

Maritime VSAT experience in the Norwegian market



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Maritime VSAT experience in the Norwegian market

- ❑ **How VSAT got established in the maritime market**
 - ❑ Market Perspective
 - ❑ Product Perspective
 - ❑ What are really the drivers for VSAT ?
- ❑ **New Fleets Moving To VSAT**
- ❑ **CapRock's new maritime offering; *SeaAccess***



The Market Perspective – a look back in time

- In 2000 about 500-600 vessels was equipped with VSAT systems for data & telephony communications
- Very much focused around Energy (Oil & Offshore market) and Passenger (Cruise & Ferry market)
- In Norway in this period several other segments started showing interest. Typically within offshore services; Supply, survey, shuttle etc.
- As an example, in 2002-2003 most shuttle tankers in the North Sea was equipped with VSAT
- To meet requirements from new segments some innovation in the VSAT services was developed (bandwidth, shared and flexible networks, operational efficiency and also pricing)
- VSAT volume expanded and about 800-9000 vessels equipped with systems
- Due to increased communication requirements and also with impact from new VSAT entrants in the market, commercial shipping started move into VSAT in 2004-2005
- The burst in maritime business in 2006 both in Energy and Commercial Shipping had impact on decisions for moving to VSAT. Issues with getting crew onboard also strongly contributed. The next level of innovation was introduced to the market providing extended network flexibility (2005-06).
- In 2007 it's estimated that > 3000 vessels are using VSAT for data & telephony communications

The Market Perspective - today

Energy & Passenger Market Segments

- Semisubs/Drilling
- Jackup
- FPSO
- Pipelaying/Diving
- Seismic
- Cruise/Ferry

Service & Supply Market Segment

- Platform Supply & Services
- Anchor Handling (Tug)
- Special Vessels

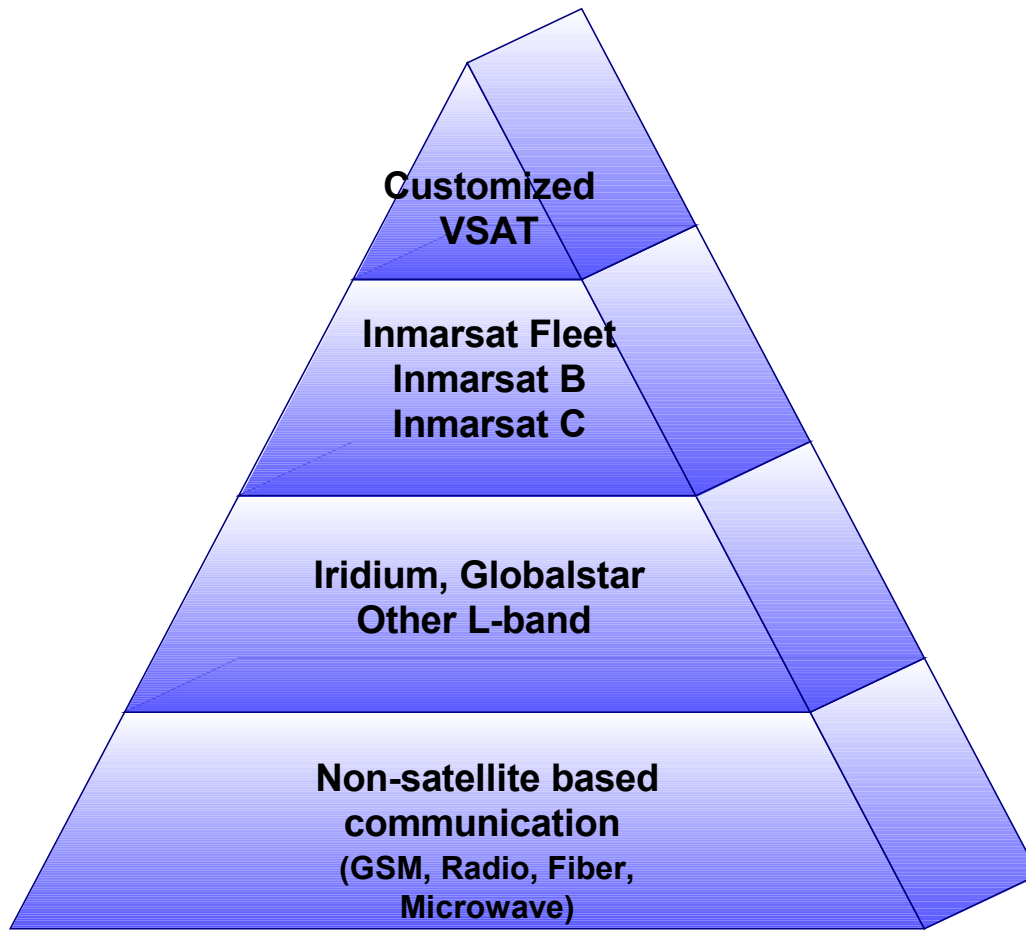
The Commercial Shipping Market Segment

- Bulk & Tankers
- Cargo & Containers
- Special vessels
- Passenger (yachts)
- Seafood

