Institutional Projects
- 11:50 - 12:15    **ESA tutorials (parallel sessions):**
- How to write a good ESA Business Applications proposal (Norbert Hübner)
  - How to convince investors (Jason Maroothynaden)
  - How to register to EMITS/ ESA-STAR (Ian Downey)
  - How to access Sentinel data (Roberto Cossu)
  - Coaching for ESA Business Competition finalists ([Eggs Design](#))
- 12:15 - 13:15    **Lunch & Expo**
- 12:15 - 13:15    **ESA Astronaut Paolo Nespoli meets 1000 students from Junior High Schools in Stavanger**  
 Paolo Nespoli  
 ESA Astronaut  
 Special guests  
 Presented by Norwegian Space Centre
- SPECIAL TOPIC: ENERGY
- 13:15 - 13:30    **“From Space to the Seven Seas, part II”**  
 Bernt Skeie  
 CEO, CMR Prototech
- 13:30 - 13:45    **“A new level of intelligence for the global LNG market – and perspectives beyond”**  
 Kjell Eikeland  
 CEO, Eikland Energy AS
- 13:45 - 14:00    **“Offshore oil spill detection and monitoring from low earth orbit”**  
 Andreas H. Kaljord  
 Project Manager, KSAT AS
- 14:00 - 14:30    **ESA Business Applications projects, ENERGY**
- WaterInfo**        Frano Cetinic (CEO, EDInsights AS)  
**SatBAMS**            John D. Byrne (Digital Array Control Systems Limited)

**ISSWIND** Vital Teresa (GMV Portugal)

**Interactive: Q&A with the audience**

14:30 - 14:50 **Coffee Break & Expo**

**SPECIAL TOPIC: INFRASTRUCTURE AND TRANSPORT**

14:50 - 15:05 **"Oceans of change "**

Johnny A. Johannessen  
Research Coordinator at Nansen Center (NERSC, Norway)  
Member of the Mercator Ocean Management Board

15:05 - 15:20 **"Space Applications in support to European Maritime Safety Agency's Integrated Maritime Services"**

Konrad Kurpinski  
Project Officer  
EMSA

15:20 - 15:30 **"Digitalisation of the ocean - maritime IoT enabled by Norwegian New Space"**

Signe Marie Husø  
Project Manager  
Space Norway

15:30 - 15:45 **"Satcom Technology to shape the future of Autonomous Ships"**

Domenico Mignolo  
Head of the Ground and User Segment Technologies and Products Section  
European Space Agency

15:45 - 16:00 **"Omni-Situ surface currents : Using ships as in-situ sensors and machine learning to observe ocean dynamics from space."**

Yann Goichoux  
CEO & President  
eOdyn

16:00 - 16:15 **"Disrupting maritime transport and logistics - autonomous shipping projects in Norway"**

Ørnulf Jan Rødseth  
Senior Research Scientist  
Sintef Ocean

16:15 - 16:25 **Interactive: Q&A with the audience**

16:25 - 16:55 **ESA Business Applications projects, TRANSPORT**

**Astrocast** Bryan Eagle (Astrocast)  
**Icecast** Jaakko Ristaniemi (Navidium)  
**Muldiarcos** Andreas Kjøl (General Manager, Viking Ice Consultancy)

**Interactive: Q&A with the audience**

16:55 - 17:35 **ESA business competition: Finalists pitch session & voting**

17:35 - 17:50 **Art session**  
Luci Eldridge

17:50 - 18:00 **Closing of Day 1**

[Spaceport Norway](#) (Ole Dokka, Executive Director)  
[ESA Business Applications](#) (Jan Dettmann, Head of Countries & Outreach)  
[Norwegian Space Centre](#) (Terje Wahl, Deputy Director General)

Moderated by Sebastian Straube  
Spaceport Norway host & Founder of Interstellar Ventures

18:00 - 19:00 **Personal time**

19:00 - 22:00 **Cocktails, dinner, entertainment and Spaceport Norway & ESA Business Applications Award Night**

## DAY TWO - 24 MAY 2018

8:00 - 9:00 **Morning coffee & Expo, Stavanger Forum**

9:00 - 9:15 **Reflections from Day One**

[Spaceport Norway](#) (Ole Dokka, Executive Director)  
[ESA Business Applications](#) (Jan Dettmann, Head of Countries & Outreach)  
[Norwegian Space Centre](#) (Bo N. Andersen, Director General)

Moderated by  
ESA Business Applications

### **Setting the scene for Day Two:**

Sebastian Straube  
Spaceport Norway host & Founder of Interstellar Ventures

### KEYNOTES

9:15 - 9:45 **“Ocean & Space 4.0: the path to sustainability on Earth (and other planets!)”**

Johann-Dietrich ‘Jan’ Wörner  
Director General  
European Space Agency

9:45 - 10:00 **“Feed the world: Space technology as driver for reaching Sustainable Development Goals (SDGs)”**

Lorant Czarán  
Program Officer  
United Nations Office for Outer Space Affairs

10:00 - 10:15 **“Food production in the Moon Village and on Spaceship Earth”**

Ann-Iren Kittang Jost  
Chief Scientist  
CIRiS, Norwegian University of Science and Technology

10:15 - 10:30 **INTERACTIVE: Q&A**

Moderated by Bo N. Andersen, Director General  
Norwegian Space Centre

10:30 - 11:00 **Coffee Break & Expo**

11:00 - 11:30 **ESA tutorials (parallel sessions):**

→ How to write a good ESA Business Applications proposal (Norbert Hübner)

- How to convince investors (Jason Maroothynaden)
- How to register to EMITS/ ESA-STAR (Ian Downey)
- How to access Sentinel data (Roberto Cossu)
- Designing for success! ([Eggs Design](#))

## SPECIAL TOPIC: FOOD & AQUACULTURE

- 11:30 - 11:45 **“New production concepts in salmon farming - threats or possibilities?”**  
Audun Iversen  
Scientist  
NOFIMA
- 11:45 - 12:00 **“Green Fish Farm: Zero emission and Zero Waste Fish Farm concept using technologies developed for Space”**  
Crina Silvia Ilea  
Senior Researcher  
CMR Prototech
- 12:00 - 12:15 **“New access to Ocean knowledge for aquaculture by using marine drones powered by space”**  
Lionel Camus  
Senior Scientist  
Akvaplan Niva
- 12:15 - 12:45 **ESA Business Applications projects, FOOD**
- |                                 |  |
|---------------------------------|--|
| <a href="#">i-FishSat</a>       | Joseph Muna (Avanti Communications Group)                        |
| <a href="#">Transparent Sea</a> | Gerd Eiden (Head of Service & Applications Department, LuxSpace) |
| <a href="#">MarIA</a>           | Eibhlín O’Sullivan (Marine Applications Ltd)                     |
- Interactive: Q&A with the audience**
- 12:45 - 13:00 **Summary and conclusions: Ocean x Space**
- [Spaceport Norway](#) (Ole Dokka, Executive Director)  
[ESA Business Applications](#) (Jan Dettmann, Head of Countries & Outreach)  
[Norwegian Space Centre](#) (Bo N. Andersen, Deputy Director General)
- Moderated by  
ESA Business Applications & Sebastianb Straube
- 13:00 - 14:00 **Lunch & Expo**
- 14:00 → **Afternoon programme TBA**