

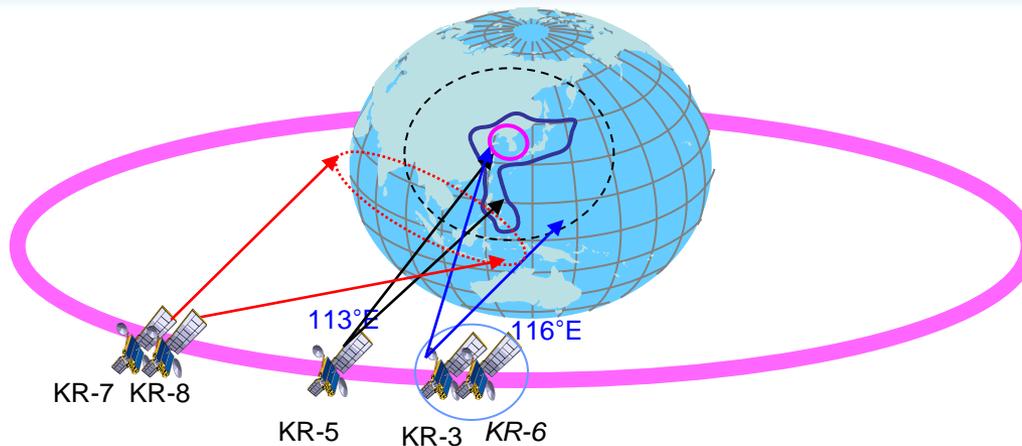
# KT Satellite Business

YANG, Sang Jin

- I. KT Capacities
- II. Koreasat Services
- III. International Services



- Koreasat 1 was launched in 1995 and de-orbited in December 2005.
- Koreasat 2 at 75°E, Koreasat 3 at 116°E and Koreasat 5 at 113°E
- Koreasat 6 satellite is to be launched in 2010 replacing Koreasat 3



## Koreasat-7

- Orbital Location : 75 East
- Launch Date : 1999

## Koreasat-8

- Orbital Location : 75 East
- Expected Launch Date : 2013

## Koreasat-2

- Orbital Location :
- Launch Date : January, 1996
- Manufacturer : Lockheed Martin
- Launcher : Delta II
- Launch Mass : 1,459 kg
- Life time : 10 years
- Transponders : FSS (12), DBS (3)

## Koreasat-3

- Orbital Location : 116 East
- Launch Date : September 1999
- Manufacturer : Lockheed Martin
- Launcher : Ariane IV
- Launch Mass : 2,800 kg
- Life time : 12 years
- Transponders :
  - Ku band : FSS (24), DBS (6)

## Koreasat-5

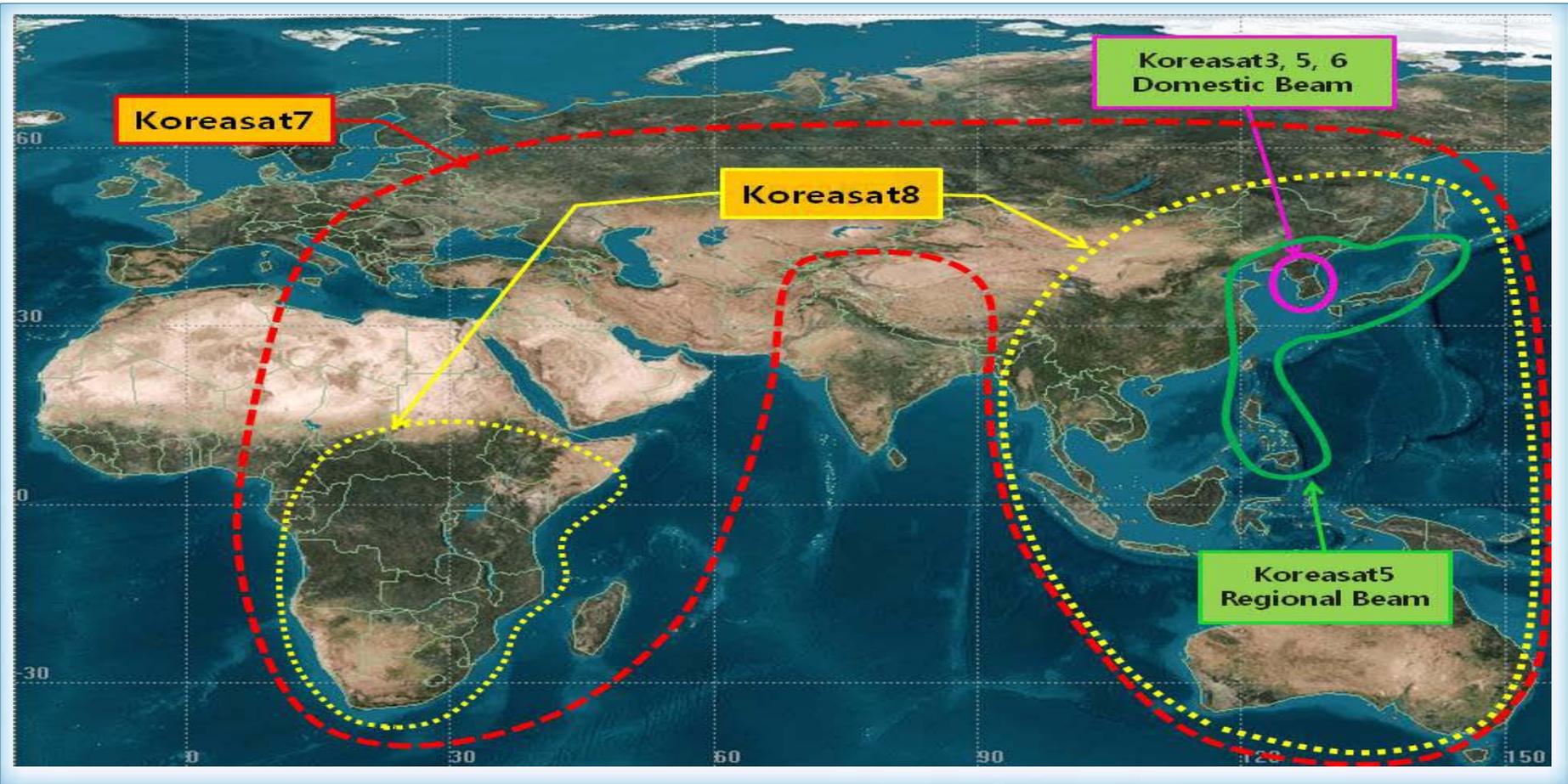
- Orbital Location : 113 East
- Launch Date : August, 2006
- Manufacturer : Alcatel
- Launcher : Sea Launch
- Launch Mass : 4,500kg
- Life Time : 15 years
- Transponder : FSS(24)

