

KONGSBERG MARITIME

SUBSEA DIVISION

Bjørn Jalving, Executive Vice President



DISCLAIMER



This presentation contains certain forward-looking information and statements. Such forward-looking information and statements are based on the current, estimates and projections of the Company or assumptions based on information currently available to the Company. Such forward-looking information and statements reflect current views with respect to future events and are subject to risks, uncertainties and assumptions. The Company cannot give assurance to the correctness of such information and statements. These forward-looking information and statements can generally be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements sometimes use terminology such as "targets", "believes", "expects", "aims", "assumes", "intends", "plans", "seeks", "will", "may", "anticipates", "would", "could", "continues", "estimate", "milestone" or other words of similar meaning and similar expressions or the negatives thereof.

By their nature, forward-looking information and statements involve known and unknown risks, uncertainties and other important factors that could cause the actual results, performance or achievements of the Company to differ materially from any future results, performance or achievements that may be expressed or implied by the forward-looking information and statements in this presentation. Should one or more of these risks or uncertainties materialize, or should any underlying assumptions prove to be incorrect, the Company's actual financial condition or results of operations could differ materially from that or those described herein as anticipated, believed, estimated or expected.

Any forward-looking information or statements in this presentation speak only as at the date of this presentation. Except as required by the Oslo Stock Exchange rules or applicable law, the Company does not intend, and expressly disclaims any obligation or undertaking, to publicly update, correct or revise any of the information included in this presentation, including forward-looking information and statements, whether to reflect changes in the Company's expectations with regard thereto or as a result of new information, future events, changes in conditions or circumstances or otherwise on which any statement in this presentation is based.

Given the aforementioned uncertainties, prospective investors are cautioned not to place undue reliance on any of these forward-looking statements.







- Underwater Sensor Systems
- 2. Marine Robotics

Core technology – multiple markets

SYNERGIES IN

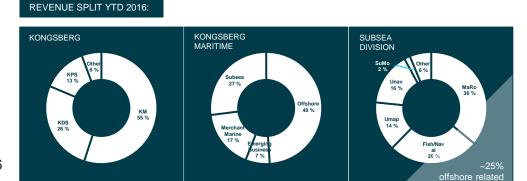
- -Technology
- -Operations
- -Markets

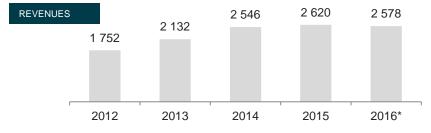


SUBSEA DIVISION



- High activity level in non-O&G related segments
 - ~50% growth last 24 months
- Reduced activity in O&G related segments
 - ~50% reduction last 24 months
 - ~25% O&G related business in 2016
- Significant capacity adjustments executed in 2016





* Last 12 months





KONGSBERG MARITIME VESSEL AND RIG SOLUTIONS

SUBSEA: MARINE ROBOTICS

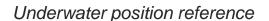








Hydroid Marine Robotics Horten

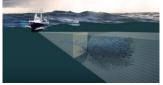


SUBSEA:

UNDERWATER

SENSORS SYSTEMS

Underwater Mapping



Fishery Naval



Underwater Navigation

Subsea Monitoring



Blue: Blue ocean

Green: Growth

Red: Oil and gas downturn

KM SUBSEA DIVISION COMPANIES & LOCATIONS





Subsea Horten, Norway

- Underwater Mapping
- UNAV
- Fishery Naval
- Marine Robotics
- · Subsea Monitoring



Hydroid
Pocasset, MA, USA
• Marine Robotics



Lynnwood, WA, USA

- Hydrography
- SeagliderFishery



Mesotech Port Coquitlam, Canada

Hydroacoustics for ROVs, fishery, security, inspection, mapping and monitoring



Camera Aberdeen, UK

- Underwater cameras
- Vessel camera systems



Underwater Mapping Great Yarmouth, UK Swath bathymetry, SSS, SBP



Simrad Spain
Alicante, Spain
Fishery, Subsea and
Merchant



Subsea Monitoring Halstenbek, Germany Subsea Monitoring



Kiel, Germany
Contros underwater gas
sensors and TA systems



UNDERWATER NAVIGATION







- Position reference for Kongsberg Maritime marine operation solutions
- ROV navigation
- Subsea construction
- Seismic (position reference for streamers and bottom nodes)



