Instant readiness:
Applications of Inmarsat technology in disaster management

Pelle Maerkedahl Larsen
Market Development Manager, Enterprise Solutions

43rd Session of Scientific and Technical Subcommittee, 23rd February 2006, Vienna

Topics

- Who are Inmarsat?

- Inmarsat in action – applications in disaster management

Inmarsat:

Who are we?
What do we offer?

Inmarsat fast facts

- Market leader in global mobile satellite communications

  – Covering 98% of the world's landmass

  – Network reliability 99.99%

- Organisational transformation

  – 1979: Set up as a IGO

  – 1999: Private company

  – 2005: IPO on London SE

- 2004 revenues: $474 million

- 410 employees

- 400,000 registered terminals

inmarsat
Total Communications Network™

Our Sectors

Maritime

- Service launched: 1982

- Approx. 50% of revenues

- Established enterprise users including 50% of deep water merchant shipping

- Only provider of GMDSS

Land

- Service launched: 1982

- Approx. 30% of revenues

- Only provider of mobile broadband service with global footprint

Aeronautical

- Service launched: 1990

- Approx. 5% of revenues

- Established enterprise users

- Installed on 50% of long-haul commercial aircraft

Leasing & Navigation

- Leasing satellite capacity

- Approx. 15% of revenues

- Powered by unused network capacity in second and third generation satellites

- Growing, predictable revenue stream

inmarsat
Total Communications Network™

What do we offer?

Reliable connectivity from remote areas / areas with poor infrastructure

- Near-instant operational readiness
  - Carried by hand
  - Easily set up by user
  - Connect in minutes

  ➡ Fast response to emergencies

- Cost-efficient communications
  - Increased productivity for field users
  - No more travelling to get connected
  - Multiple users can share one device
  - Re-deploy device from site to site
  - Global coverage, one supplier

inmarsat
Total Communications Network™

Three main services used for disaster communication

Mini-M

Low-speed (2.4 kbps) data & voice

BGAN (Broadband Global Area Network)

Up to 0.5 Mbit/s data
+ Voice
+ ISDN

GAN (Global Area Network)

64 kbps data & ISDN

inmarsat
Total Communications Network™

BGAN - Broadband Global Area Network

BGAN is the first mobile communications service to offer:

Broadband data (up to half a megabit)

... plus voice

accessible simultaneously

through a single compact device

with guaranteed data rates on-demand

that can be accessed globally

inmarsat
Total Communications Network™

What you can do with BGAN

	Data	• Standard IP • Variable bit rate service • Up to 492kbps (send & receive)

|	Streaming	• Guaranteed bit rate service • Available on demand • 32, 64, 128, 256 kbps (send & receive) • Also supports ISDN

	Voice	• 4kbps circuit-switched service • Voicemail • Enhanced services: call waiting, forwarding, barring, holding • Broadcast quality voice

	Text	• Send and receive text messages via your laptop

inmarsat
Total Communications Network™

Global mobile broadband coverage
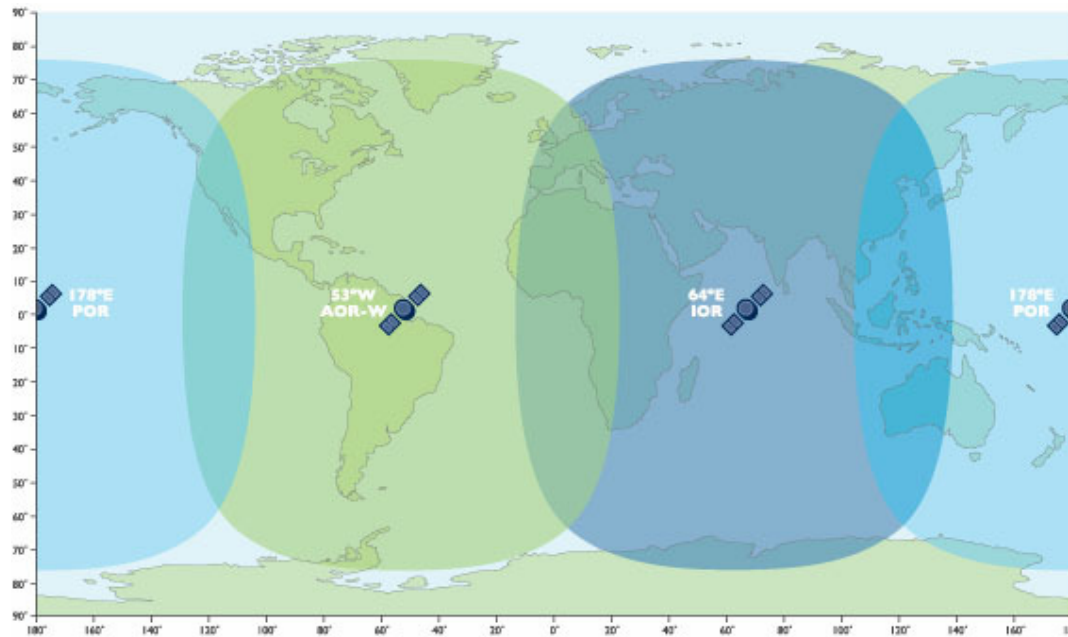
Each satellite has 228 narrow spot beams