## Koreasat-6

- Orbital Location : 116 East
- Launch Date : November 2010
- Manufacturer : OSC
- Launcher : Ariane 5
- Launch Mass : 2,800kg
- Life Time : 15 years
- Transponder : FSS(24), DBS(6)

※ Replacement for K3

- 4 C-band Transponders on Koreasat-7(ABS-1) covers Asia, Middle East and Africa
- 4 C-band, 4 Ku band Transponders on Koreasat-8(ABS-2, to be launched by 1Q 2013) would cover SE Asia and Africa.
- Wide range of services including DTH, Cable TV distribution, VSAT services, Data networks and Telecommunication services are available.



# I. KT Capacities

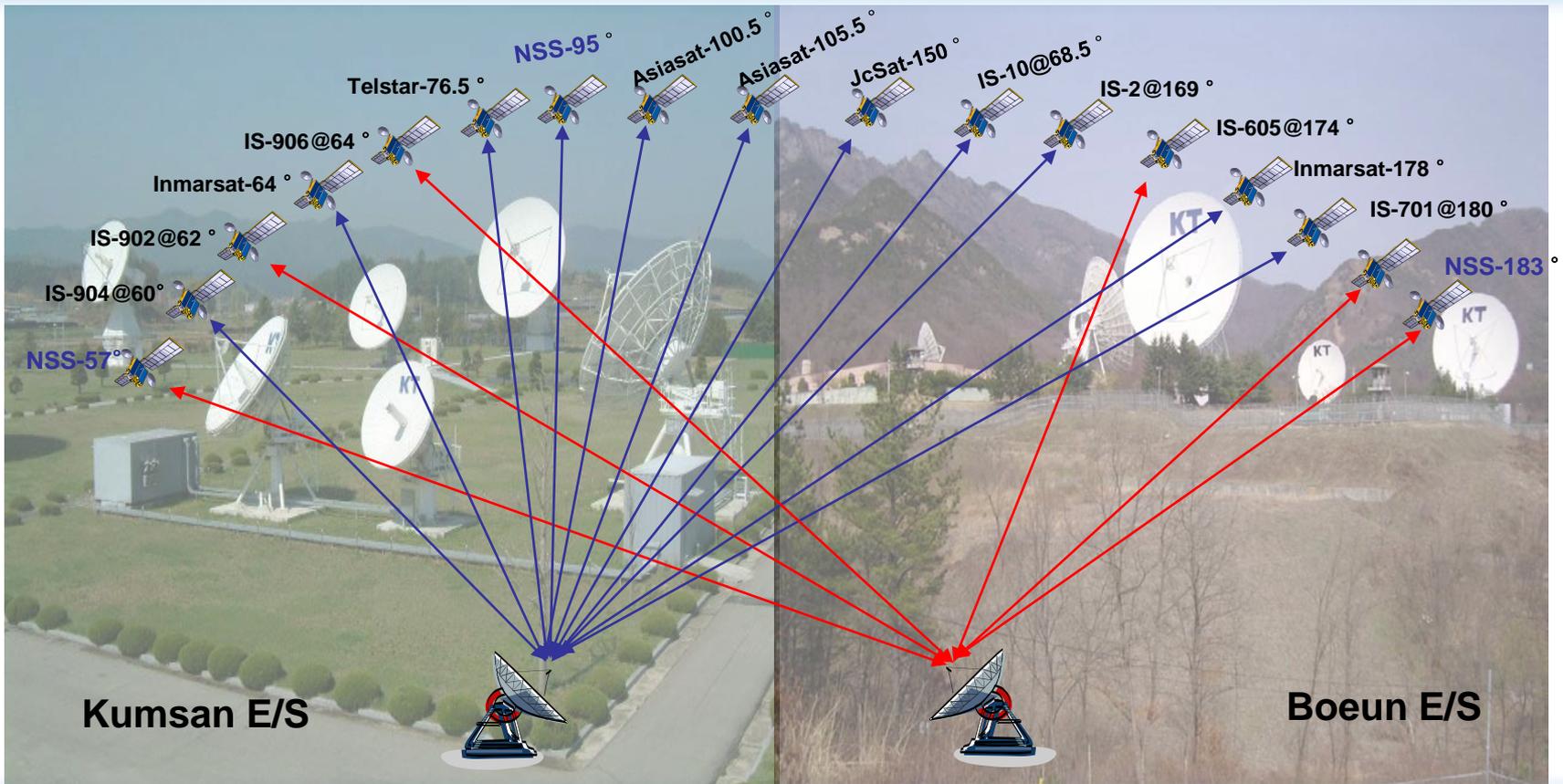
## Domestic Satellite Connections

- KT has two SCC (Satellite Control Center) for Koreasat Fleet
- Seven domestic branch sites to cover a nationwide service

