

August  
2011

## Events 2011/12

5 - 9 September 2011  
EUMETSAT 2011 – Oslo  
[http://www.eumetsat.int/Home/Main/News/Conferences\\_and\\_Events/801292?l=en](http://www.eumetsat.int/Home/Main/News/Conferences_and_Events/801292?l=en)

18 - 20 October 2011  
Meteorological Technology  
World Expo, Brussels.  
<http://www.meteorologicaltechnologyworldexpo.com/>

24 - 27 October 2011  
ITC 2011, Las Vegas  
<http://telemetry.org/>

22 - 26 January 2012  
AMS 2012 New Orleans  
<http://www.ametsoc.org/meet/annual/index.html>

21 - 27 March 2012  
International TOVS Study  
Conferences (ITSC-XVIII)  
<http://cimss.ssec.wisc.edu/itwg/itsc/>

11 - 15 June 2012  
SpaceOps 2012, Stockholm,  
Sweden  
<http://www.spaceops.org/content.cfm?pageid=7>

For meeting and appointments  
during the events, e-mail us on  
[marketing@spaceteq.no](mailto:marketing@spaceteq.no)



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## EUMETSAT Advanced Retransmission Service (EARS) Network

Kongsberg Spaceteq has for more than a decade provided turn key ground stations (MEOS™ Polar) for acquiring and processing data from the NOAA series of satellites and also Metop after the launch in 2006.

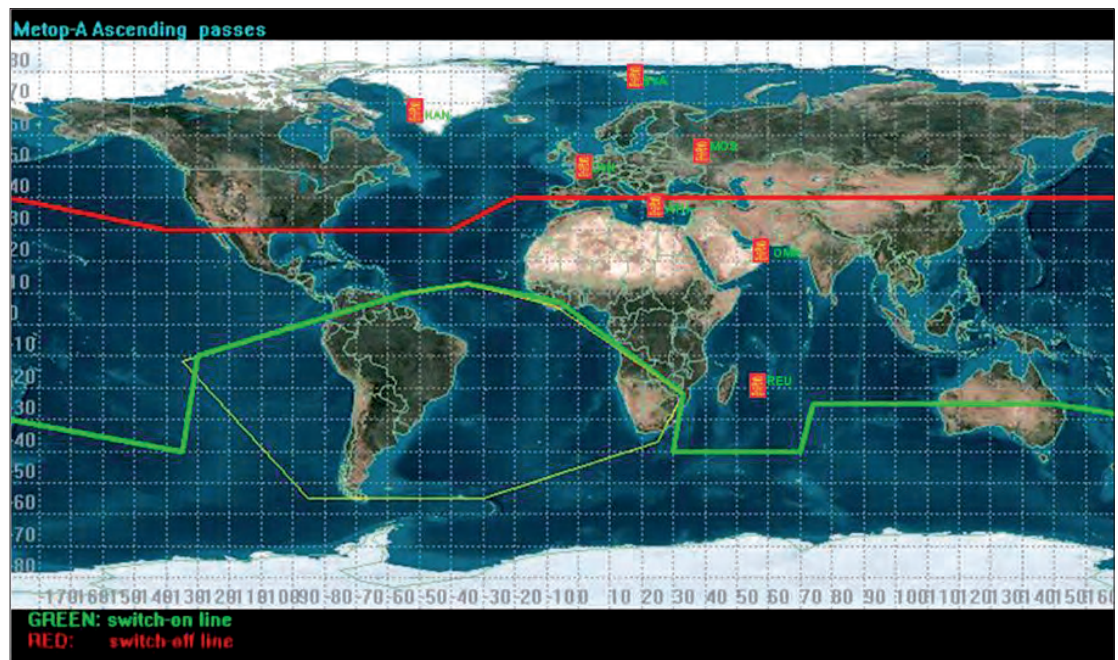
Several of these ground stations are today part of the EUMETSAT Advanced Retransmission Service (EARS) Network.

*Locations of the EARS Ground Stations provided by Kongsberg Spaceteq AS.*

The EARS System provides

- three separate satellite data services (ATOVS, AVHRR and ASCAT)
- large geographical coverage combined with timely retransmission that is achieved by the established network of existing HRPT stations (Metop and NOAA) and rapid distribution of the end-user data

Kongsberg Spaceteq has provided the solution for all in Europe except for one.



