



ARCTIC DEVELOPMENT EXPO 2023

Satellite, Space, & Communications Technology

Knowledge Economy

AMUND NYLUND
COO, KSAT
JUNE 15TH, 2023



«We Connect Space and Earth»

KSAT is the leading provider of Ground Network Services and Earth Observation Services

HQ in Tromsø, Norway, 250 Employees

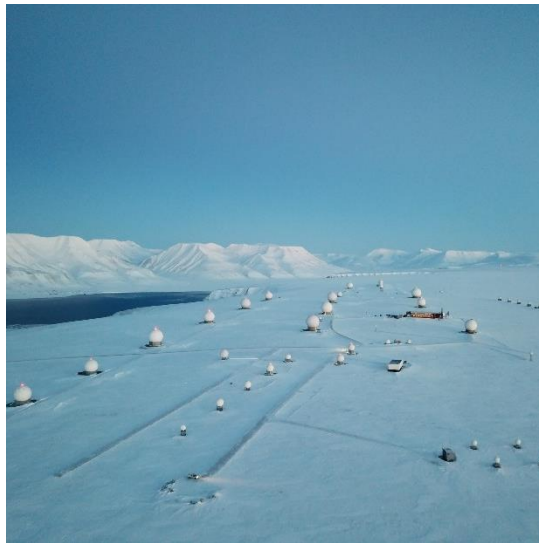
Branches in Svalbard, Oslo, Stockholm and Colorado

Daughter Companies: Inuvik, Canada and Punta Arenas, Chile



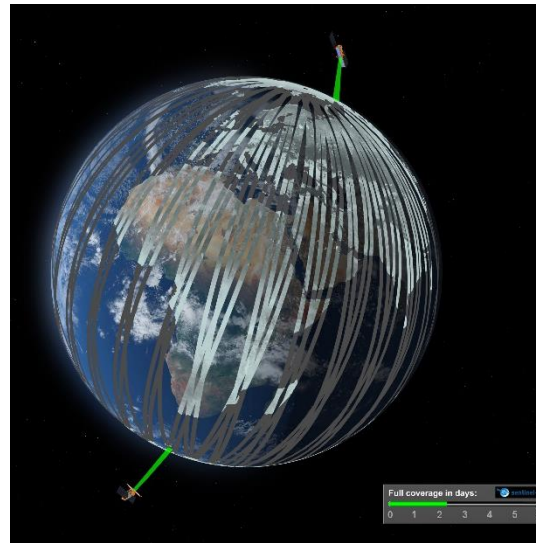
KSAT BUSINESS AREAS

An organisation fit for the future



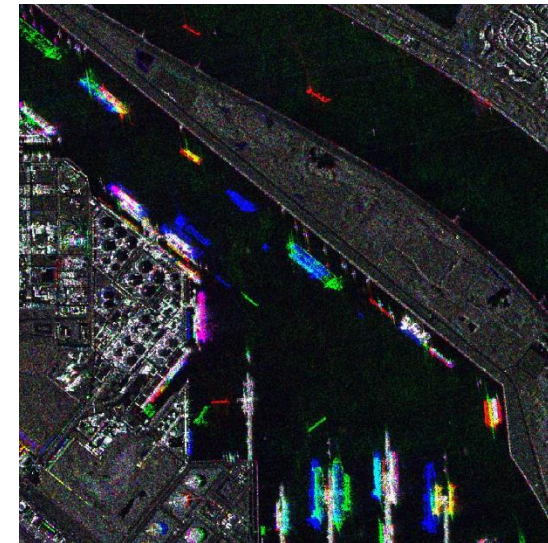
GROUND NETWORK

- Telemetry, tracking and command
- Data Acquisition services
- Launch and LEOP support
- Hosting and Maintenance



EARTH OBSERVATION

- Oil Slick Detection
- Vessel Detection
- Multi-Mission Near Real-Time data
- Planning & Ordering



GOVERNMENT PROGRAMS

- Vessel Detection
- Satellite Operations
- Data and Information services

GROUND NETWORK SERVICES

The power of a world leading Global Ground Station Network – enabling your mission