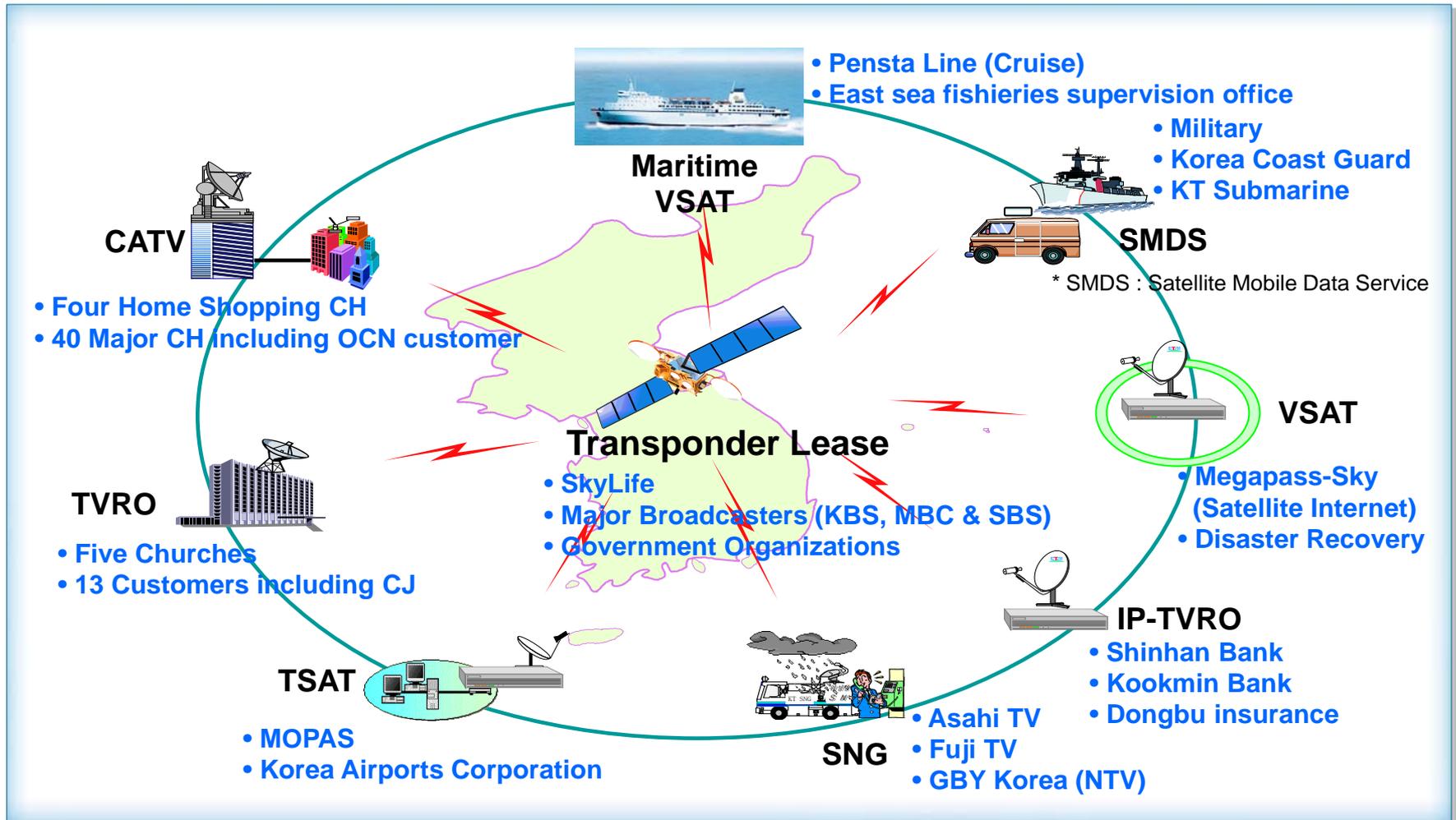
Service	Station	Facilities
Satellite Control Center	Yongin Primary SCC	Three Antennas (11M, 9M & 7.2M)
	Daejeon Backup SCC	Two Antennas (11M FMA & 6.4M)
Satellite Service	Gwangjin E/S (Seoul)	Two Antennas (9M & 3.7M)
	Seongsu E/S (Seoul)	Two Antennas (9M & 3.7M)
	Yongin E/S	9M Antenna
	Daejeon E/S	Two Antennas (6.4M & 4.6M)
	Taegu E/S	6.4M Antenna
	Busan E/S	6.4M Antenna
	Gwangju E/S	6.4M Antenna