MARINE ROBOTICS MAIN APPLICATIONS





- Mine counter measures (MCM)
- Search and salvage
- Hydrography
- Seabed mapping and inspection
- Marine research



MARINE ROBOTICS INITIATIVES



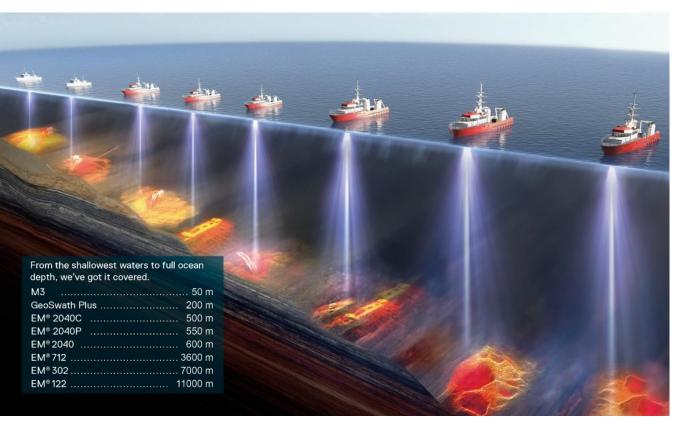


- New generation vehicles
- New applications
- KONGSBERG hydroacoustics for AUVs
- Resident Inspection Maintenance Repair; Eelume



UNDERWATER MAPPING





Applications:

- Waterways
- Ports and harbours
- Coastal
- Ocean

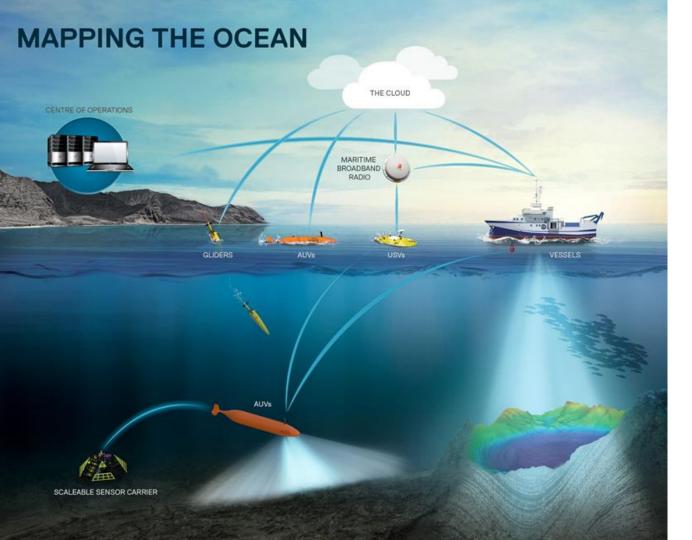
Main customers:

- Survey companies
- Hydrographic offices

Market trends:

- Most nations now involved in mapping of underwater resources and hydrography
- Overall growth despite oil and gas downturn







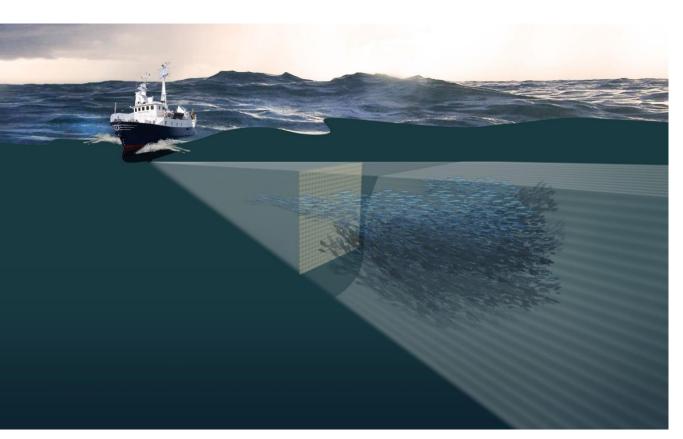
TRENDS:

- Improved instruments
- Continued robotization
- Connected and automated operations
- Extending from mapping to monitoring



FISHERY





PRODUCTS:

- Sonars
- Single and multibeam echosounders
- Catch monitoring systems (trawl)

MARKETS:

- Fishery
- Research



TECHNOLGY FOR SUSTAINABLE AQUA CULTURE





NAVAL SONARS





Main applications:

