



Inmarsat Maritime Safety Services

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inmarsat
The mobile satellite company

Global Maritime Distress and Safety System (GMDSS)

Continued commitment to save lives at sea

1999

1 February the final implementation of GMDSS became fully effective

300t

Required on all passenger and cargo ships over 300gt on international voyages

IMO

Only satellite communications provider approved by the IMO

99.9%

Consistent availability of Inmarsat's satellite & ground network which meets the GMDSS standards

30 years

30 years proven reliability in providing Safety Services

Innovation

30 years proven reliability in providing Safety Services

Maritime Safety Systems

- More than 240,000 maritime terminals in service
- Inmarsat C/mini-C terminals (More than 150,000)
- FleetBroadband (More than 45,000), "505" emergency services on all terminals. Distress and Urgency with Priority and Pre-emption on Cobham and JRC terminals
- MSDS project provide similar services as Inmarsat C, Fleet and new enhanced functions.

GMDSS Compliance

Inmarsat-C is the only conventional satellite system required by IMO SOLAS Convention Chapter IV. NO EOL – Extend I6

- Inmarsat B EoL Dec 2016
- Fleet 77 EoL Dec 2020
- FB IMO approval process under way



Inmarsat Fleet

Geostationary orbit: 35,786km

200

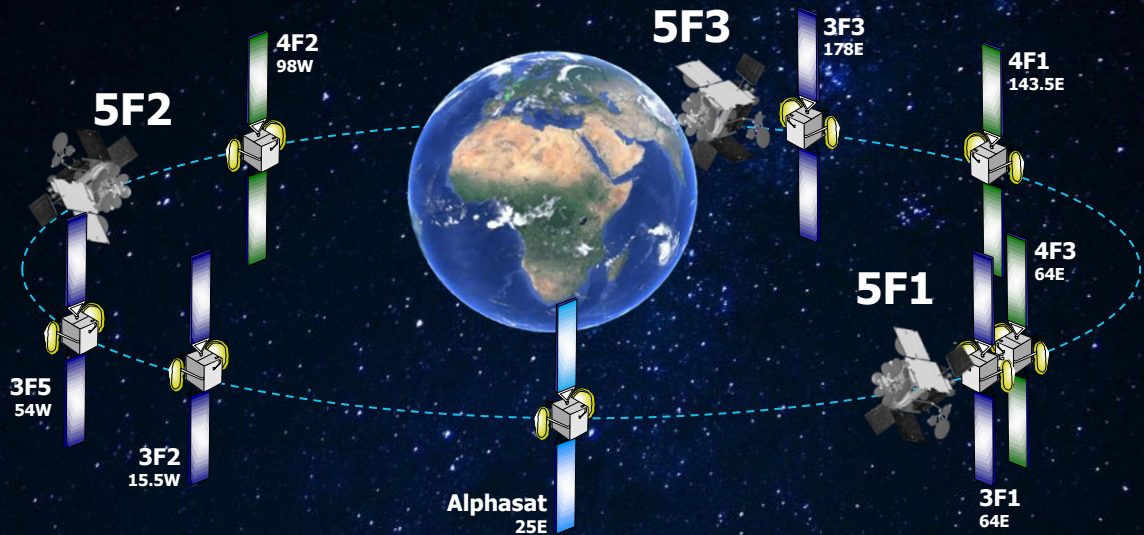
Aggregated years
of satellites in-
orbit