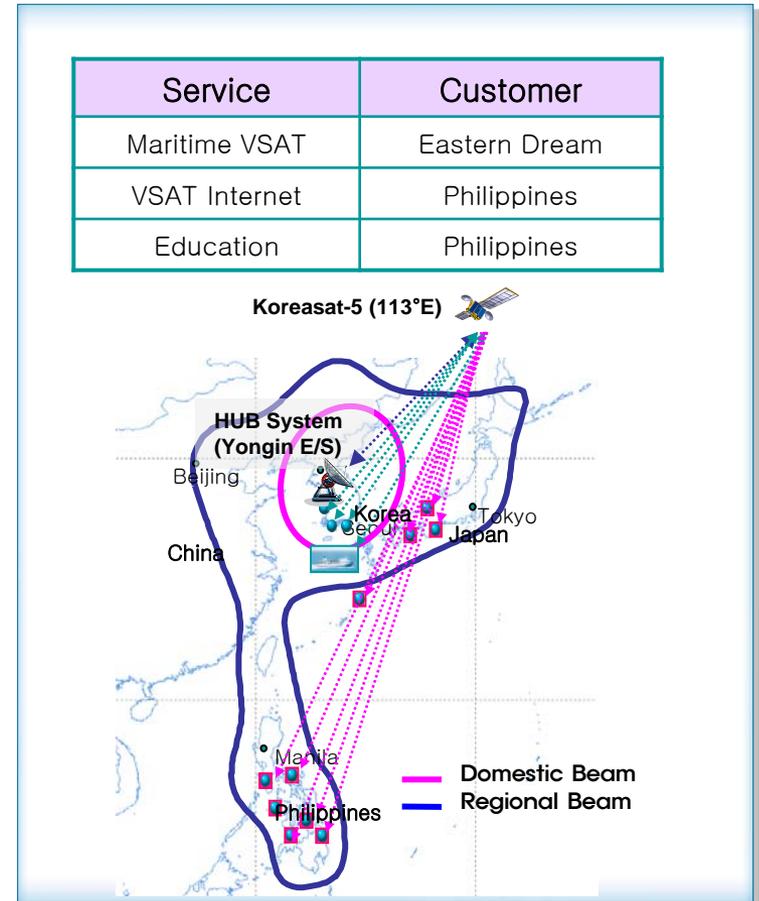
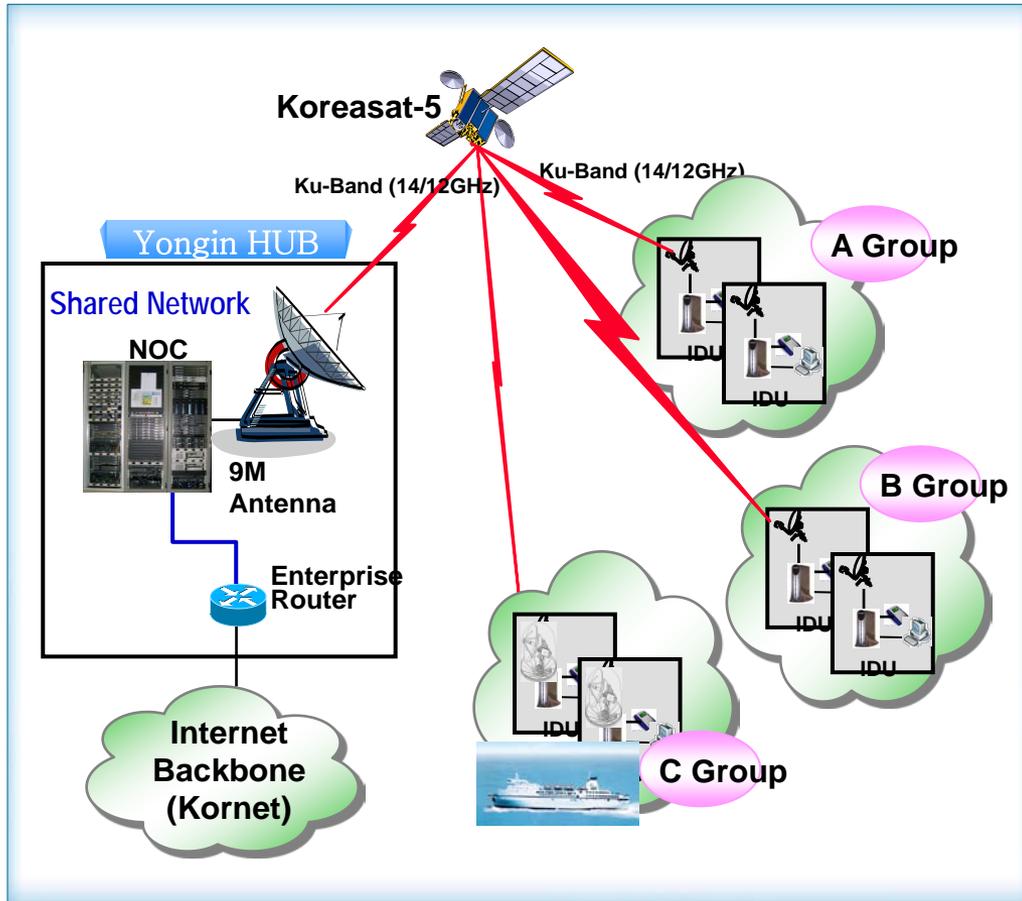
- **KT provides global satellite services using Intelsat, Telesat, SES, Asiasat, etc.**
- **Operating 22 antennas for global services covering Africa, Europe, all Asia**



