

A satellite with long solar panel arrays is shown in space, with the Earth's horizon and a starry background. A semi-transparent blue banner is overlaid across the middle of the image.

CRISIS CONNECTIVITY CHARTER

Simon Gray v2.2

CHARTER OBJECTIVES



- ✓ **Pre-Planned solutions** - Triggered by the ETC redundant, Hybrid, predictable & scalable end-to-end satellite-based solutions.
- ✓ **End-to-end solutions** - Ensuring full operational satellite network up to Ethernet port of modem; ETC takes over for the LAN network distribution.
- ✓ **Comms for everybody** – Communications for up to 1000 humanitarian workers and the effected population.
- ✓ **Immediate implementation** – Solutions to be deployed within 24 hours with a mixture of MSS & FSS.

CHARTER OBJECTIVES



- ✓ **One point of contact per signatory & ETC** - For each signatory to facilitate the coordination of solutions with a single contact point for the ETC.
- ✓ **Training & capacity building** – Signatories to capacity build in the humanitarian community, local experts, governments, & response communities
- ✓ **Full ETC logistical support** – Equipment stored in Dubai at the Humanitarian Response Depot ready for transport to disaster areas, transport within disaster areas, importation & licensing.

IMPLEMENTATION - TIME OF DISASTER

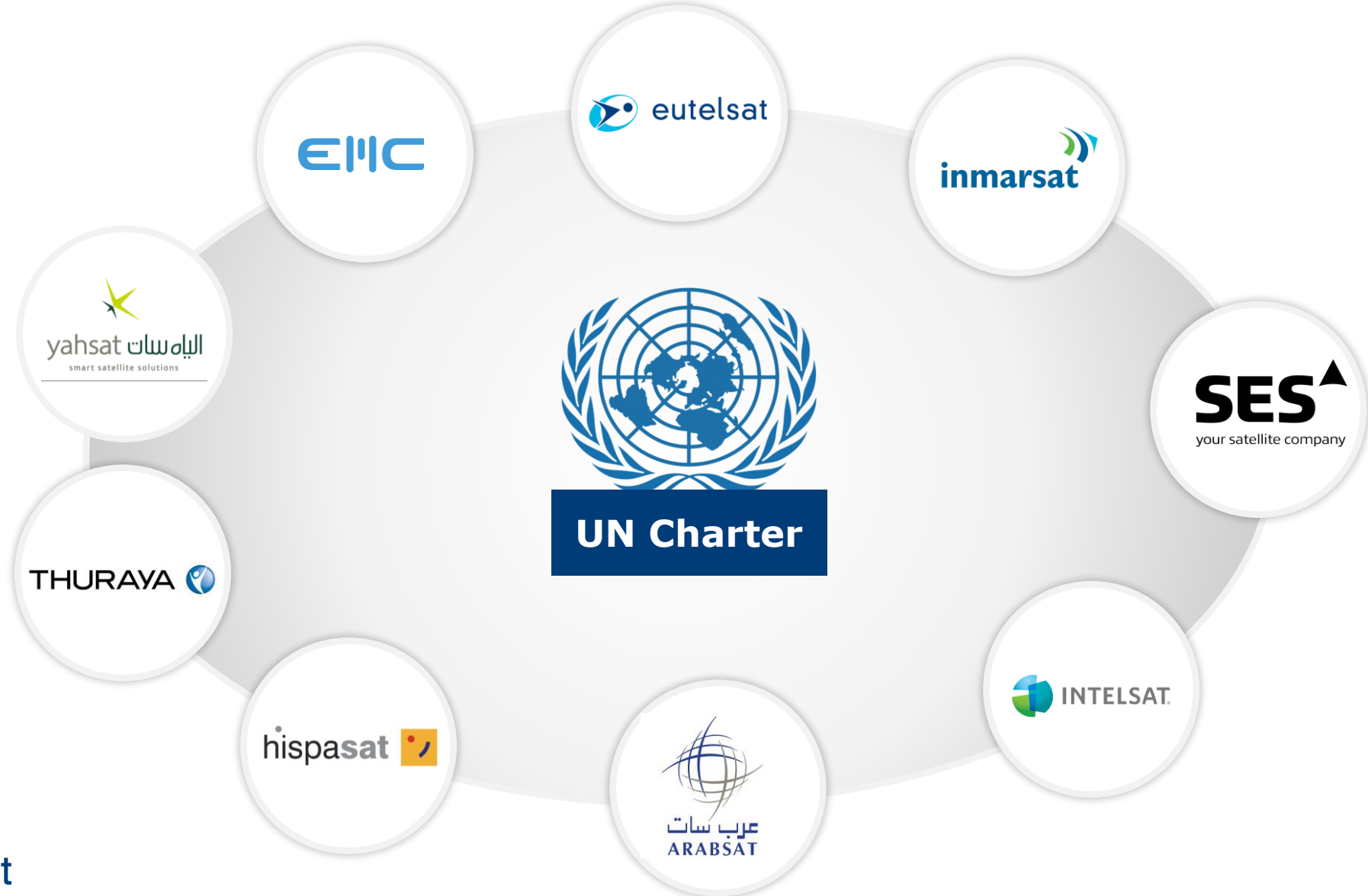
STEP 1

- ✓ ETC triggers Charter
- ✓ Conf-call to take place within 12 hours where ETC informs Charter Signatories of context & requirements
- ✓ Charter signatories reach an accord on which pre-planned response(s) to recommend to the ETC
- ✓ If no pre-planned response has been identified, then Step 2 will be activated