KSAT MAX



KSAT LITE



KSAT LAUNCH & LEOP



KSAT HOSTED



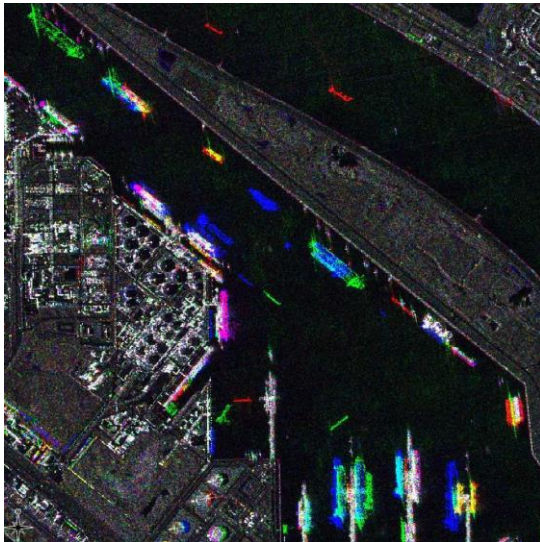
KSAT LUNAR



SATELLITE OPERATIONS

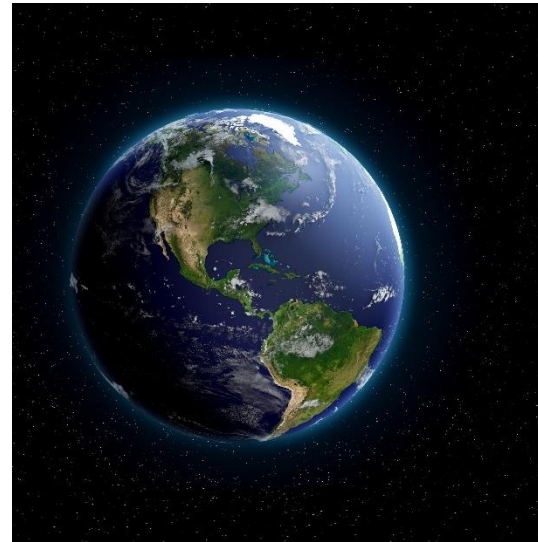
EARTH OBSERVATION SERVICES

Easy access to satellite information through one point of contact



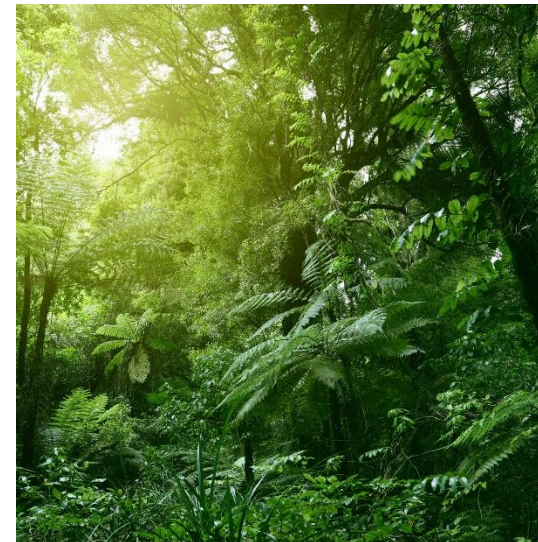
MARITIME SURVEILLANCE & SECURITY

- Vessel Detection
- Ice Monitoring
- Oil Spill Detection



ENVIRONMENTAL MONITORING

- Oil Spill Detection
- Fisheries
- Greenhouse Gas
- Algae



FORESTRY & LAND MONITORING

- Land Mapping
- Forestry, deforestation



SATELLITE IMAGERY & PROCESSING

- Data Processing
- Cloud Platforms
- Rapid Tasking
- SAR & Optical



 KSAT Ground Station

 KSAT Partner Station

Svalbard 78' North



Inuvik 68' North



NICFI

- NICFI (Norway's International Climate and Forest Initiative)
- KSAT was awarded the contract in partnership with Planet and Airbus in 2020
- 540 million km² new mosaics generated per year
- More than 10,000 users from 145 countries have registered to access the data
- Program extended to 2024



The NICFI satellite data program nominated for the Better State Award

European Maritime Safety



KSAT selected to provide maritime monitoring services in Europe and beyond

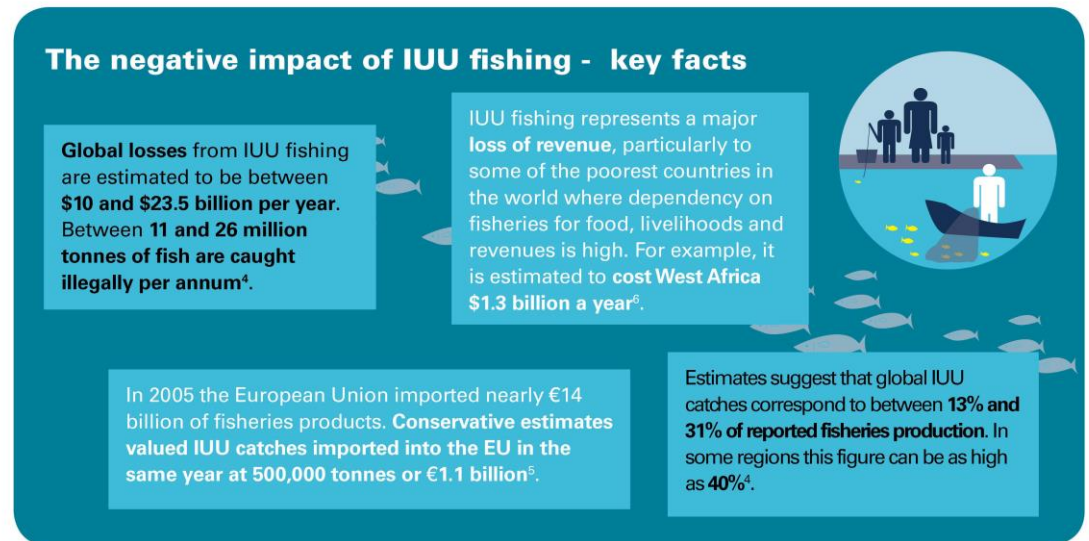
KSAT will deliver an extensive portfolio of Earth Observation SAR Services to the European Maritime Safety Agency (EMSA).