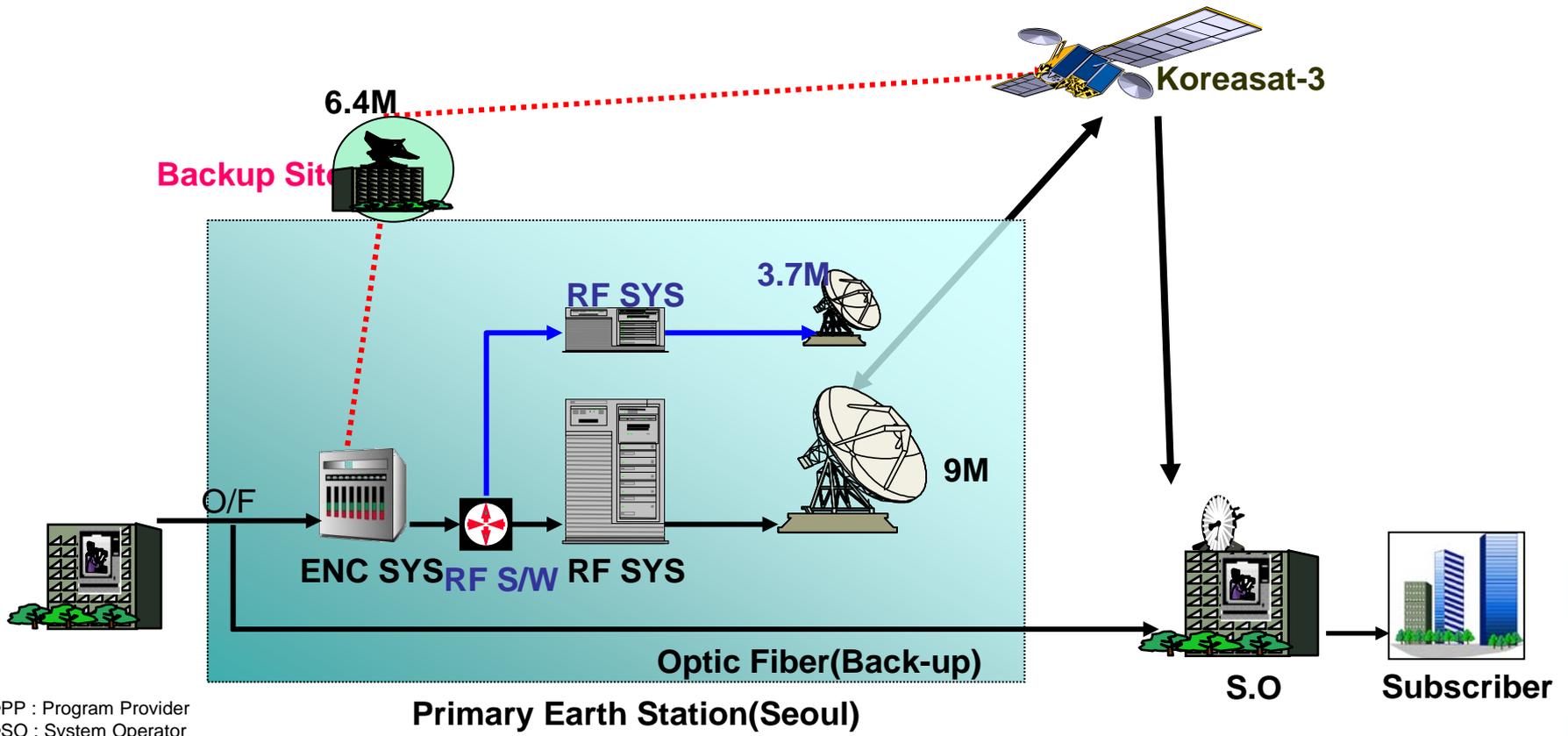
- Current major services are CATV/TVRO, VSAT, transponder lease, etc.



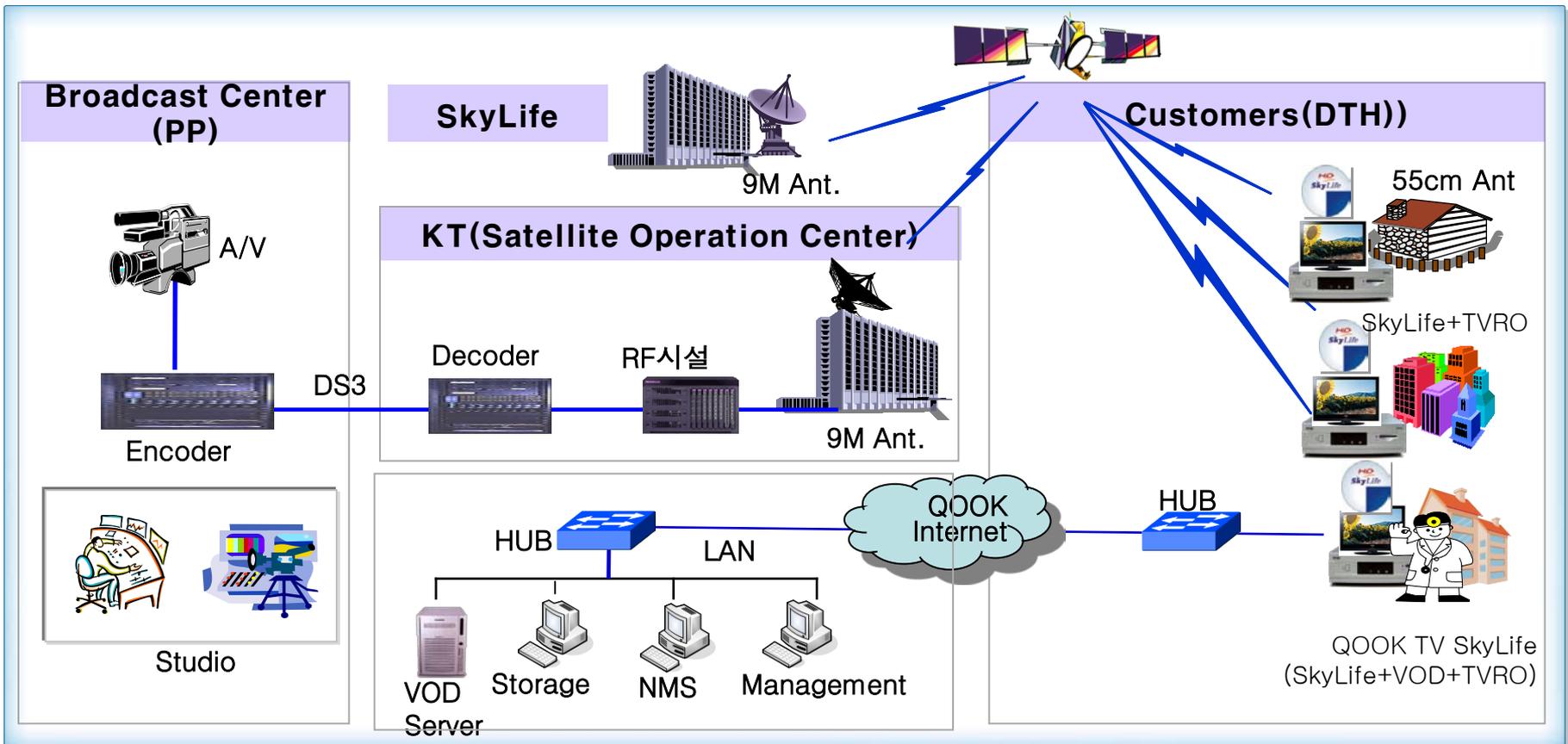
- Maritime VSAT service for the ships via Koreasat-5 regional beam.
- New regional VSAT and DTH services: Philippines.



