Iridium Certus<sup>SM</sup>: Maritime Satellite Communications reinvented
L-band - The Natural Choice

• Robust - doesn’t suffer from rain attenuation
• Reliable - more forgiving on pointing accuracy
• Compact - simpler less complex equipment requiring less maintenance
The History of Maritime L-band

- Pricing
  - Maritime Broadband originally implemented without “safety-net” (birth of VSAT)
  - Limited supply of maritime L-band providers
  - Price Rises
- Limited bandwidth - older satellites (LEO and GEO) with older technology (Certus Latest Tech)
Advantages of LEO

- Low latency - 800km vs 36,000km
- Multiple points of redundancy - multiple satellites, always moving and with in-orbit replacements
- Absolute coverage
- Other benefits - can be used for other payloads (AIS)
Iridium Certus

- Giving the Maritime sector the satellite communications they have always wanted.
- New Satellites
- New Technology (20 years later)
- LEO Constellation
- New Ground Infrastructure
- New Distributors
- New Manufacturers (the best in the world)
Iridium Certus Maritime Manufacturers
Iridium Certus Services

- HD Voice
- Data
  - 100 - Simple Email/Low Bandwidth
  - 200 - Email & File Transfer
  - 350 - Basic Enterprise & VSAT Back up
  - 700 - Enterprise and Crew
  - 1500 - High-end Enterprise & Crew
- GMDSS
- SBD - Telemetry (future development)
- Broadcast - Safety and other (future development)
Iridium Certus Terminals

- Best Manufacturers
- Wide range of data throughputs
- HD Low Latency Voice
- Safety Services
- Future Services (SBD and PTT)
- Terminal Variety
  - Fisheries - Small Antenna, ~100kbps, Safety Features and PTT
  - Merchant - Medium sized Antenna, 1Mbit+ for primary communications or VSAT complement. SBD for monitoring of systems.
Iridium Certus Applications

• Easy access and operation of applications could be the next great innovation in maritime.

• We will design Iridium Certus to be ready for this.

• Different billing scenarios

• Allowing airtime through an application
  • Weather
  • Oceanographic data
  • Chart Updates

• Creating an environment where partners and third-party applications providers can design to the customers requirements, rather than design around the network.
Iridium Certus Future

• L-Band reinvented
• A re-defining of the binary choice for L-band or VSAT
• A platform for diverse hardware, services and applications which enable further innovation in the maritime industry’s future
• Possibility of Global GMDSS
• Choice
All Systems Go For Iridium NEXT

• Launches Starting July 2016
• Commercial Service end of Q1 2017
• Full constellation by 2018
• New range of compact, low-cost L-Band terminals with speeds from around 100kbps to 1.4Mbps
Summary

• For our end users
  • Fastest speeds on the most reliable frequency (L-Band)
  • Complete global coverage on Iridium NEXT
  • Equipment designed & built by world class, experienced manufacturers
  • Flexible, capable, reliable data (and voice) services
  • Combined with competitive pricing

• For our partners
  • Stable & reliable distribution structure
  • Enabling a healthy and sustainable business
  • Driving innovation by supporting partners and third-party application providers to better support the industry

We are now providing a choice.
We are building the opportunity now, for both partners and end users to be able to make the smart choice for Maritime Satellite Communications.