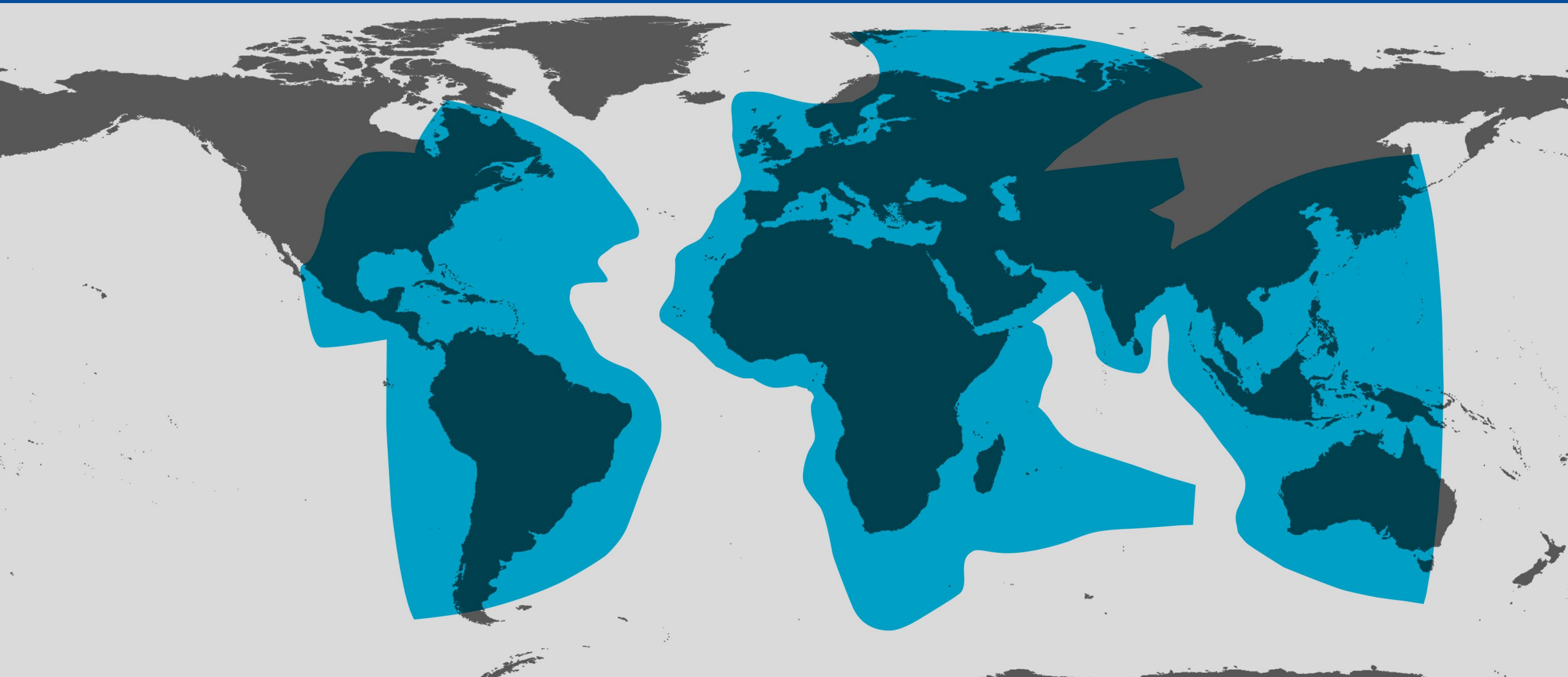
STEP 2

- ✓ Charter Signatories agree on most suitable response(s)
- ✓ Charter Signatories hold second conference call with the ETC within 48 hours of the charter triggering