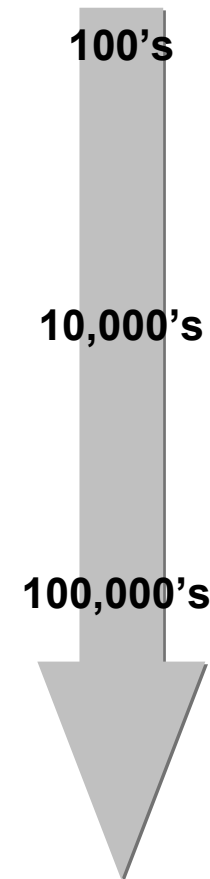
Characteristics from the broadband perspective:

- Mature market
- High service level
- Mission critical
- System integration
- Less price sensitive
- Strongly evolving to broadband
- Less mission critical
- Single customer usage
- Crew welfare importance
- Price sensitive
- Opening market
- Adoptive, ready for piloting etc.
- Not mission critical – will be
- Crew welfare importance
- External requirements
- Very price sensitive

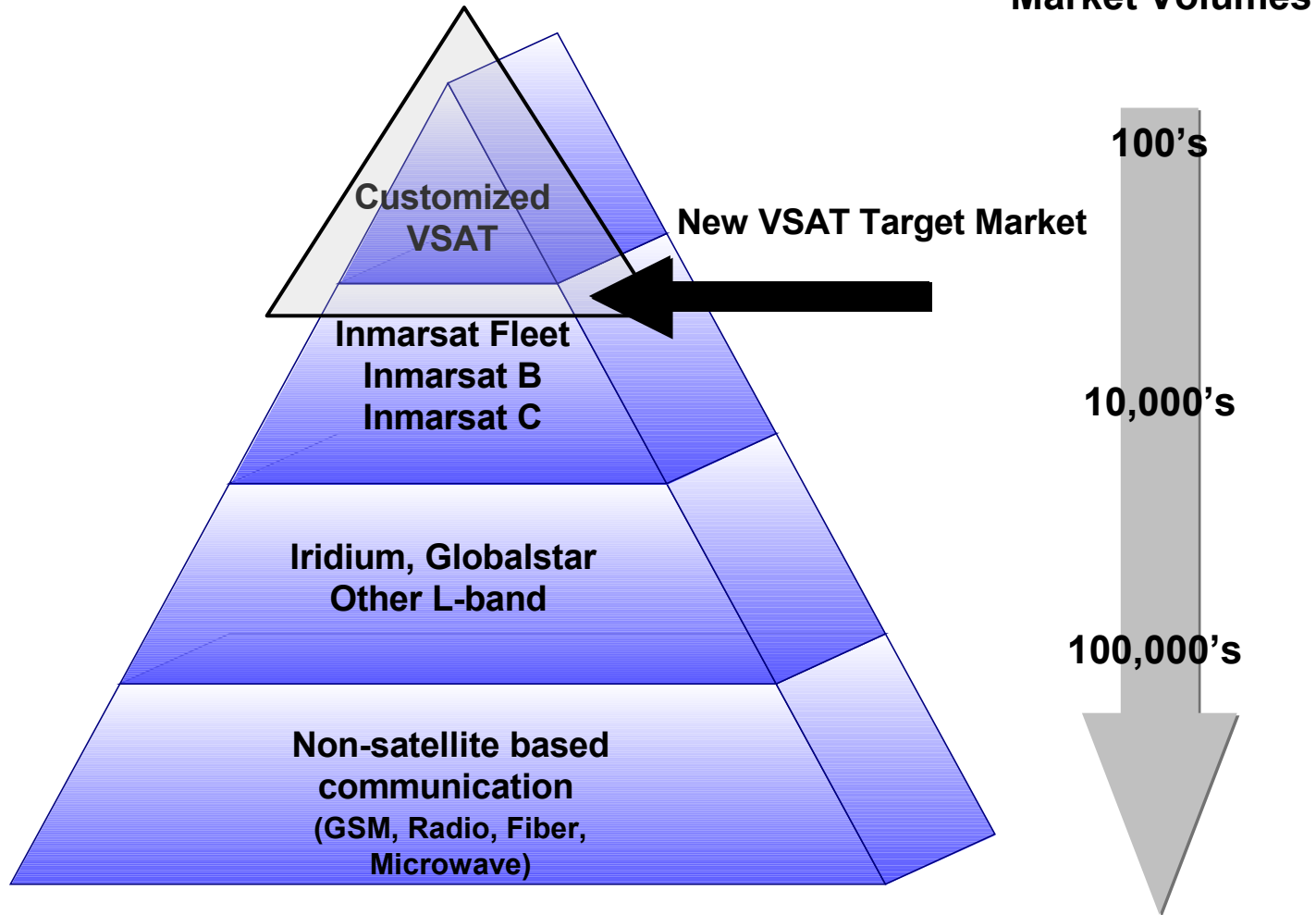
The Product Perspective



Market Volumes



The Product Perspective



What are really the market drivers for VSAT ?

” Think land based, how terrestrial communication is used”

Economical element

- Predictability with fixed costs
- Elimination or minimize existing various products & costs
- Competitive (land based) telephony tariffs



What are really the market drivers for VSAT ?

” Think land based, how terrestrial communication is used

Systems & Applications element

- Online at sea
- Ship management support
- Technical support at sea
- External communications



What are really the market drivers for VSAT ?

” Think land based, how terrestrial communication is used”

Crew welfare & retention element

- Difficulty to get crew (and right crew)
- Access to email, internet and TV
- Competitive and unified telephony tariffs everywhere



What about the vendors ?



Service, service and service
is the main differentiator.

Think
solidity,
substance,
experience,
track record,
well proven,
operations



New Fleets Moving to VSAT

Höegh Fleet Services Chooses CapRock for Always-On VSAT Connectivity

LNG Carriers to be Outfitted with SeaAccess Communications™

OSLO, NORWAY & HOUSTON, TEXAS — May 22, 2007 — CapRock, a leading provider of satellite services to remote and harsh locations, has been selected by Höegh Fleet Services (HFS) to deploy its broadband maritime service, SeaAccess Communications™, onboard five LNG carriers owned by Höegh LNG and operated by HFS. SeaAccess offers HFS always-on connectivity that enables more efficient corporate networking and crew morale solutions over the previously utilized pay-per-minute solutions.



New Fleets Moving To VSAT

Seatrans is Next Shipping Company to Choose CapRock's New Commercial Maritime Service

SeaAccess Communications™ to improve operations of global fleet