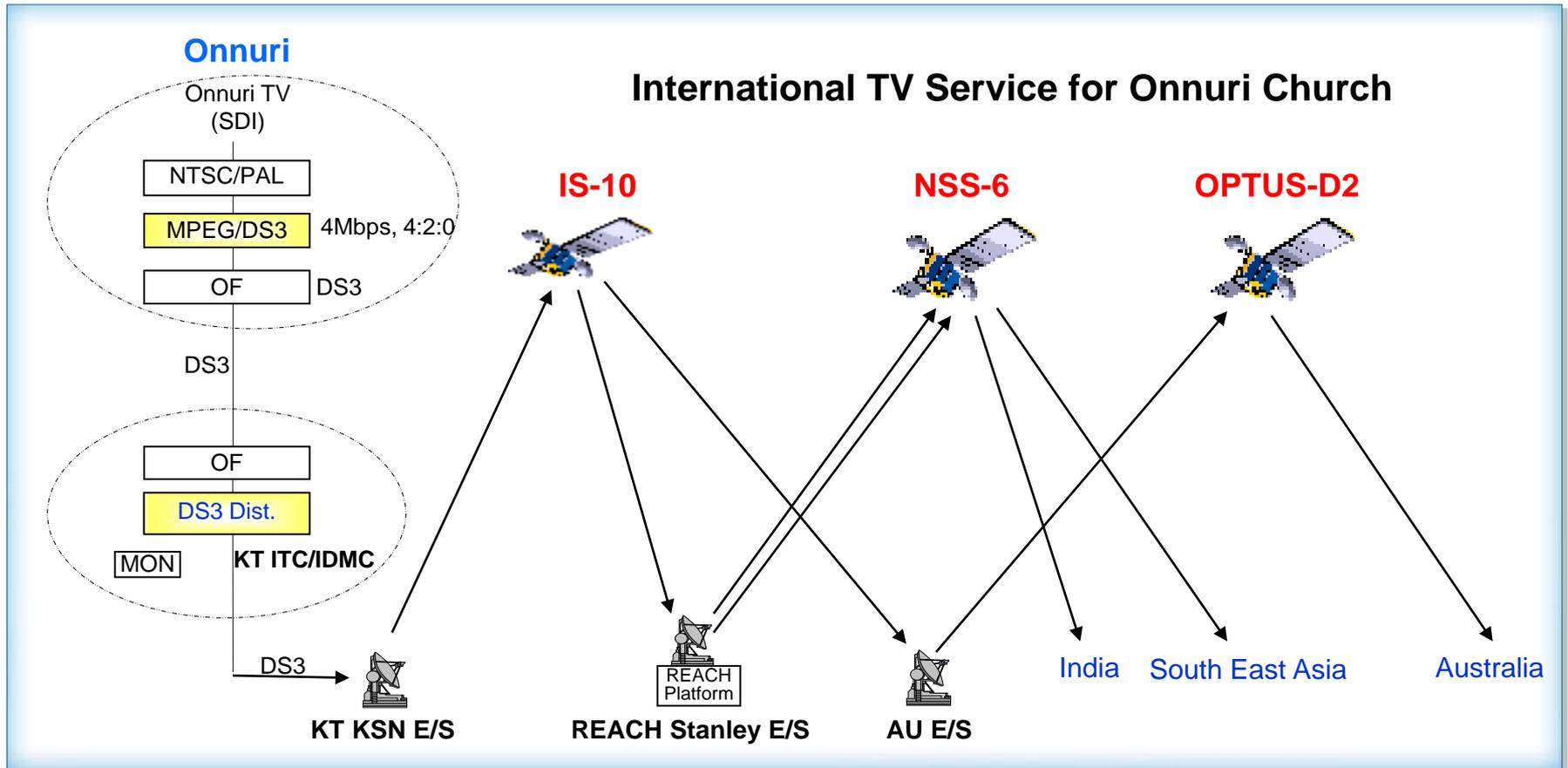
- TV programs distribution to regional CATV broadcasting stations or customer branches
- Applications: Home Shopping, Corporate TV Broadcasting and Remote Education