CHARTER SIGNATORIES



KU-BAND



eutelsat

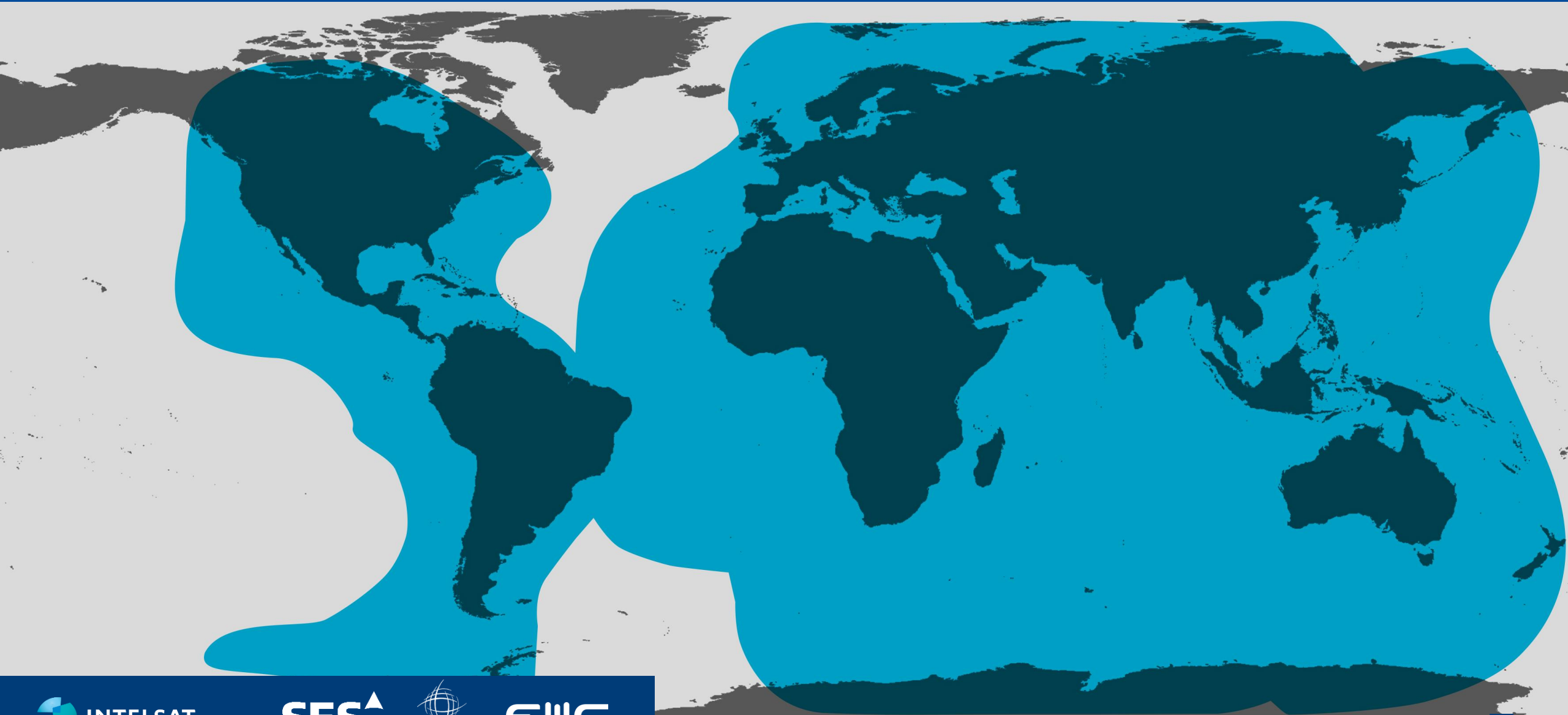
SES
your satellite company

hispasat

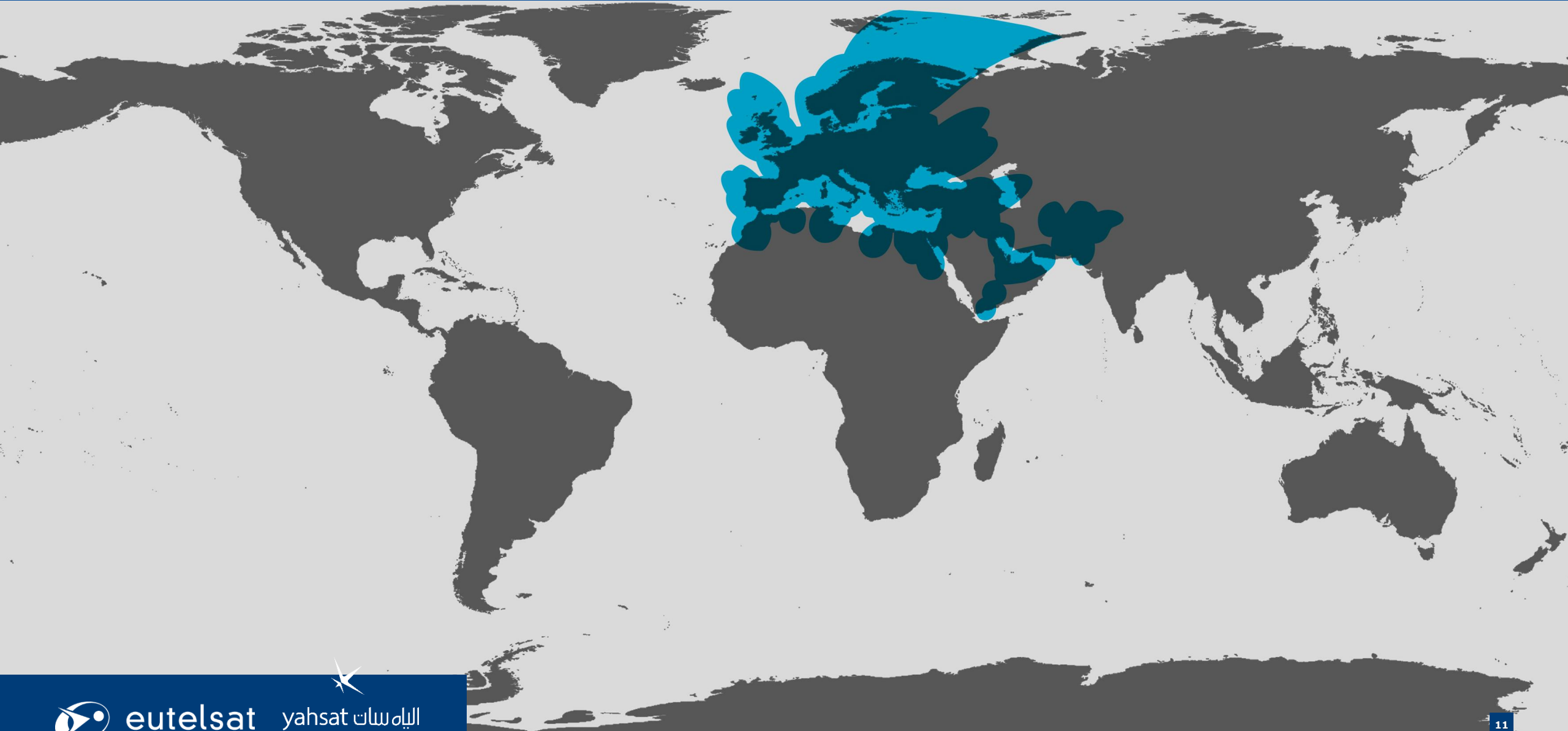


EHIC

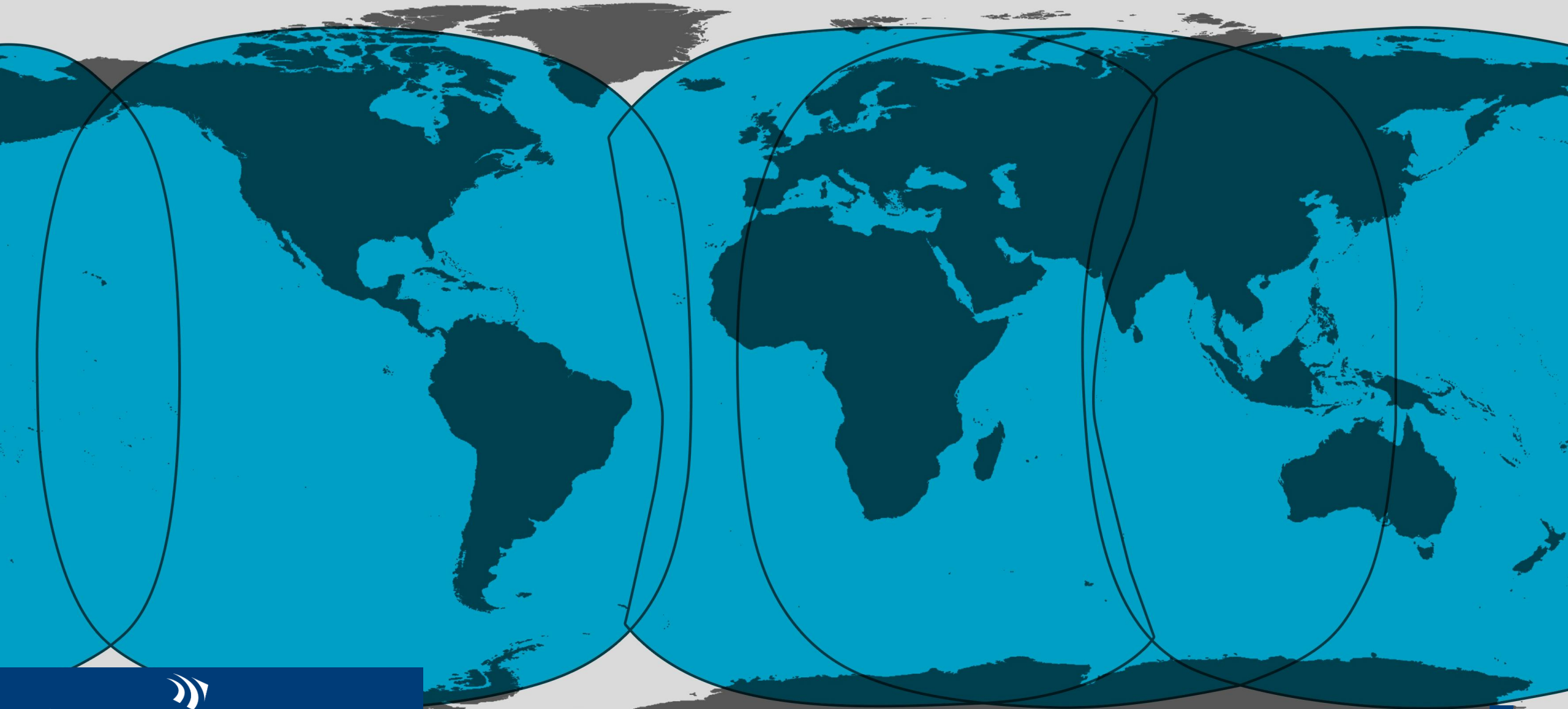
C-BAND



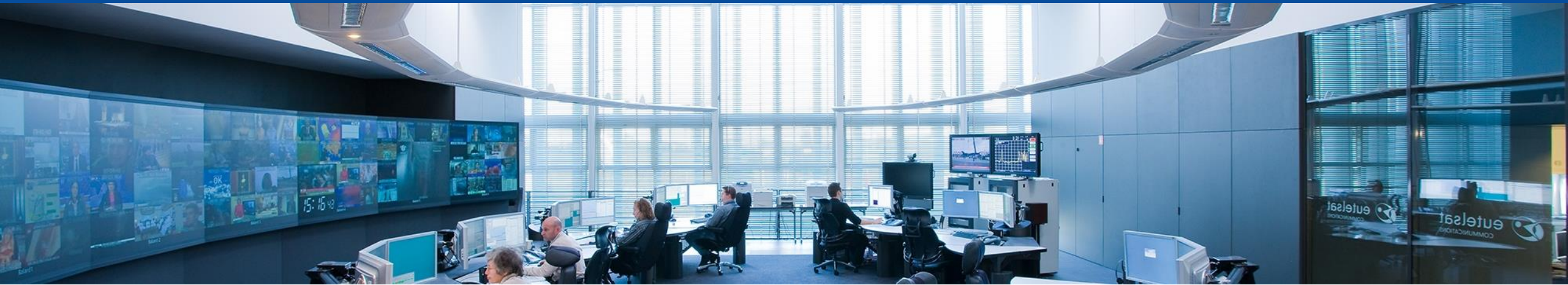
KA-BAND



L-BAND

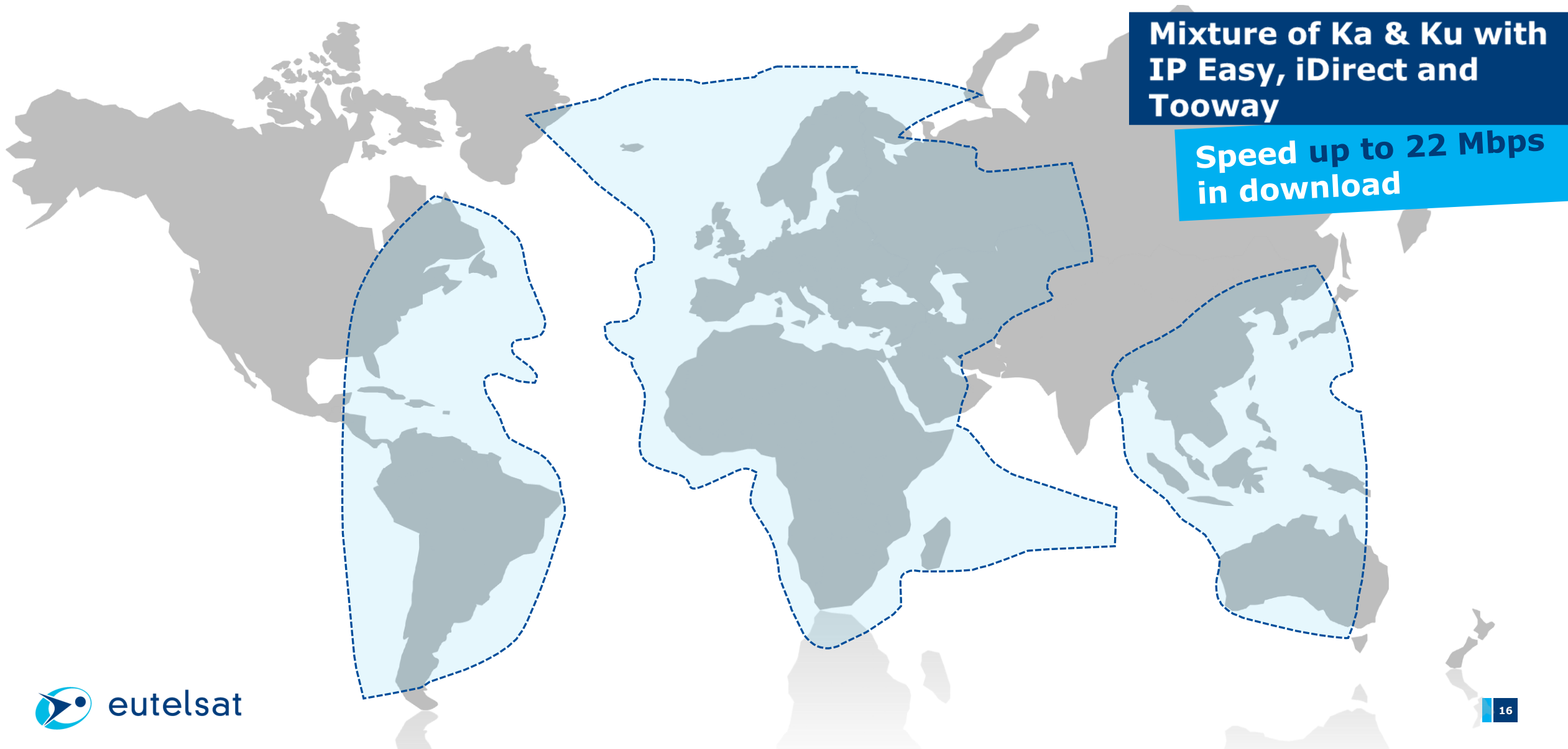


Eutelsat IP Connectivity Services



- ➔ **80 VSAT terminals – Estimate 10 per disaster**
- ➔ **6 satellite coverages – S America, Africa, Europe & Asia**
- ➔ **Training of ETC members**
- ➔ **End to end solution**