- Extensive portfolio of (Synthetic Aperture Radar) SAR satellite monitoring services to EMSA in support of the operational requirements of multiple maritime user communities in Europe
- By being able to cover almost the entirety of European waters and delivering multiple satellite missions, KSAT ensures near real-time (NRT) delivery of time-critical information for the maritime domain

Illegal, Unreported and Unregulated (IUU) fishing



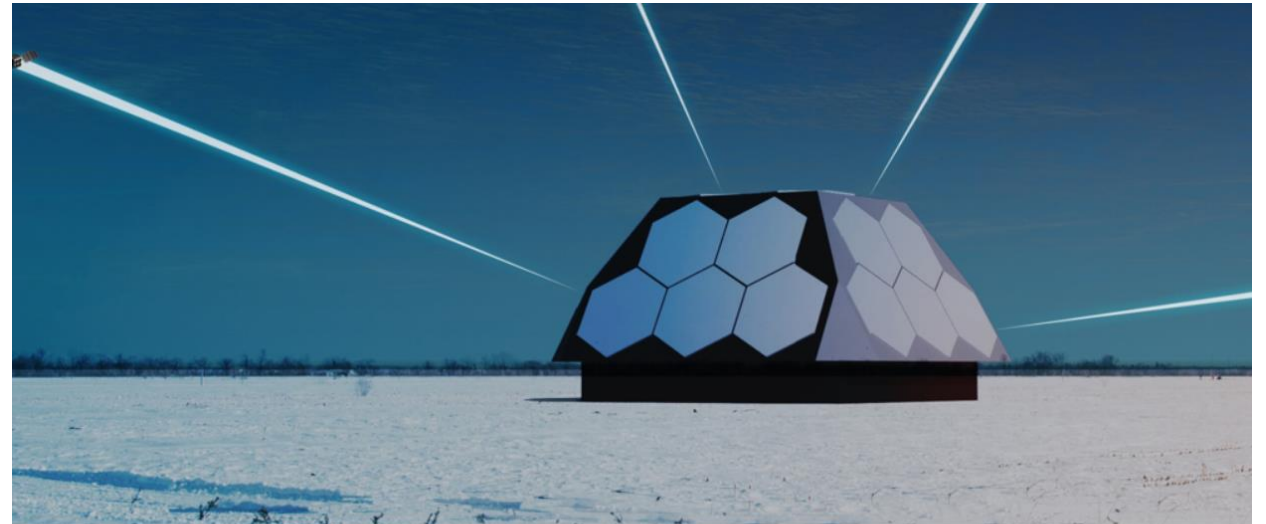
KSAT shares its expertise on IUU fishing detection at GLOC 2023



<https://www.iuuwatch.eu/wp-content/uploads/2016/01/Negative-Impacts.jpg>

Phased-Array Antenna (PAA)

- Proven technology for communications, but new technology for Earth Observation
- KSAT to install technology demonstrator by end of 2023
- One PAA can replace multiple antennas
- Still technical issues and constraints to be worked out



ThinKom and KSAT Explore Radically New Approach to Satellite Ground Stations

New antenna architecture to deliver more reliable connectivity in a smaller footprint, with lower total cost of ownership for leading gateway operator.

Satellite Constellation Operations



- Day-to-day management of GHGSat's satellite constellation
- Utilizing KSAT global network of antennas
- Natural step of KSAT portfolio
- Benefit customers such that they can focus on what is most important for them → the data collected

GHGSat signs with KSAT for Satellite Constellation Operations

GHGSat is partnering with Kongsberg Satellite Services (KSAT) to provide satellite operations and control of their constellation of greenhouse gas monitoring spacecraft. KSAT will operate the current 5 commercial satellites in orbit.

Knowledge Economy in the Arctic





Thank you

www.ksat.no

