







# **FB – Managed Service Practical Solutions**

**16<sup>th</sup> November 2011**



**Guru Chana**

# FleetBroadband gives Maritime users.....

	<b>Voice</b>	<ul style="list-style-type: none"> <li>➤ 4kbps circuit-switched service (+870)</li> <li>➤ Voicemail</li> <li>➤ Enhanced services: call waiting, forwarding, barring, holding</li> <li>➤ Broadcast quality voice</li> </ul>	
	<b>Data – Standard IP</b>	<ul style="list-style-type: none"> <li>➤ High Speed Standard IP</li> <li>➤ Variable bit rate service – Shared &amp; Best Effort</li> <li>➤ Up to <b>432/432 be kbps</b> (send /receive)</li> </ul>	<b>Volume Charged</b>
	<b>Data – Streaming IP</b>	<ul style="list-style-type: none"> <li>➤ On-demand Guaranteed bit rate service</li> <li>➤ 32, 64, 128*, 256* kbps (send &amp; receive)</li> <li>➤ ISDN – Legacy compatibility.</li> </ul>	<b>Time Charged</b>
	<b>Text</b>	<ul style="list-style-type: none"> <li>➤ Send and receive text messages via your Pc</li> </ul>	

...**Simultaneously**  
 ...From an Easy to operate,  
 Compact, Light weight **Proven**  
 product.

...**Plug & Play IP Connectivity**  
 ...**On-Demand Choice of Services**  
 ...**Quick, Convenient & Painless**  
**DIY installation**



# So, what is the FB Managed Service?

## Features

### (a) INMARSAT

- ➔ Bandwidth management by core network
- ➔ Priority IP connection to business applications
- ➔ Controlled IP access to crew applications