- ➔ **Unlimited or dedicated bandwidth for first 3 months**

THE EUTELSAT COVERAGE



**Mixture of Ka & Ku with
IP Easy, iDirect and
Tooway**

**Speed up to 22 Mbps
in download**

“This is
a great system
and so practical”
TSF



- ✓ 77cm antenna
- ✓ Installation in 1 hour

**“When we first saw it,
it seemed just some
consumer grade stuff
but actually
it is the coolest system
we have ever installed**

Nethope”



✓ Compact antenna

→ 1m & 1.2m

→ Installation in 1 hour

GLOBAL NETWORK OF TELEPORTS



COMPREHENSIVE GLOBAL FIELD SUPPORT SERVICE



**Field Support
Networks**



Training



**VSAT
Innovation
and Development**

**SYSTEM INTEGRATION TEAM
3 Pillars**

A man with dark, curly hair and a black t-shirt is shown in profile, looking upwards and to the right. He is sitting in a white plastic chair. In the background, a large white satellite dish is visible, with the words "FREI" and "tAn" partially visible on its surface. The background is a blurred cityscape with buildings.

FIELD SUPPORT

The Eutelsat Difference





Field Support Networks – Pillar 1

VSAT - Field Support Providers - DTH

VSAT INSTALLERS



- ✓ Responsible for approx. 300 000 VSAT installations in total across 4 continents, Europe, Africa, Middle East & Asia
- ✓ 6900 Tooway Installers trained and certified in class room situations across 3 continents.

**IN TOTAL
OVER 12,000 TRAINED INSTALLERS**

GLOBAL FIELD SUPPORT PARTNERS

- ✓ **80 Field Service Partners**
- ✓ **Coverage –**
 - Europe – Middle East – Asia – Africa
- ✓ **Network Validation - Diagnosis of issues with DATA, VSAT or Broadcast networks**
 - proposed & implemented solutions