- Navigation and obstacle avoidance
- Shallow water anti-submarine warefare

Main platforms:

- Submarines
- Patrol boats
- Expect increased use of robotic platforms in the future

Strategy:

 Dual use sonar technology in littoral applications with significant growth potential







SUBSEA: MARINE ROBOTICS

SUBSEA: **UNDERWATER SENSORS SYSTEMS**







KONGSBERG



Underwater Mapping

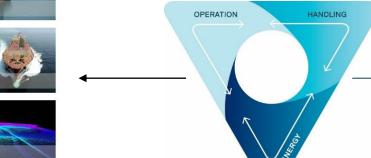






Fishery Naval







Underwater Navigation



It's all about integration



Subsea Monitoring







DISCLAIMER



This presentation contains certain forward-looking information and statements. Such forward-looking information and statements are based on the current, estimates and projections of the Company or assumptions based on information currently available to the Company. Such forward-looking information and statements reflect current views with respect to future events and are subject to risks, uncertainties and assumptions. The Company cannot give assurance to the correctness of such information and statements. These forward-looking information and statements can generally be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements sometimes use terminology such as "targets", "believes", "expects", "aims", "assumes", "intends", "plans", "seeks", "will", "may", "anticipates", "would", "could", "continues", "estimate", "milestone" or other words of similar meaning and similar expressions or the negatives thereof.

By their nature, forward-looking information and statements involve known and unknown risks, uncertainties and other important factors that could cause the actual results, performance or achievements of the Company to differ materially from any future results, performance or achievements that may be expressed or implied by the forward-looking information and statements in this presentation. Should one or more of these risks or uncertainties materialize, or should any underlying assumptions prove to be incorrect, the Company's actual financial condition or results of operations could differ materially from that or those described herein as anticipated, believed, estimated or expected.

Any forward-looking information or statements in this presentation speak only as at the date of this presentation. Except as required by the Oslo Stock Exchange rules or applicable law, the Company does not intend, and expressly disclaims any obligation or undertaking, to publicly update, correct or revise any of the information included in this presentation, including forward-looking information and statements, whether to reflect changes in the Company's expectations with regard thereto or as a result of new information, future events, changes in conditions or circumstances or otherwise on which any statement in this presentation is based.

Given the aforementioned uncertainties, prospective investors are cautioned not to place undue reliance on any of these forward-looking statements.







MERCHANT MARINE







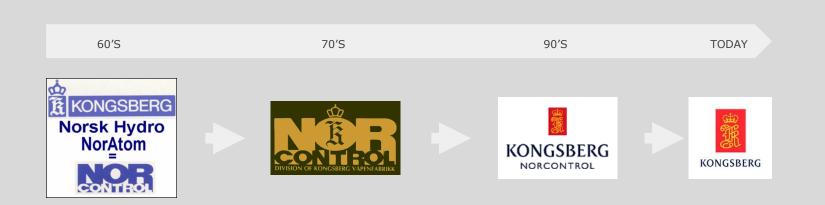


Marine electronics, applications and solutions to the global merchant marine fleet



HISTORY MERCHANT MARINE





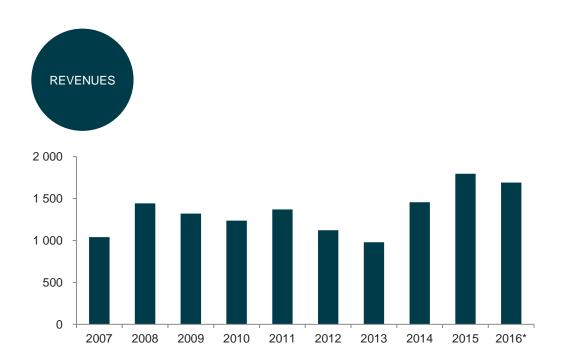
A part of Kongsberg since 1st April-1965