### BANDWIDTH CONTROL

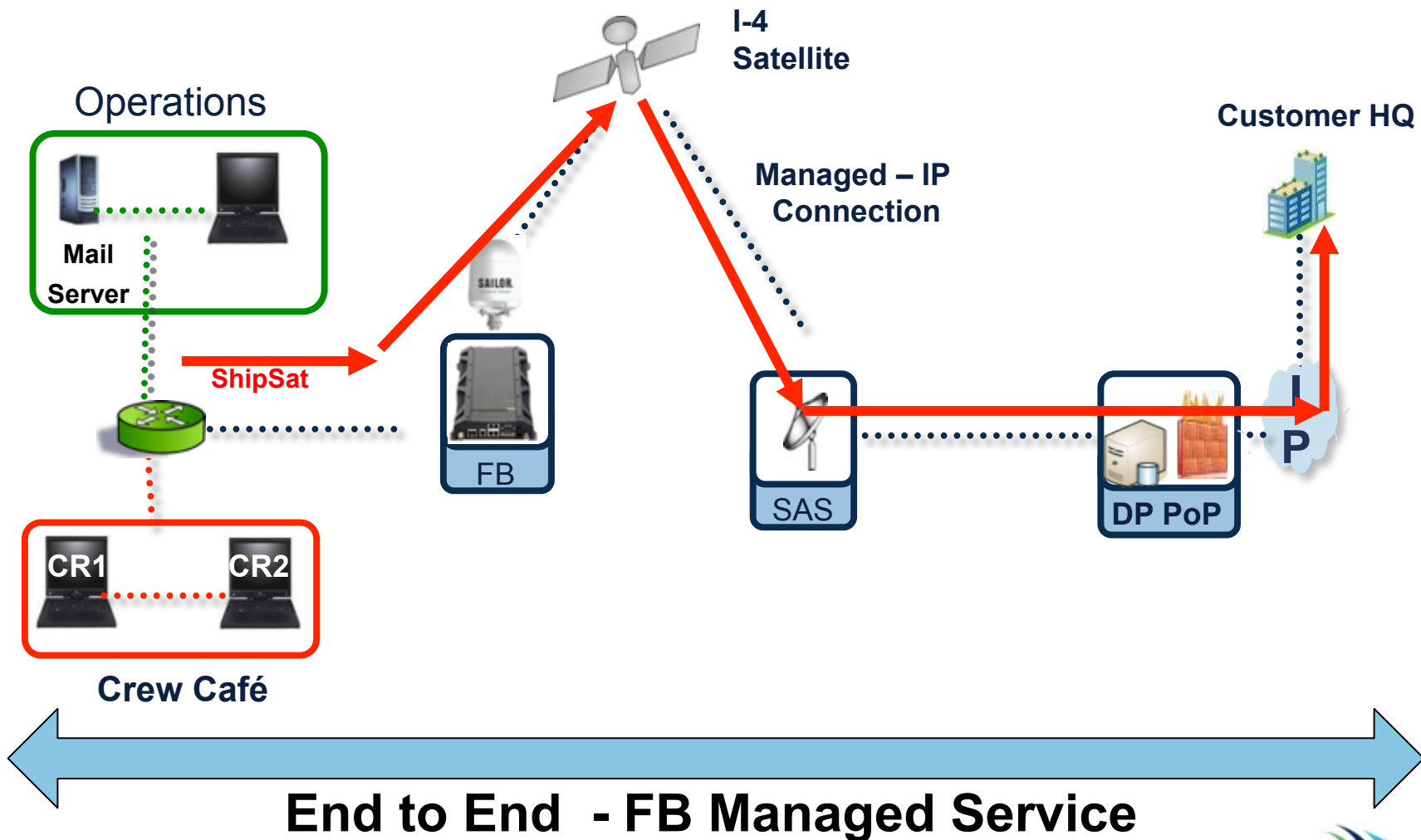
### (b) CHANNEL PARTNER

- ➔ Optimises application performance (via VAS) by doing caching, compression & content filtering.
- ➔ Combines with Inmarsat provide the ultimate effective solution.