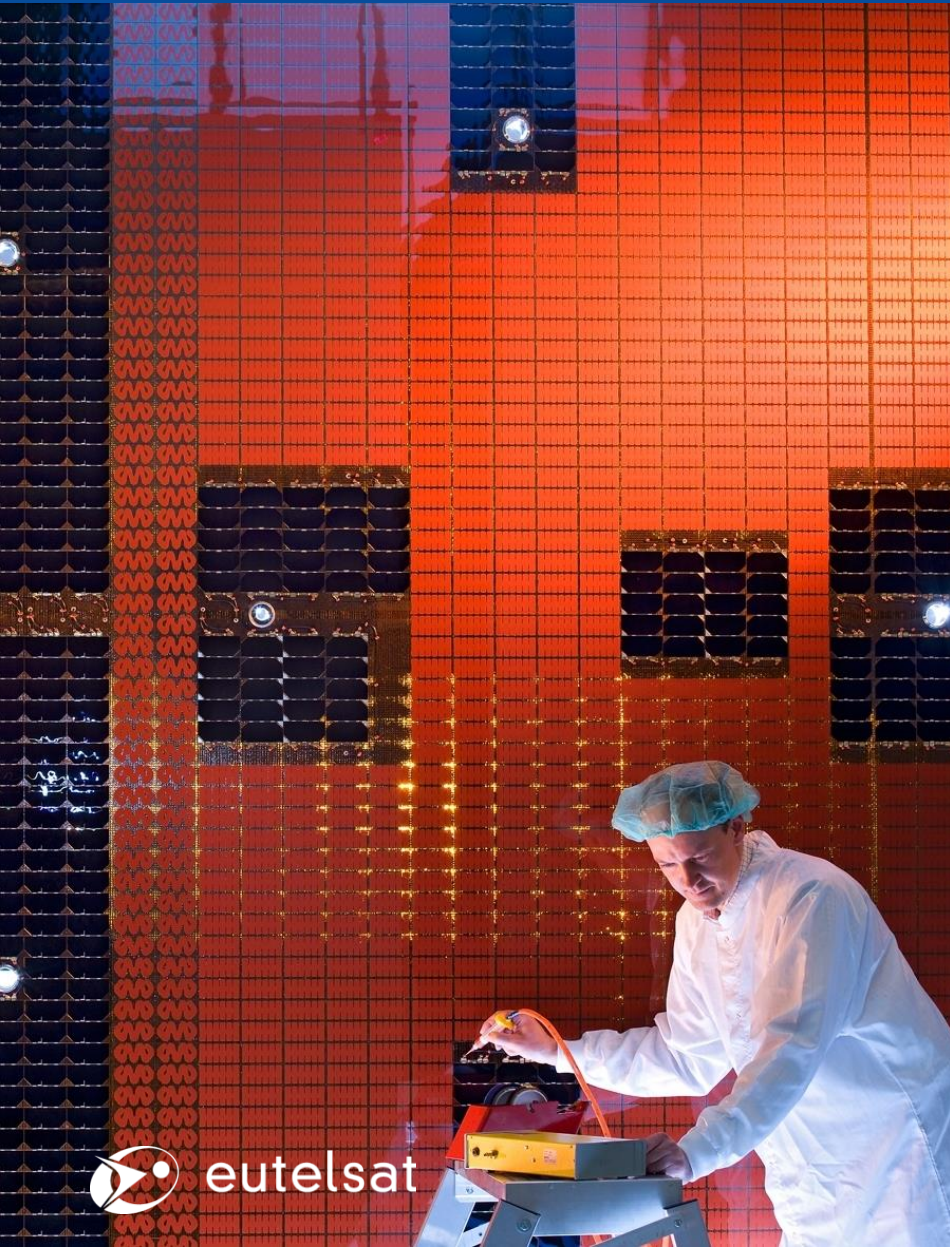




Training – Pillar 2

The largest training initiative in the industry

TRAINING TOOLS



- ✓ **Classroom courses : Theoretical and Practical**
→ Local training centres in UK, Italy, Spain, Croatia, Germany
- ✓ **Road – Shows to create installation and “Point Of Sale” networks in Italy, Spain, France, UK, Croatia, Russia, Caribbean**
- ✓ **On-line University with courses in SNG, VSAT, Maritime, etc in cooperation with GVF.**
- ✓ **Dedicated you tube site and installer portal**

OVER 12,000 TRAINED INSTALLERS

TRAINING TOOLS AND APPS

✓ Videos and online training tools

→ 320,000 views of installer videos

✓ Installation Apps

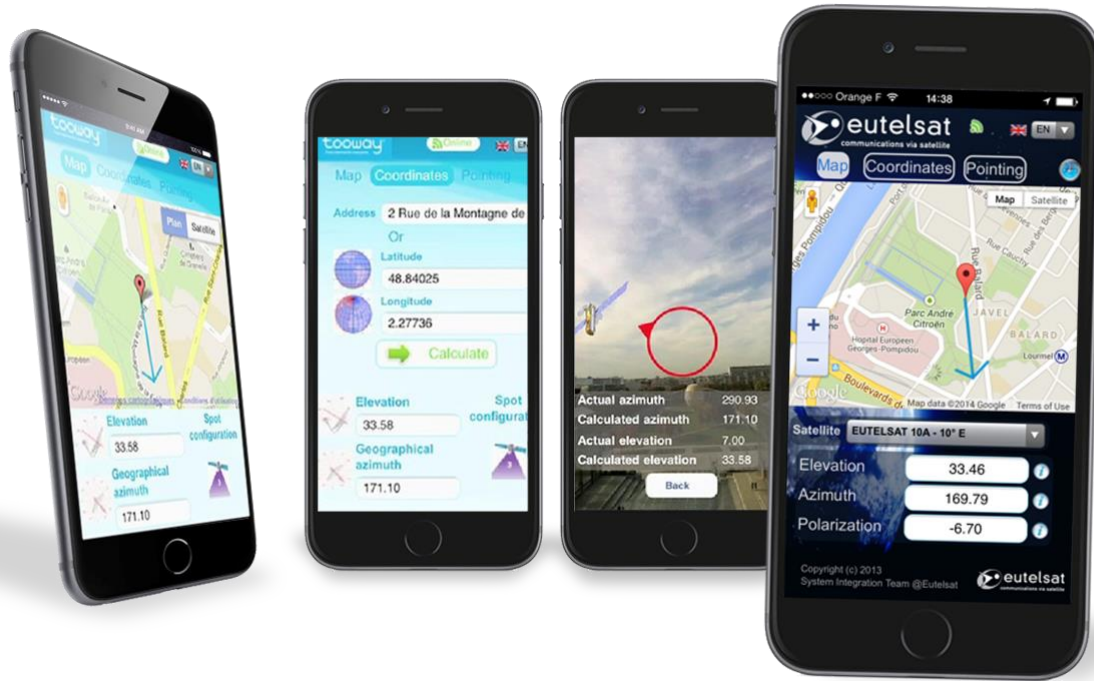
→ 500,000 downloads of dedicated apps



A composite image showing a satellite in orbit above the Earth. The satellite has a central body with various instruments and two large, rectangular solar panel arrays extending outwards. The Earth's horizon is visible on the left, showing blue oceans and white clouds. The background is the deep black of space filled with stars.