A SUCCESSFULL PLAYER IN A VERY CYCLICAL MARKET







1,000 EMPLOYEES – 65% OUTSIDE NORWAY



























PRODUCTION FACILITY IN ZHENJIANG, CHINA







MERCHANT MARINE DIVISION

KONGSBERG

- 50 years of continuous innovation











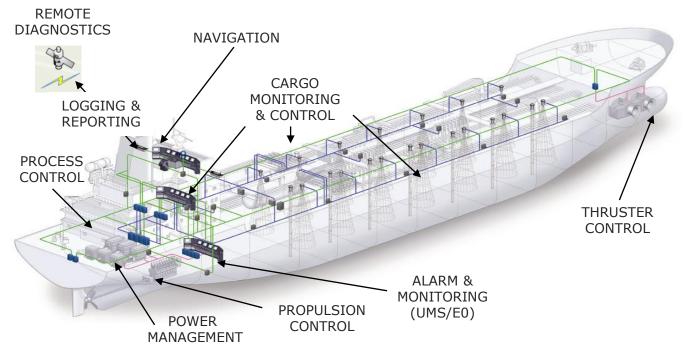


We maximize marine performance by providing

THE FULL PICTURE









THE FULL PICTURE IN PRACTICE



United Arab Shipping Company (17 ships) Contract value MNOK 200







FULL PICTURE ENGINE







SYSTEM

Redundant CAN



BEARING TEMP MONITORING



BEARING WEAR / WIO MONITORING



CYLINDER LINER TEMP MONITORING



DISTRIBUTED I/O MODULES



SENSORS FOR ENGINE



ENGINE PERFORMANCE



SHAFT POWER MONITORING



POWER SOLUTIONS





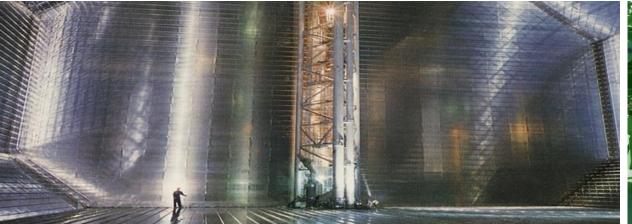


CUSTODY TRANSFER SYSTEM – LNG CARRIERS













THE FULL PICTURE IN A GREEN PERSPECTIVE



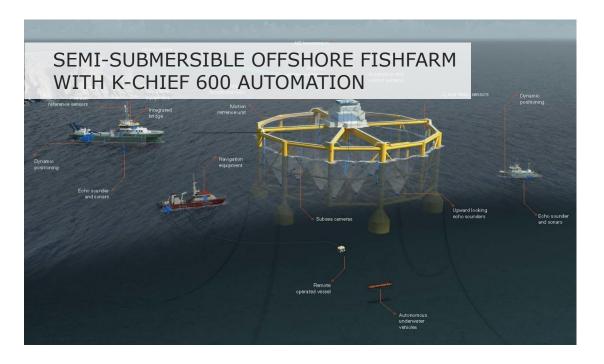


- Engine Performance and Optimisation
- Power Performance
- Hull Performance
- Nautical Operational Performance
- Shore management for Vessel Performance



THE FULL PICTURE IN PRACTICE





CONTROL APPLICATIONS:

- Power management system
- · Ballast control system
- · Position control of movable bulkhead
- · Level monitoring of general service tanks
- · Water ingress detection system
- Control of net-washing machines mounted on the movable bulkhead
- Control of chain driven brushes for dead fish collection
- · Control of discharge area lifting frame
- Control of cameras and underwater illumination
- · General operation of fans, pumps and valves.
- Handheld portable remote control of removable and moveable bulkheads.
- · Fish food loading and distribution
- · Dead fish handling system
- · Sewage control system
- Workstation in deck office and in the main control centre.

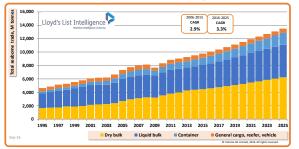


KEY TAKEAWAYS

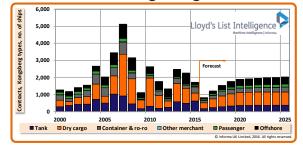


- Contracting of ships are cyclic, but seaborne trade is stable and expected to grow (CAGR 3.3% 2016-2025).
- Recent contracting is exceptionally low, but is expected to grow and stabilize in the years to come.
- Environmental requirements and a need for «OPEX friendly» ships will trigger owners to build.
- KONGSBERG is a long term player with a lifecycle perspective. We live with our customers.
- Continuous innovation, reliable products, determined people and collaborative approach is key elements for our continuous success.

Seaborn Trade Prognosis



Contracting Prognosis



"Our ambition is to make our customers the world's most efficient ship owners by the use of our systems and applications!"