### BANDWIDTH OPTIMISATION

# FB Managed Service Deployment

## (c) Smart Router – for the complete Network topology



# Understanding

## Flat rate & Unlimited



**Flat rate:** by definition: A price that remains constant regardless of the number of units used



Flat Rate does not mean Unlimited



**Unlimited:** by definition – Not limited or restricted in terms of number quantity

# Managed Service Solution

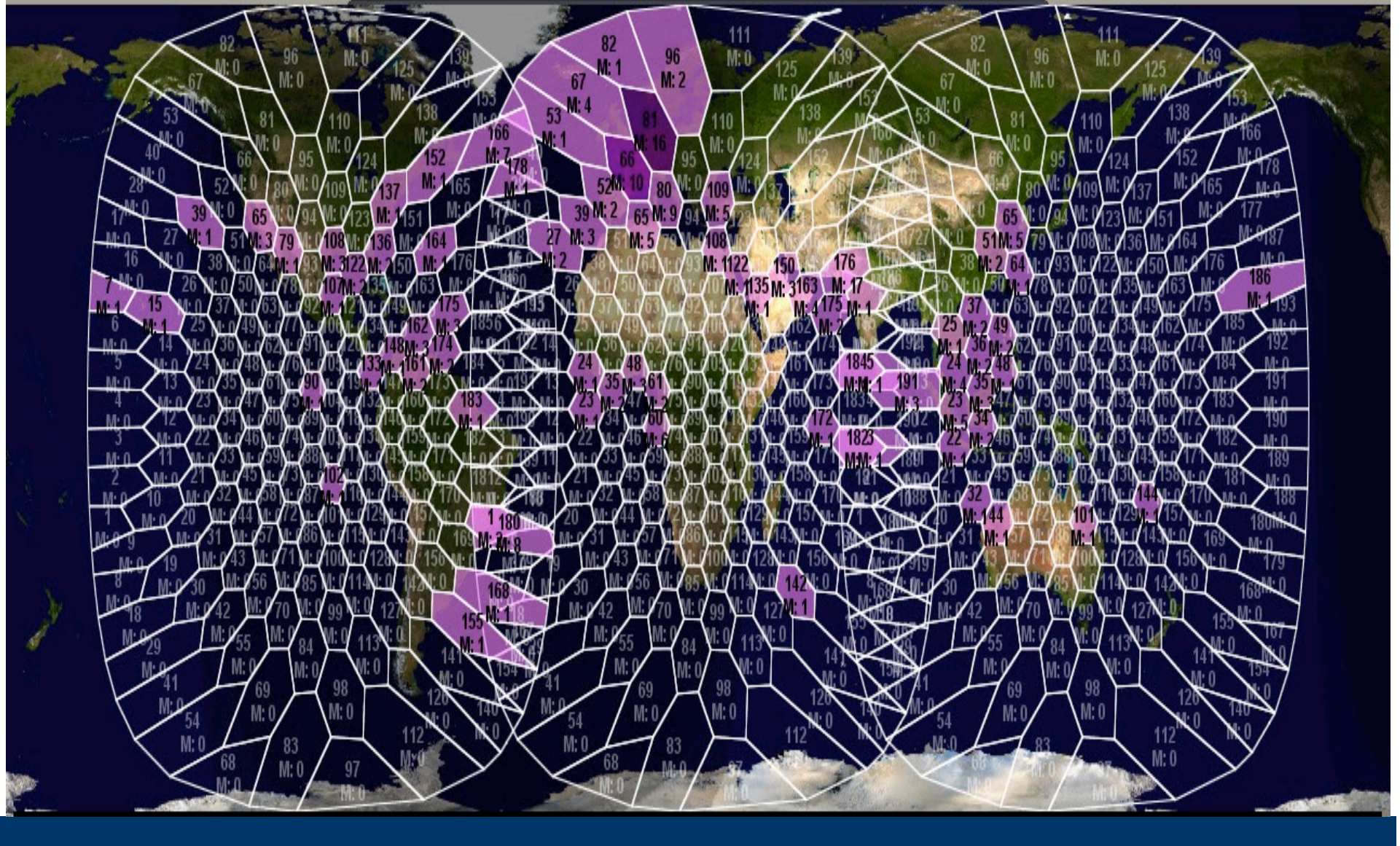
## ShipSat



**If resource is limited and is limited it must be managed**



# Global Coverage until 2020's (L-Band Seamless Coverage)



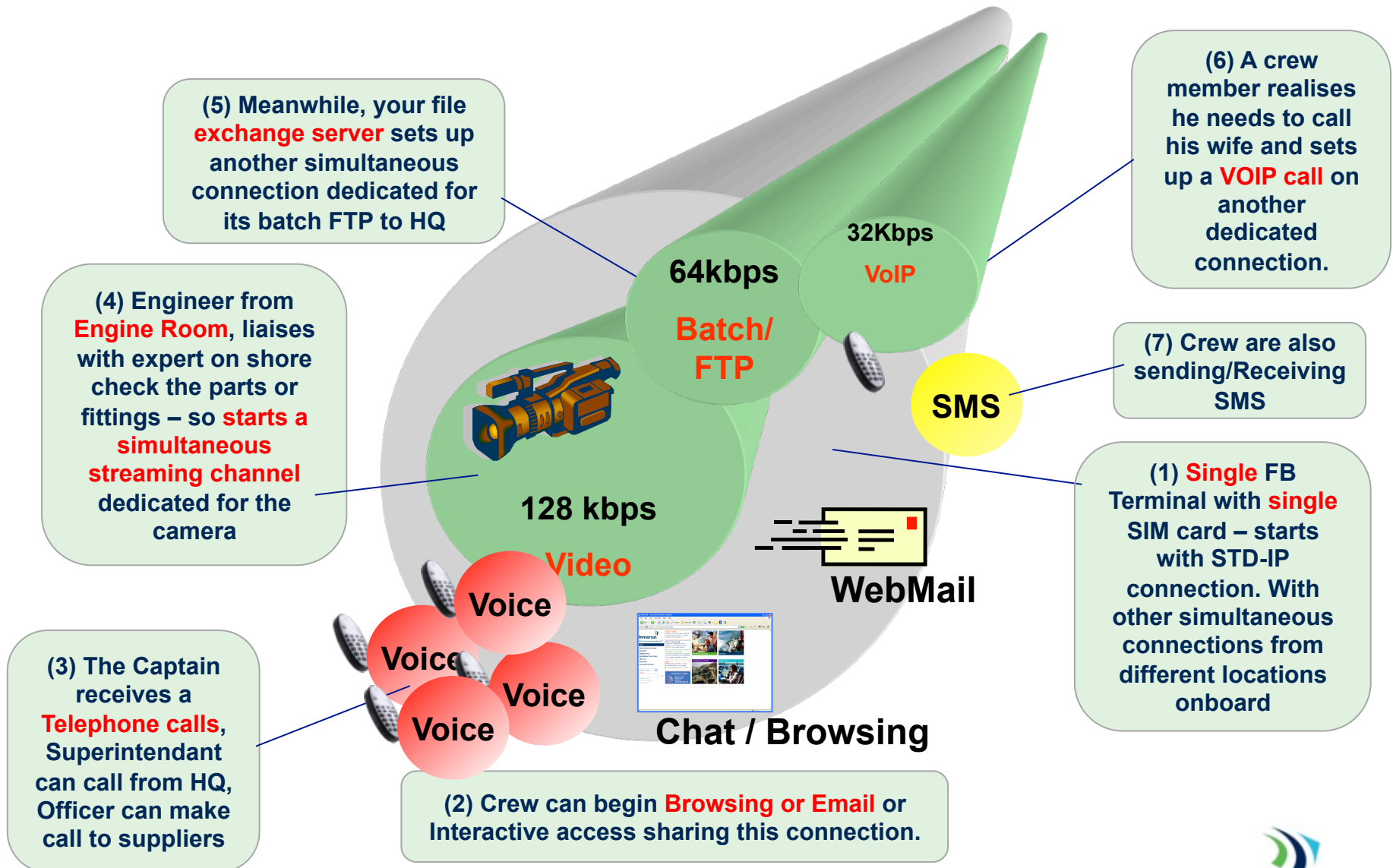
# What is FB Managed Service Solution?