OSLO, NORWAY & HOUSTON, TEXAS – June 12, 2007 – For Seatrans AS, a fully integrated shipping company, adopting innovative services and solutions to better operate its fleet of global vessels has been key to the company's success. To dramatically improve its ship-to-shore and shore-to-ship communications, Seatrans has chosen CapRock's broadband maritime service, SeaAccess Communications™.



New Fleets Moving To VSAT



Green Reefers

Green Reefers is a specialist logistics service provider for chilled and frozen products. We provide our clients with rational logistic solutions at competitive terms and prices.

Contract signed with CapRock the 8th June 2007 for entire fleet of 37 vessels.



New Fleets Move To VSAT

NorSkán Offshore Awards Long-Term Contract to CapRock's South American Operation in Brazil

Leading offshore supply vessel company signs up for broadband VSAT

HOUSTON – May 30, 2007 - As competition continues to escalate within the offshore energy industry, major players often differentiate themselves by offering improved and innovative services to customers. For Brazil-based NorSkán Offshore, a leading offshore supply vessel company, delivering exceptional quality and responsiveness to its customers is its top priority. To further build upon its commitment and to improve the overall performance and efficiency of its fleet, NorSkán recently entered into a multi-year agreement with CapRock Communications of Brazil to receive reliable, turnkey satellite communications services.



New Fleets Moving To VSAT



CapRock is a global provider of Turnkey VSAT solutions

- **Company established in 1981**
- **Staff: ~400 Worldwide**
- **Global Operations & Facilities**
 - Four international teleports
 - Two 24 x 7 network operations centers
 - Nine regional service centers
- **System Engineering & Integration Services**
 - Custom engineering, design, and consulting
 - Systems integration and implementation
 - Turn Key project management
- **Customers & Coverage**
 - Services available globally
 - Maritime and land mobile customers



CapRock Global HQ – Houston, Texas

CapRock Infrastructure Provides Services Worldwide



CapRock Communications Norway AS

Mission: *To build a global maritime division through organic growth and strategic acquisitions*

- Company established in Oslo May 2006
- Wholly owned by CapRock Communications Inc.
- Senior Management from satellite communications industry
- Introducing competitive VSAT solutions for the maritime market



Caprock Communications offices is located at Lysaker Torg in Oslo

Welcome to booth C05-17



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