**New  
product  
release!**

## Some new contracts 2011

- **Norwegian Coastal Administration**, has awarded Kongsberg Spacetek a contract for developing the BarentsWatch framework.
- **HNMS via EUMETSAT** MEOS™ Polar EARS-Ground station in Athens, Greece
- **Kongsberg Satellite Services, Norway** MEOS™ Control and MEOS™ Connect to Mid latitude stations in Singapore, Bangalore, Dubai and Hartbeesthoek, South-Africa
- **Finnish Meteorological Institute, Finland** MEOS™ Polar Ground station, MEOS™ Capture and MEOS™ Control
- **Meteo France** MEOS™ Polar Ground station installed in Lannion, France

## MEOS™ Capture 4

The latest high performance data receiver and telemetry processing system for wideband transmissions in the X-, Ka- and Ku-bands.

MEOS™ Capture 4 supports higher data rates, enhanced functionality, specific mission support, and improved monitoring and control.

Like the previous version, MEOS Capture 4 is a true multi-mission product for demanding users, focusing on performance, reliability and flexibility.

MEOS™ Capture 4 is developed to bring all the user's data safely home, always.



*The new MEOS Capture HRDFEP 4 GUI, including HW monitoring*

- Enhanced support for missions with multiple downlinks
  - 1 or 2 IF input channels, 750 Mbps per channel (8psk)
  - Up to 4 channels digital input, 1 Gbps per channel
  - Adaptive filtering
- Enhanced output capabilities
  - 1 or 2 IF output 1 Gbps per channel (16QAM)
  - Up to 4 channels digital output, 1 Gbps per channel
  - Full modulator support, including both BER patterns and file output
- Improved reporting, including web reports
- Improved monitoring and control, including historical view of contacts and activities and prioritized updates for slow connections.
- Improved system monitoring, including fans, power supplies, temperatures and Computer Identification.
- Enhanced GUI
  - Overview for system operators
  - Details for system analysts
  - Overall lock status always visible
  - On-line and context sensitive help
  - Faster startup time
- New mission support
  - NPP EVCDU
  - RSAT2
  - Sentinels 1, 2, 3
- Backward compatibility, minimizing replacing and integration cost
- Easy upgrade by installing additional
- 4U height

MEOS Capture 4 is available in the following models: HRD (High Rate Demodulator), HRFEP (High Rate Front End Processor), HRDFEP (High Rate Demodulator and Front End Processor) and HRTG (High Rate Test Generator), in both single and dual channel configurations.

For more information, please refer to [http://www.spacetek.no/ProductsAndServices/meos\\_capture](http://www.spacetek.no/ProductsAndServices/meos_capture)

New  
product  
release!

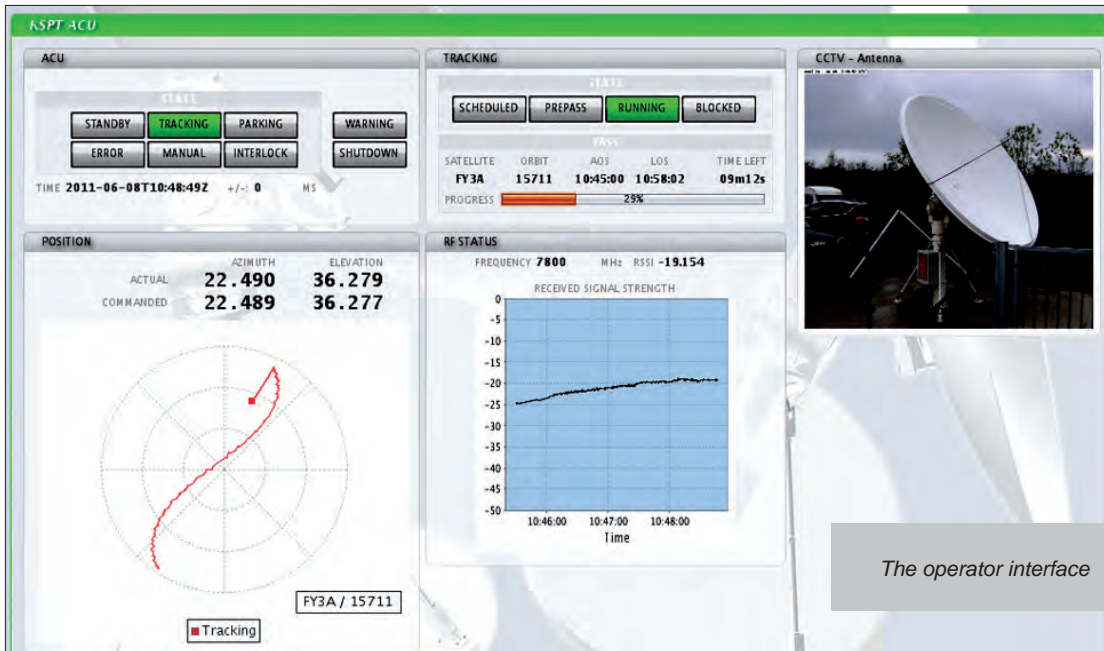
## MEOS™ Antenna

Built on 25 years of satellite ground system experience, we are proud to present MEOS™ Antenna.