DISCLAIMER



This presentation contains certain forward-looking information and statements. Such forward-looking information and statements are based on the current, estimates and projections of the Company or assumptions based on information currently available to the Company. Such forward-looking information and statements reflect current views with respect to future events and are subject to risks, uncertainties and assumptions. The Company cannot give assurance to the correctness of such information and statements. These forward-looking information and statements can generally be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements sometimes use terminology such as "targets", "believes", "expects", "aims", "assumes", "intends", "plans", "seeks", "will", "may", "anticipates", "would", "could", "continues", "estimate", "milestone" or other words of similar meaning and similar expressions or the negatives thereof.

By their nature, forward-looking information and statements involve known and unknown risks, uncertainties and other important factors that could cause the actual results, performance or achievements of the Company to differ materially from any future results, performance or achievements that may be expressed or implied by the forward-looking information and statements in this presentation. Should one or more of these risks or uncertainties materialize, or should any underlying assumptions prove to be incorrect, the Company's actual financial condition or results of operations could differ materially from that or those described herein as anticipated, believed, estimated or expected.

Any forward-looking information or statements in this presentation speak only as at the date of this presentation. Except as required by the Oslo Stock Exchange rules or applicable law, the Company does not intend, and expressly disclaims any obligation or undertaking, to publicly update, correct or revise any of the information included in this presentation, including forward-looking information and statements, whether to reflect changes in the Company's expectations with regard thereto or as a result of new information, future events, changes in conditions or circumstances or otherwise on which any statement in this presentation is based.

Given the aforementioned uncertainties, prospective investors are cautioned not to place undue reliance on any of these forward-looking statements.







SPACE & SURVEILLANCE









EXCELLENCE IN SPACE

- Applying core technologies to develop advanced products and services for the complete Space & Surveillance value chain
- Launch satellite technology ground services - surveillance





KONGSBERG SPACE & SURVEILLANCE FAMILY



Launcher and satellite mechanisms, electro optics



Norspace
Satellite electronics



Spacetec

Ground station

Ground station equipment



KONGSBERG Satellite Services*

Ground station services



KONGSBERG Norcontrol

Maritime surveillance

KONGSBERG MARITIME



KONGSBERG Seatex

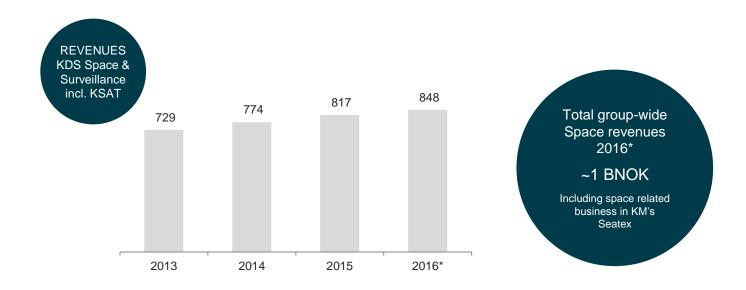
AIS payloads GPS systems



© 2016 KONGSBERG – All rights reserved. *50% ownership

A STEADY GROWING AND PROFITABLE BUSINESS







© 2016 KONGSBERG – All rights reserved. * Last 12 months

PRODUCTS - LAUNCHER & SATELLITE SEGMENT





SPACE MECHANISMS

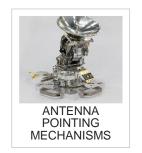


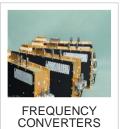
BOOSTER ATTACHMENTS



BARRIER













SEARCH & RESCUE **TRANSPONDERS**



SAW-FILTERS



SATELLITE EQUIPMENT



PRODUCTS - GROUND SEGMENT







GROUND STATIONS



SATELLITE **OPERATIONS**



PROCESSING



LEOP SERVICES



HARBOUR SURVEILLANCE



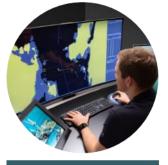
COASTAL SURVEILLANCE



OFFSHORE VTS



E-NAVIGATION



MARITIME SURVEILLANCE



CUSTOMER BASE





ARIANESPACE AIRBUS SAFRAN LAUNCHERS SPACEX (Falcon 9 LEOP services)