35

Years experience
operating mobile
satellite networks

24/7

Experienced in-
house customer
services



I3 Satellite Constellation E&E

Four ocean regions for Existing & Evolved services incl. GMDSS

AOR-E

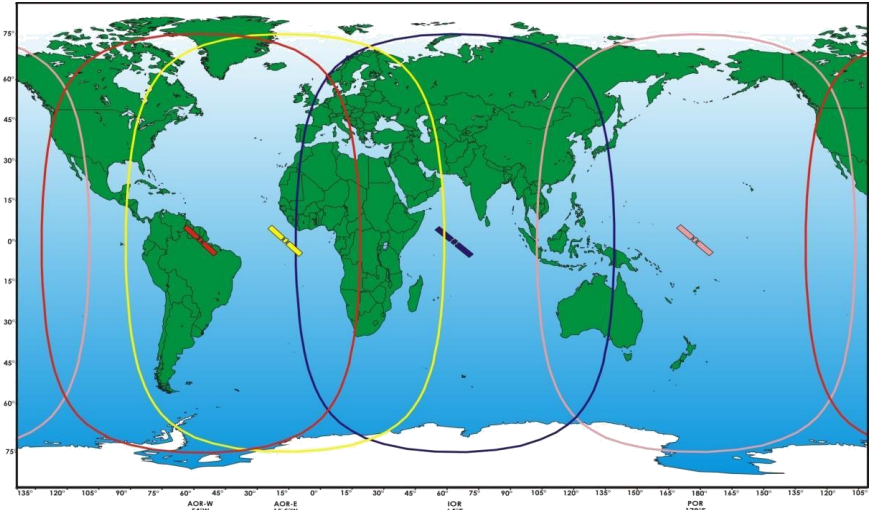
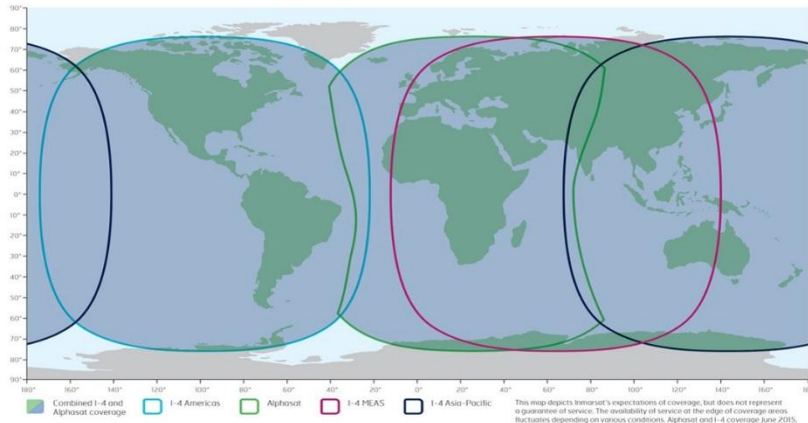
AOR-W

IOR

POR



I-4 and Alphasat coverage



I4 Satellite Constellation

Four ocean regions for all Broadband services including "505" and Non SOLAS FB Voice Distress