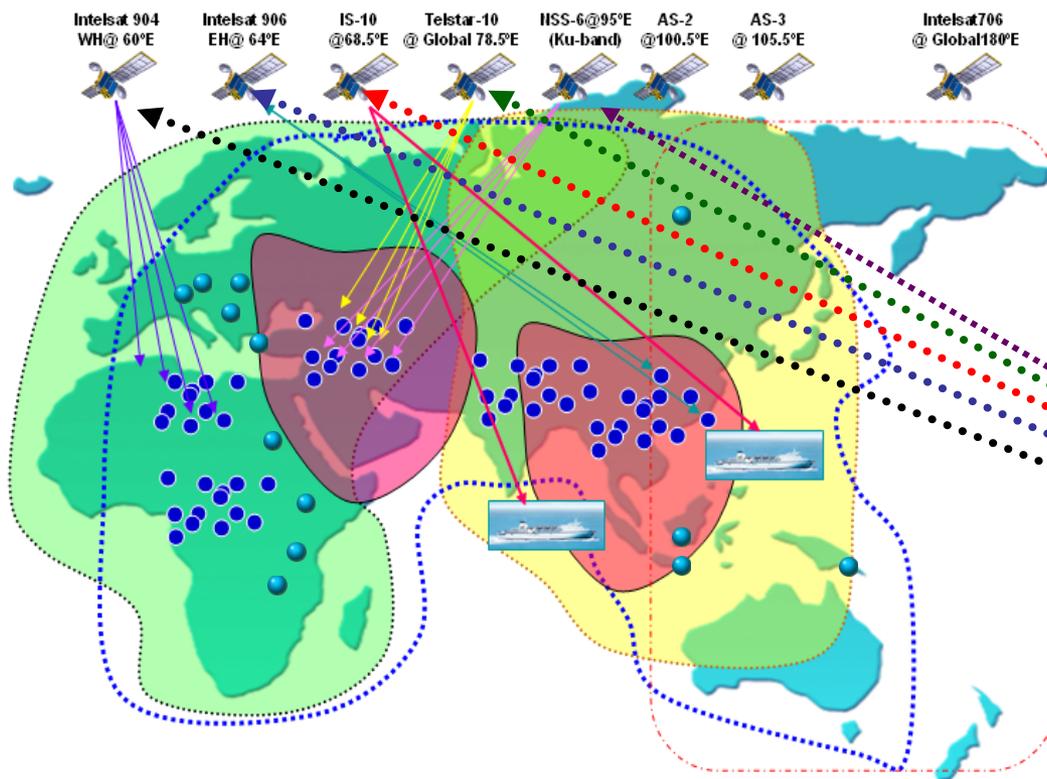
- KT is to provide the Hybrid TVRO service in partnership with SkyLife
- Customers watch SkyLife TV Channels, simultaneously specific channel for customer



- KT has begun International TV service (ocassional) to customers home and abroad since 1970, especially such as Olympic,Asian games and Worldcup Soccer game,etc.
- KT is providing the leased line TV services for MBC, Arirang TV and CGNTV.



- KT provides all kinds of global satellite services such as voice, dedicated line, data, video, Inmarsat, fixed and maritime VSAT over the world.
- Service coverage: Asia, India, Middle East, Europe and Africa

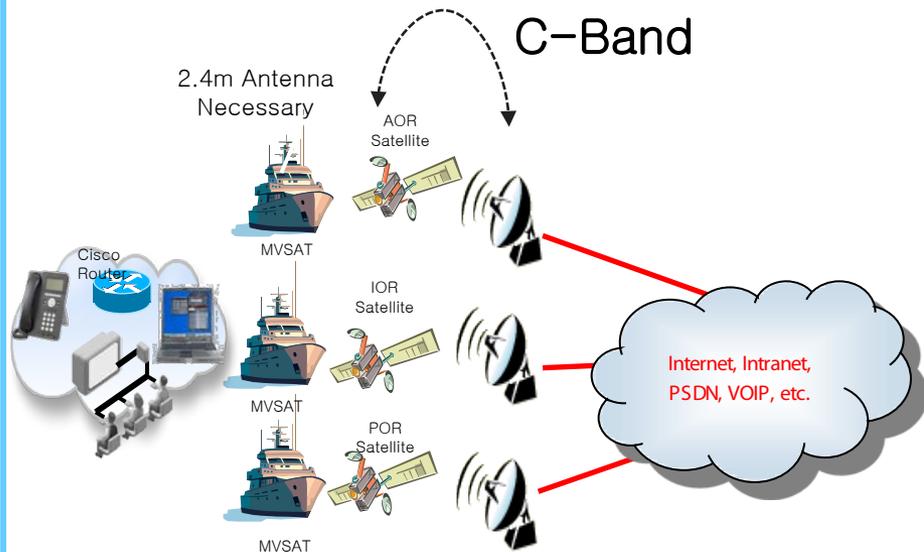


Service Area	Major Customer
East Asia	Government & Enterprise
Middle East	Military & Enterprise (Constructions)
Africa	Government & Enterprise (Constructions)
Europe	Government & Enterprise

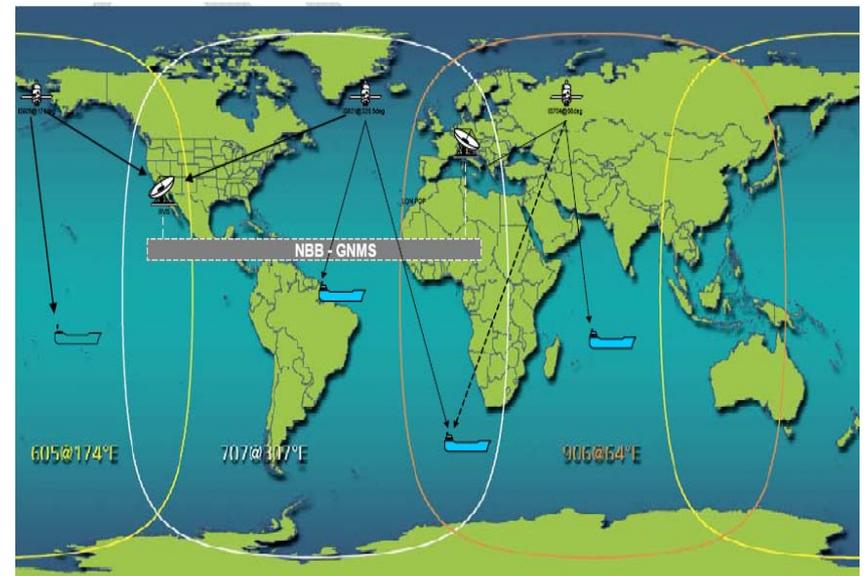


- **Global Coverage:** Provides seamless satellite communications service in Pacific, Indian, and Atlantic Ocean with automatic beam switching using C-band global beam satellites
- **Supports Communications and Fleet management applications**
  - Internet, VoIP, VPN, Real time info exchange, Troubleshooting, Cargo information, etc.