## Enables Onboard Users to.....

- ➔ **Run Critical Business Applications** – which can be **prioritised** over other traffic.
- ➔ **Browse efficiently** over the internet.
- ➔ **Allow crew** to Socialise, Communicate via Email, Chat, Stay in touch and generally **ACHIEVE** things important on a **daily basis**.
- ➔ **Control filtering** Advertising, Reduce resolutions of Pictures
- ➔ **Rationalising** Peer-to-Peer traffic
- ➔ **Rationalising** Streaming Video / Radio.



# Unique Capability of FleetBroadband



# Video Solutions.....

Standard IP (be)

Streaming IP

1. **Digital Photos:** Transmission of damage, insurance claims.
2. **Video Chatting:** MSN, Yahoo Messenger. Typified by webcam quality images during text-conferencing sessions.
3. **Store & Forward Video:** FTP of large, compressed video files of High resolution, High quality.
4. **Video Streaming:** Real-time Surveillance, Tele-Training. Typified by Text/Audio/Video being transmitted in one direction mainly.
5. **Video conferencing:** Typified by High Quality Audio/Video transmission **synchronised** in both directions. Tele-training. User expects high quality images & audio clarity. Disturbance upsets purpose of this application.



**Tandberg**



TANDBERG  
Centric  
1700 MXP



# Where are we going

## What's next ? (Huge Upgrade to our Network)

1. Multi-Voice on FB
2. Data Reporting on FB - **Dynamic Telemetry Service (DTS)**
3. GMDSS on FleetBroadband – Non-solas / Solas
4. GlobalXpress

### Not to forget:

1. Emergency Calling 505
2. IsatPhone Pro, Docking units, Data
3. Fleetphone Oceania 400 / 800

# What is Global Xpress?

- ➔ \$1.2bn investment in new IP based Ka-band Satellite Network
- ➔ 3 Ka-band satellites commissioned from Boeing, each offering two types of payloads baseline (fixed beams) and HCP (steerable beams)
- ➔ Ground network and Satellite Terminal Core Modules to be developed by iDirect
- ➔ A range of product and services for
  - Maritime
  - Energy
  - Government
  - Enterprise & aeronautical