AMER

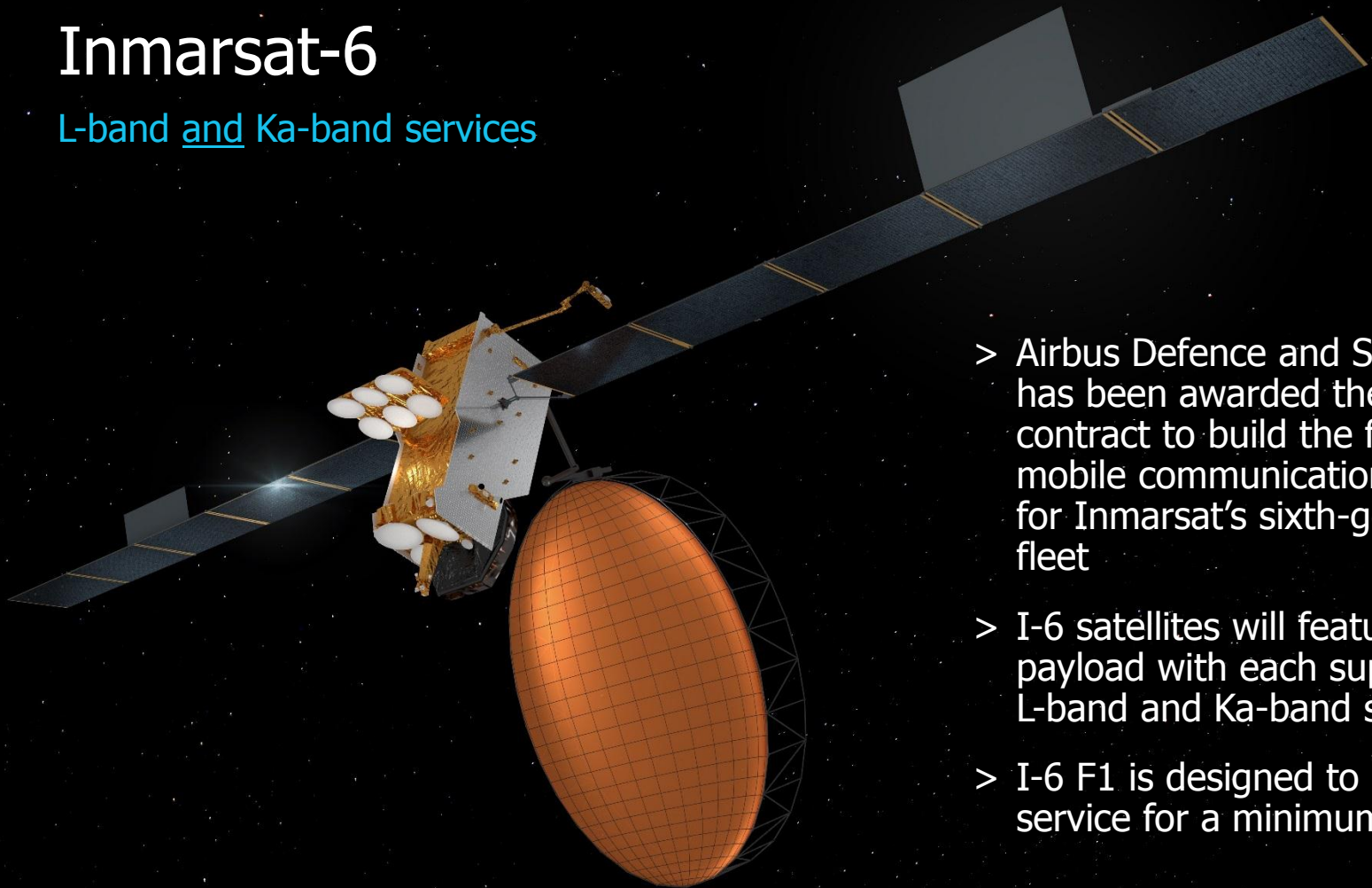
ALPHASAT

MEAS

POR

Inmarsat-6

L-band and Ka-band services



- > Airbus Defence and Space (Airbus) has been awarded the \$600 million contract to build the first two mobile communications satellites for Inmarsat's sixth-generation fleet
- > I-6 satellites will feature a dual-payload with each supporting both L-band and Ka-band services
- > I-6 F1 is designed to remain in service for a minimum of 15 years

GMDSS Communication Functions via Satellite

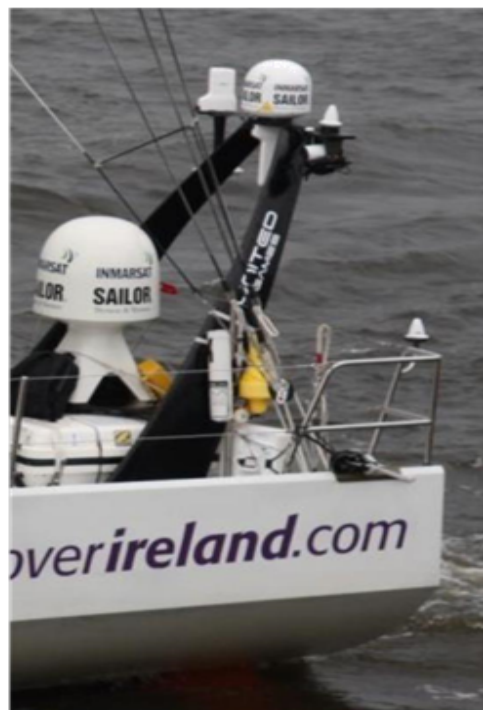
No single piece of equipment can do all functions!!!