Innovation & Development – Pillar 3

INSTALLATION APPS



➔ **All our apps are available free-of-charge from iTunes and Google Play**

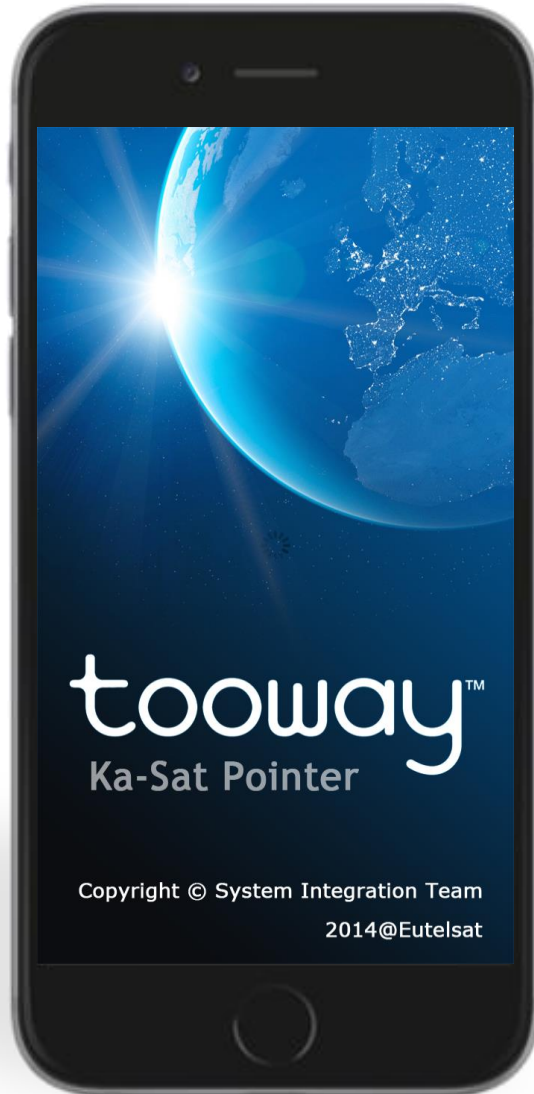
➤ The Eutelsat Finder app

- ➔ Easy-to-use tool to point satellite antennas
- ➔ Provides basic parameters for exact antenna pointing (elevation and azimuth angles, line-of-sight, optimal polarisation angles)

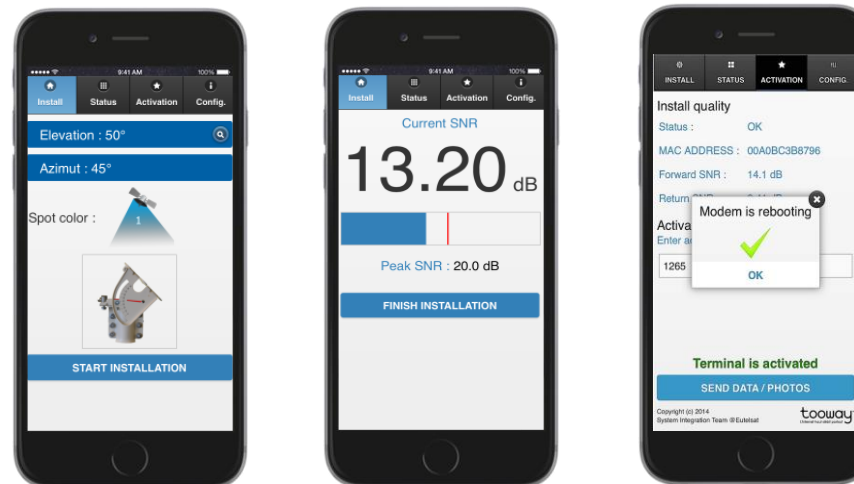
➤ The KA-SAT Finder app

- ➔ Essential information for Tooway antenna installers
- ➔ Provides spot configuration, azimuth and elevation angles according to geographical position

INSTALLATION APPS



- /// Entire installation and activation
- /// Secured E-mail with GPS data for installation management
- /// About 7 000 downloads in 6 months
- /// Patent pending



OBJET: KA-SAT POINTER REPORT : 00:A0:BC:3B:87:96

FROM : INSTALL TOOWAY

TO : distributor@distributor.com

```
### BEGIN ###  
LATITUDE=48.55695432056538  
LONGITUDE=1.790893692524909  
DATE=THU JUL 24 2014 12:03:38 GMT+0200 (CEST)  
INSTALLATION_STATUS=ONLINE  
UT_MAC=00:A0:BC:3B:87:96  
FORWARD_SNR=13.6  
RETURN_SNR=10.19  
SOFTWARE_VERSION=UT_1.5.4.2.6  
RECEIVED_POWER=-33.5  
CABLE_ATTENUATION=9.9  
ODU_CABLE_RESISTANCE=0.5  
### END ###  
HASH_MD5=8E0EA482B7A67950A0133B2285950153
```



IT'S THE SMALL THINGS THAT COUNT

2
minutes
to construct

NO
TOOLS
needed

VERY
STABLE

Up to
1.2m
6
watt
antenna

STEP
1



STEP
2



STEP
3



THANK YOU