#### Network Connectivity



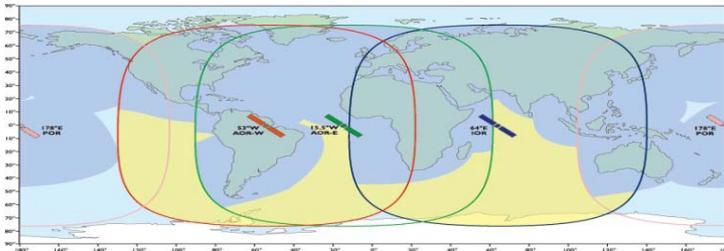
#### Service Coverage



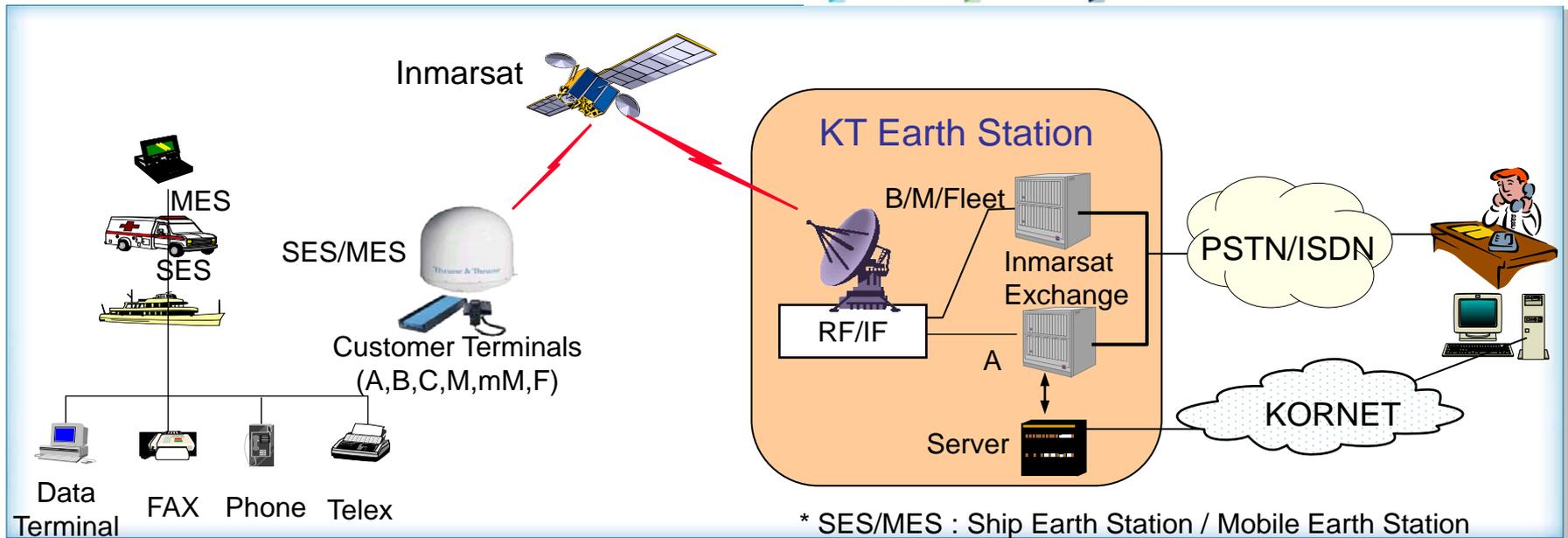
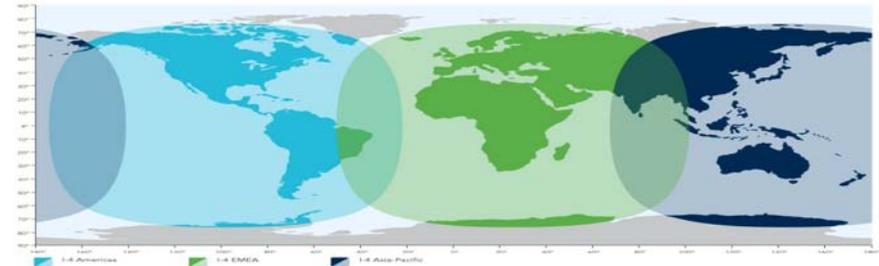
## New Generation Services: BGAN and FB (Up to 432 Kbps)

- **BGAN (Broadband Global Area Network):** land mobile service with global satellite Internet network access using portable terminals for the users in the land. The terminal can be used anywhere line-of-sight exists.
- **FB (Fleet Broadband):** maritime service to provide broadband data and voice simultaneously.

Existing Inmarsat Satellite



New Generation Satellite



### III. International Services

### GSPS(Global Satellite Phone Service)

- Mobile satellite phone service available anywhere you can see the sky
- Global coverage through Inmarsat's 3 earth stations(Hawaii, Italy, Philippine)