But... where does Inmarsat equipment fit?

GMDSS Functions	<u>Inm-B*</u>	Inm-F77**	<u>Inm-C</u>
1. Distress Alerting ship-to-shore	Yes (voice)	Yes (voice)	Yes
2. Distress Alerting shore-to-ship		Yes (voice)	Yes
3. Distress Alerting ship-to-ship (RF)			
4. SAR Communications	Yes	Yes	Yes
5. On-scene communications			
6. <u>Tx/Rx</u> of MSI	Yes (<u>Tx</u>)	Yes (<u>Tx</u>)	Yes
7. Locating signals			
8. General communications	Yes	Yes	Yes
9. Bridge-to-Bridge <u>communic.</u>			

* Inmarsat-B to be closed down in December 2016

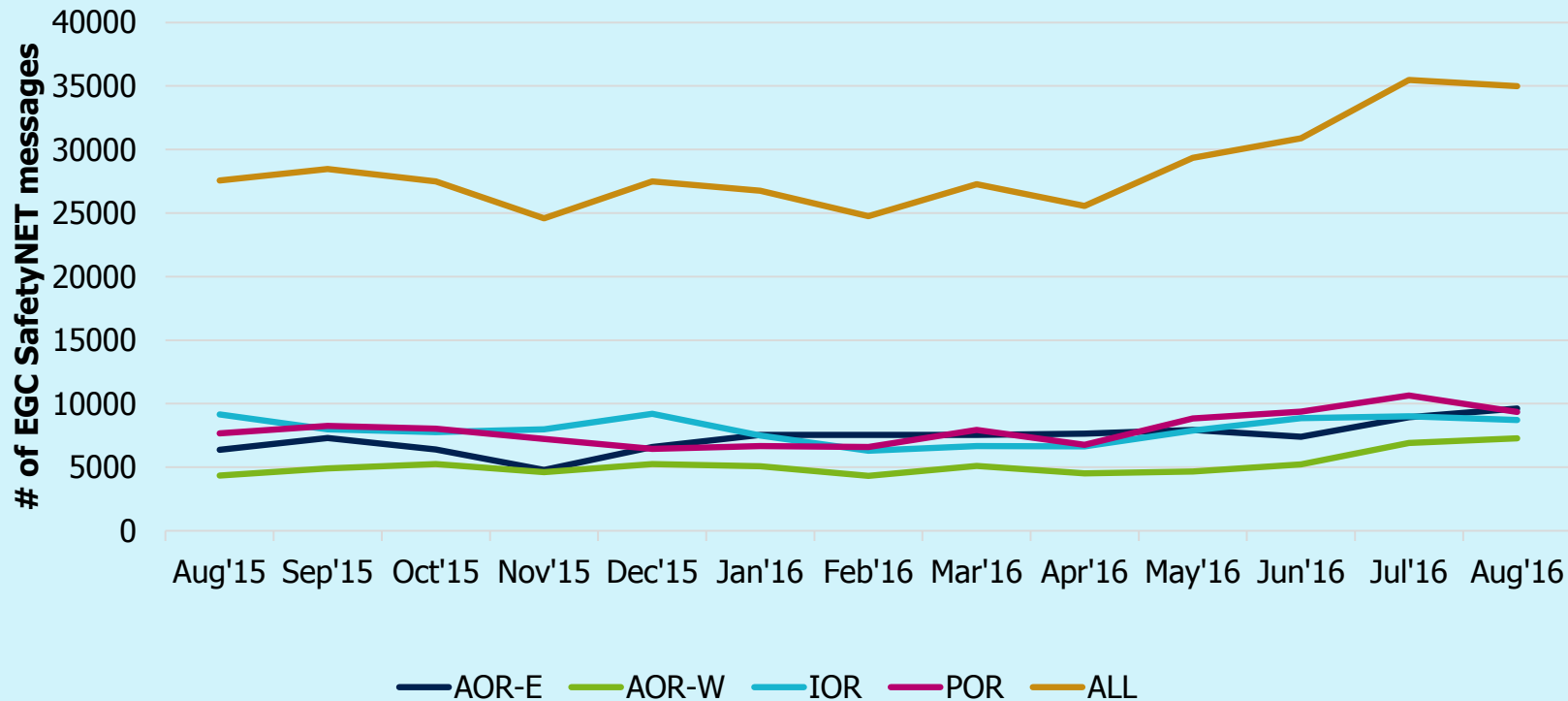
** Inmarsat F77 EOL may be announced at NCSR3