MEOS™ Antenna comes with dish sizes ranging from 3.0 to 4.3 m, providing sufficient margin for data reception from direct readout and remote sensing satellites.

Designed for optimal maintainability and reliability, the MEOS™ Antenna utilizes the most modern industrial components available.

When integrated with MEOS™ Capture or MEOS™ Polar, the total unit is a high performance data reception and processing terminal.



### Key Features:

- 3.0 m to 4.3 m dish size, 3.0 m and 3.8 m without radome
- Optical fibre between pedestal and indoor unit (>3km)
- X/Y pedestal for elimination of overhead keyhole
- Single or dual band configurations
- Tracking modes:
  - Program track
  - Autotrack, based on maximum signal level tracking by helical scanning
  - Sun track
- In field diagnostics and alignment tools
- Extensive monitoring and control capabilities

### High reliability:

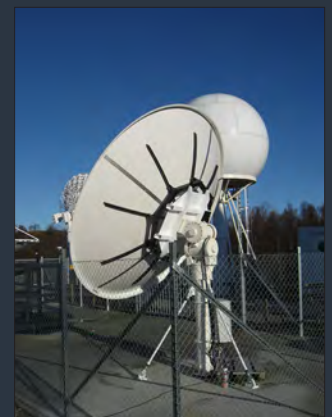
- Dehydrated positioner and electronics
- X/Y geometry for lower drive chain stress
- TCP-IP over fibre between antenna and indoor unit
- MTTR < 2 hrs
- Drive chain replacement without removing dish/positioner
- Real-Time Linux based ACU
- Resumes operation automatically after power break

### Performance:

- Travel:
  - Mechanical  $\pm 90$  deg ( $0^\circ$  elevation),
  - Tracking  $\pm 87$  deg ( $3^\circ$  elevation)
- X- and Y-axis speed 6 deg/s
- Pointing resolution 0.005 deg on both axis
- Wind speed operational 3.8m dish 27m/s
- Wind speed survival 3.8m dish 56m/s

**MEOS**  
MULTI-MISSION EARTH OBSERVATION SYSTEM

For more information, please refer to:  
[http://www.spaceteq.com/ProductsAndServices/meos\\_capture](http://www.spaceteq.com/ProductsAndServices/meos_capture)



## EUMETSAT CONFERENCE 2011 OSLO - NORWAY

5 - 9 September 2011

The 2011 EUMETSAT Meteorological Satellite Conference will take place in Oslo, Norway.

Kongsberg Spacotec are one of the sponsors and will have a booth for demonstrations and presenting our systems and products.

Please come and visit us during the conference, or contact us for setting up a meeting.

<http://www.eumetsat.int>

## BarentsWatch

The Norwegian Government's High North strategy states that the government will take the initiative to establish a comprehensive monitoring and warning system for the North. The project has been named BarentsWatch.

The main purpose of the government's initiative is to secure a civilian monitoring of Norwegian waters, as part of an operational activity, contribute to responsible management of environment and resources, and to support the Norwegian foreign policy.

After the bidding process for prequalification of suppliers, Kongsberg Spacotec reached the highest rate on price and technical quality, and is awarded the contract to deliver the solutions for the technical framework.

"We are very pleased with the solution", says project manager Frode Kjersem. "Kongsberg Spacotec is a rock solid company with a strong expertise in the areas we need. We look forward to good cooperation and a good result", he says.

*More information about this project in the February edition of this newsletter.*



*Illustration from BarentsObserver.com*

## MétéoFrance CMS, Lannion France

Kongsberg Spacotec was awarded the contract for delivery of one MEOS™ Polar system including a 2.4 m Orbital antenna and radome to Météo-France, Centre de Météorologie Spatiale, Lannion, France.

This will be the third MEOS™ Polar system installed in Lannion, in addition we have installed a similar system at their office at Reunion.

The last installation took place in June and the system is receiving data from the satellites TERRA, AQUA and FY3.

We are proud that a Meteorological institute like Meteo France choose us for the fourth time. This contract shows that our customers appreciate our systems and our efforts and experience to deliver this kind of systems.



For meeting, demonstrations and appointments during this and other events, e-mail us on [marketing@spacotec.no](mailto:marketing@spacotec.no)



*KSPT and MétéoFrance installation team with the 2.4 m antenna*



*Mr. Dominique Dago from MétéoFrance*