- Initially accessible in Europe, Africa, the Middle East and Asia

- Available in North and South America in Q2 2006

- 85% of world's landmass covered by the first two satellites

- Launch of 3rd satellite to be determined

inmarsat
Total Communications Network™

Inmarsat in Action

A world of Disasters – all need communication

inmarsat
Total Communications Network™

Inmarsat and Humanitarian Aid

Communications for life

- Darfur Refugee Camps, Sudan
- Hurricanes Jeanne and Ivan, Caribbean
- Philippines Typhoon
- Indian Ocean Tsunami
- Asian Earthquake
- Hurricane Katrina

inmarsat
Total Communications Network™

Inmarsat and the Indian Ocean Tsunami

- 26.12.04 – call for Inmarsat help

- Satellite capacity to region boosted

- Telecom Sans Frontieres sets up Inmarsat links in Sri Lanka and Indonesia for victims and Aid workers

inmarsat
Total Communications Network™

Inmarsat and the Asian earthquake

- Since 2003, Inmarsat has worked with the International Telecommunications Union (ITU), a United Nations agency

- As part of ITU's Least Developed Programme, Inmarsat provided 15 GAN terminals for emergency use

- Following earthquake, Inmarsat provided an additional 40 R-BGAN terminals to Pakistan

- These were used to provide much-needed data access to relief workers and aid agencies on the ground

inmarsat
Total Communications Network™

Inmarsat and Hurricane Katrina

- Satellite communications support provided through FEMA for U.S. Northern Command, National Guard, Army, Coast Guard, Navy

- Free use for voice telephony in the affected zone at peak of crisis

- Co-ordinated with partners to supply hundreds of additional Mini-M and GAN terminals

- Department of Homeland Security: "...experienced nothing but flawless performance and extensively long connections (in excess of 5 hours in some cases) with no uncommanded hangups or errors"

inmarsat
Total Communications Network™

Inmarsat and NetHope

- US-based agency uses Inmarsat services for voice and data communications to support relief efforts

- This recently included help for tsunami victims in South East Asia

- NetHope works with charities such as Oxfam and Relief International

- Inmarsat and NetHope have developed the Net Relief Kit; a ready-to-use Inmarsat BGAN terminal and satellite phones

inmarsat
Total Communications Network™

Asian Tsunami Early Warning System

- Through organisations like TSF, Inmarsat services were used extensively during relief efforts for the tsunami

- Inmarsat is also involved in the new Tsunami Early Warning Systems being established in the region

- Buoys equipped with Inmarsat technology monitor and relay data on seismic activity, wind speed, temperature and wave movements

inmarsat
Total Communications Network™

Looking ahead

- We have a 26-year history of providing vital communications in times of crisis
- We have proven experience – at sea, on land, in the air
- We honour our mandate, and continue to sponsor TSF
- Our new Inmarsat-4 satellites offer more power and more capacity
- Our services are quicker to deploy and easier to use
- Disasters will still happen
- And we'll still be there to offer support

inmarsat
Total Communications Network™

Thank you!

inmarsat
Total Communications Network™