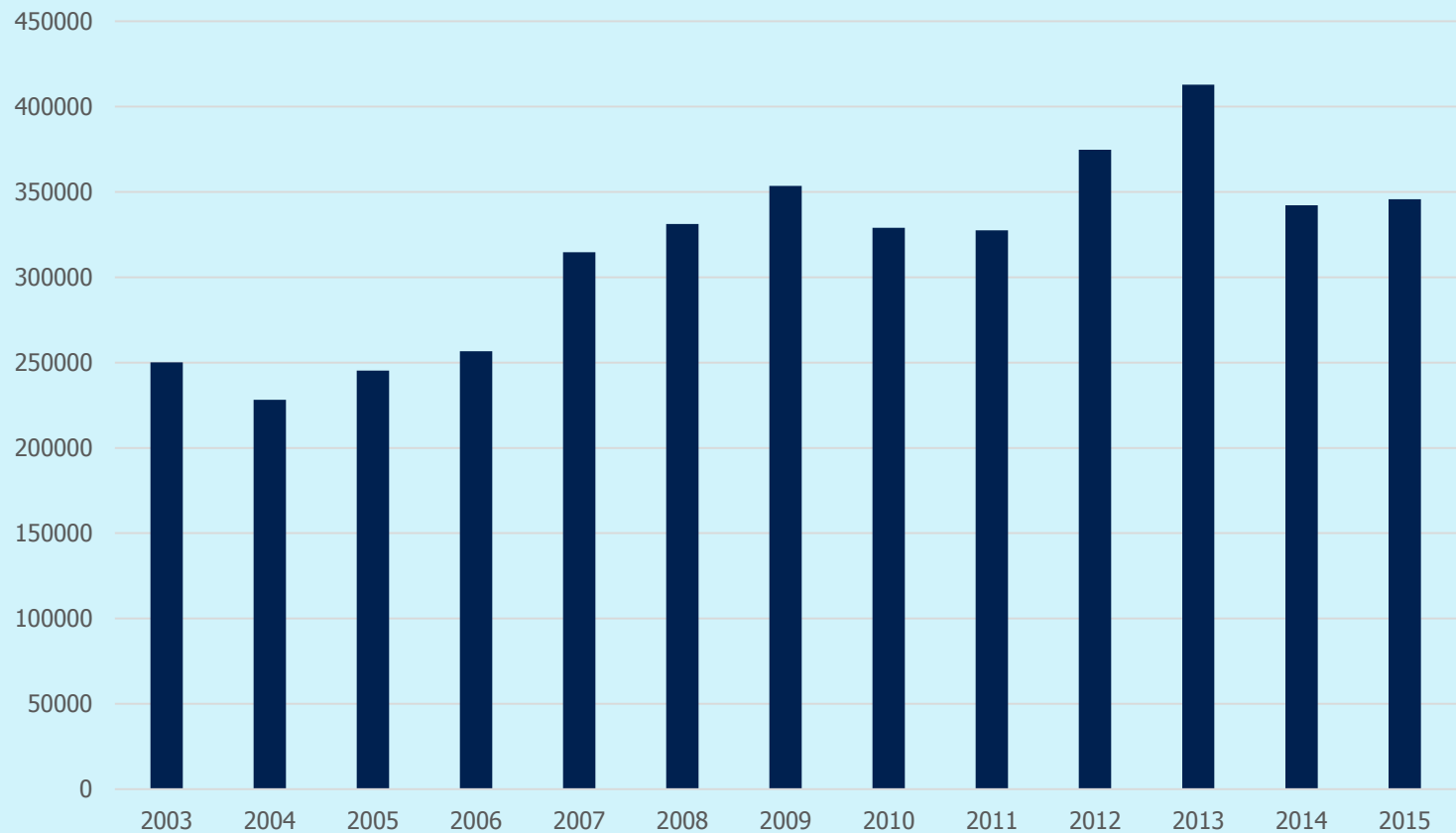
Number of EGC / SafetyNET messages per month per Ocean Region