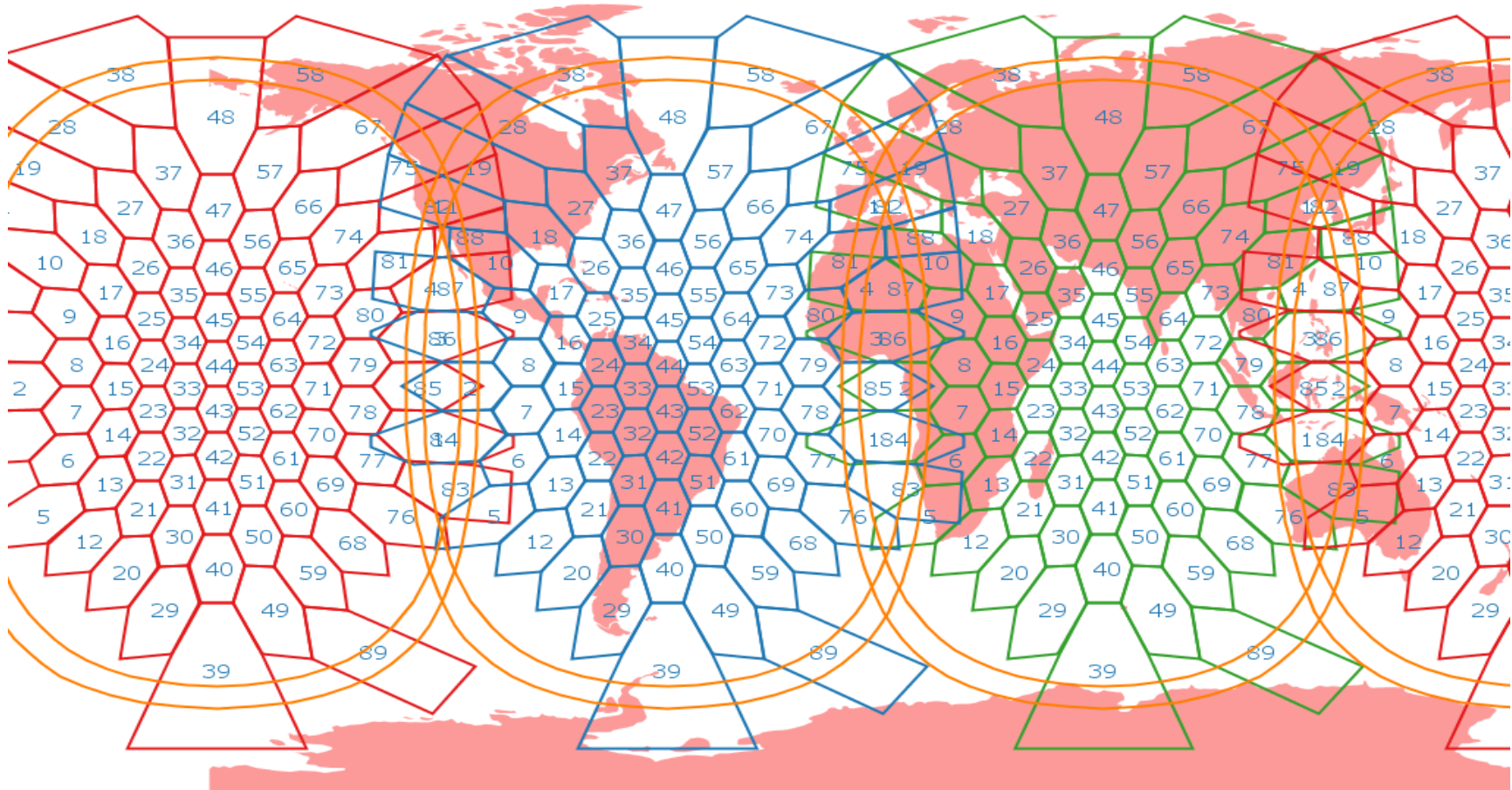
# Global Xpress I-5

- ➔ Global Service
  - 89 fixed beams per satellite for global coverage in three satellite configuration
  - 72 pairs of Fwd/Rtn 40 MHz Channels for Global Service
  - ~5 GHz aggregate bandwidth
- ➔ High Capacity Overlay Service (HCO)
  - 6 steerable spot beams per satellite for multi-regional, dynamic coverage
  - 8 pairs of Fwd/Rtn 100 MHz channels for commercial Ka-band services (per satellite)
- ➔ Satellite Delivery expected to be at Launch site:
  - F1 July 2013
  - F2 January 2014
  - F3 July 2014





# Proposed baseline global coverage



I5F3 - Pacific

I5F2 - Americas

I5F1 - EMEA



- Three satellites for global coverage

# Key Features

- ➔ Services
  - Supports native IPv6
  - Global multicast traffic will be supported using standard IP protocols
  - The system will also support voice over IP
- ➔ Security
  - Signalling and User Data encryption based AES 256 standards
- ➔ Terminals support very high data rates

	60 CM (5W)
EIRP	49.5 dBW
G/T	15.0 dB/K
FWD (Typical)	50 Mbps
RTN (Typical)	5 Mbps

# QUESTIONS?