ESA
EUMETSAT
AIRBUS
THALES
SURREY SATELLITES
OHB
SPACE SYSTEMS LORAL
LOCKHEED MARTIN



ESA
EUMETSAT
NASA
NOAA
RAYTHEON
DIGITAL GLOBE
PLANET INC
EXACT EARTH
NATIONAL METEOROLOGY



NORWEGIAN COASTAL AUTHORITIES NORWEGIAN DEFENCE PORT AUTHORITIES OIL COMPANIES (STATOIL, PEMEX) NATIONAL NAVIES



MARKET TRENDS





- Europe's next launch vehicle for medium- to large satellites
- Competition: Falcon9/SpaceX, US

MICROSATELLITES vs HIGH THROUGHPUT GEO SATELLITES

- Volume production of small and "simple" satellites, use of "COTS"
- Technology innovation: electric propulsion, lower launch cost
- In-orbit flexibility, On Board Processing, Capacity: 1Terrabit/sec

MARITIME SURVEILLANCE (VTS/VTM)

- Integration of satellite data (radar, AIS, oil-spill detection)
- eNavigation digitization of maritime communication
- BEAN (Behavioural Analysis)

















DEVELOPMENT LAST 12 MONTHS





DIGITAL GLOBE RENEWAL Kongsberg Satellite Services wins Frame Contract Renewal.



HULL, FORTH PORTS VTS Important milestone contracts for VTS in UK market



INMARSAT 6 Largest ever contract for Kongsberg Norspace – securing continued growth in Satcom Converter market and TT&C



JUICE FLIGHT PROGRAM Contract for delivery of Solar Array Drives for ESA scientific mission to Jupiters Icy Moons



METOP Contracts for delivery of Solar Array Drives, Antenna Pointing Mechanisms, and Electronics for all 6 MetOp satellites



SENTINEL/COPERNICUS Recurring contracts for supply of Solar Array Drives to Copernicusprogram. Strengthened position towards AIRBUS/Commercial



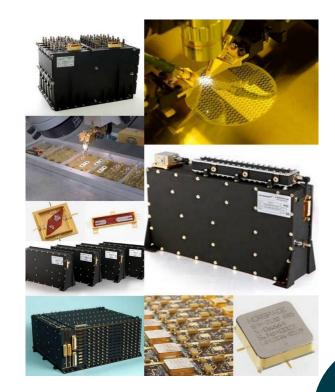
KAMARAJAR OIL SPILL DETECTION Significant system technology demonstration for detection of oil spill on water



KONGSBERG NORSPACE



- 30 years experience as World Class global supplier of analogue and microwave electronic equipment for satellites and launchers
- On-board 180 satellites in orbit
 - Analogue Signal Processing
 - Frequency Generation & Converters
 - Search & Rescue Transponders
 - Telemetry, Tracking and Command
- Building blocks: SAW filters and modules, signal amplifiers, filter banks, switch matrices, frequency synthesizers, VCOs





KONGSBERG NORCONTROL



Maritime domain awareness since 1960's

- Port Vessel Traffic Services & Management
- Coastal and Extended Economical Zone (EEZ)
- Offshore VTS
- Rivers and Inland waterways
- Our solutions in service with the world's leading maritime coastal organisations, port authorities, and safest offshore operators.
- Experience from over 240 deliveries



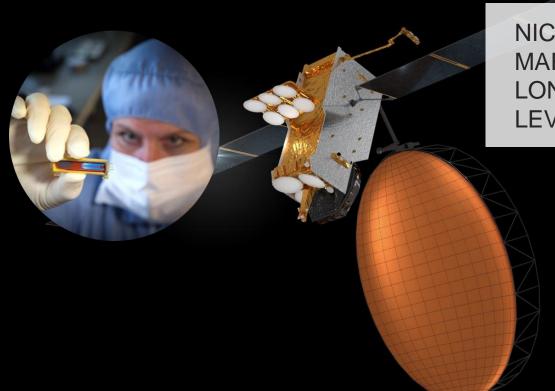






WHY WE SUCCEED - INMARSAT 6 CONTRACT





NICHE PRODUCTS

MARKET KNOWLEDGE

LONG TERM RELATIONS

LEVERAGE ON ESA-PROGRAMS





KEY TAKEAWAYS – SPACE & SURVEILLANCE COMPETITIVE NICHE PRODUCTS & SERVICES SERVING THE COMPLETE VALUE CHAIN ADOPTING TO FAST-CHANGING SPACE MARKET STEADY GROWTH – GOOD VISIBILITY