	AOR-E	AOR-W	IOR	POR	Total
Aug'15	6381	4340	9161	7678	27560
Sep'15	7302	4911	7992	8265	28470
Oct'15	6410	5259	7777	8045	27491
Nov'15	4780	4607	7981	7217	24585
Dec'15	6591	5244	9210	6439	27484
Jan'16	7535	5080	7486	6667	26768
Feb'16	7556	4327	6300	6585	24768
Mar'16	7552	5114	6675	7929	27270
Apr'16	7642	4521	6654	6755	25572
May'16	7937	4659	7894	8851	29341
Jun'16	7412	5239	8860	9384	30895
Jul'16	8926	6908	9000	10642	35476
Aug'16	9621	7277	8723	9359	34980
Total	95645	67486	103713	103816	370660

Number of EGC / SafetyNET messages per month per Ocean Region



Total number of EGC SafetyNET messages since 2003



Launching SafetyNET II

Enhanced broadcast
functionality for maritime
safety information providers



Secure web
based access

Easy to use
with clear
definitions

Enhanced
scheduling of
broadcasts

Multiple text
input
methods

Message
cancelation

Continual
monitoring

Launching SafetyNET II

6 Trial
Countries

New
enhancements
recommended

Ability to
monitor
current and
past
broadcasts

No
requirement
for Extra
equipment

100%
Geographical
redundancy

100%
Internal
application
redundancy

Contingency for
NAV/METAREAs



SafetyNET II trial associates

Authority	Login assigned	Trial participant
France (SHOM)	X	X
New Zealand MOC	X	X
NAVAREA I UKHO	X	X
RCC Norfolk	X	X
ICC (Anti Piracy) Kuala Lumpur	X	X
Australia	X	X
New Zealand RCC	X	
NAVAREA IV and XII US	X	
Den Helder RCC	X	
MRCC Brazil	X	
MRCC Japan	X	
Hong Kong SAR	X	

On 15th November we will commemorate the untimely passing earlier this year of one of the architects of Inmarsat Maritime Safety Operations network by sponsoring the first International Maritime Rescue Federation (IMRF) H.E.R.O. Award for outstanding service to maritime search and rescue



'The Vladimir Maksimov Award'

This award will draw attention to the extraordinary work done to save lives in maritime Search and Rescue (SAR) across the world. Their aim is to recognise and show gratitude for courage and exceptional performance, both by individuals and organisations, and progress IMRF's mission to improve global maritime SAR and prevent loss of life. Winners will be announced at a special ceremony in Portugal on Tuesday, November 15 and streamed globally.



Thank you

Inmarsat Maritime