



EGNOS Program Update

EGNOS Service Provision Workshop
Warsaw
27 September 2016



European
Global Navigation
Satellite Systems
Agency



Precise navigation,
powered by Europe



EGNOS Operational configuration

Space Segment:

- 2 Operational GEOs:
 - Inmarsat 3F2 (PRN-120)
 - SES-5 (PRN-136)
- 1 GEO in Test/Back-up: Inmarsat 4F2 (PRN-126)
- 1 GEO in deployment: ASTRA-5B (PRN-123)

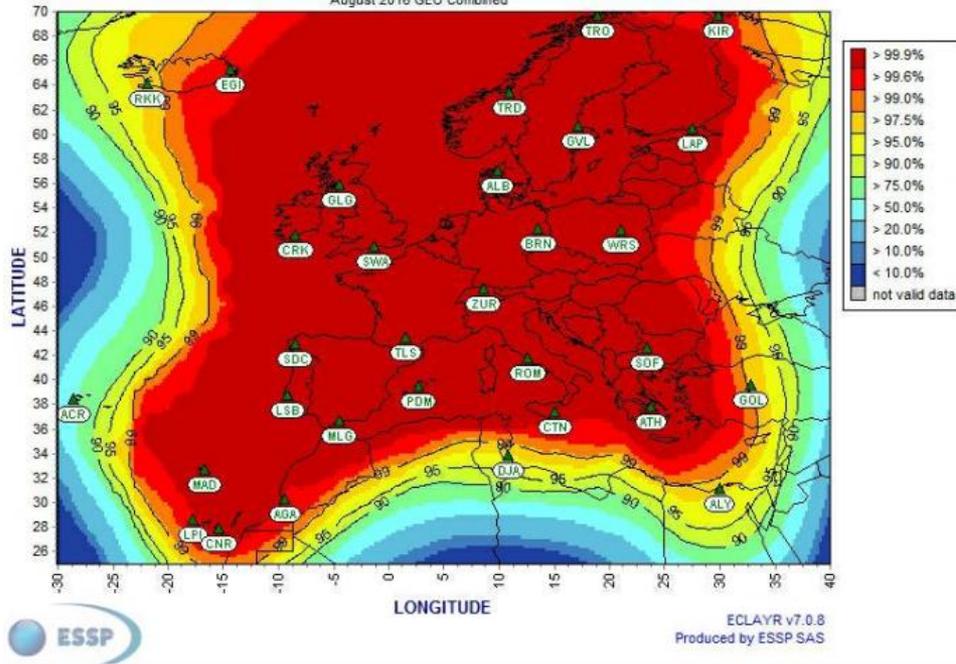
Ground Segment: System Release **2.4.1M – YSR1-PSS1** deployed in Sept 2016 to correct “Moon Ephemeris Anomaly”:

- Known SW anomaly, reclassified as Safety Critical in June 2016
- Next occurrence in Sept. and Oct. 2016
- Decided in July 2016 to develop a corrective system release
- Fast-track system correction, qualification and deployment achieved in less than 2 months (including EASA consultation)

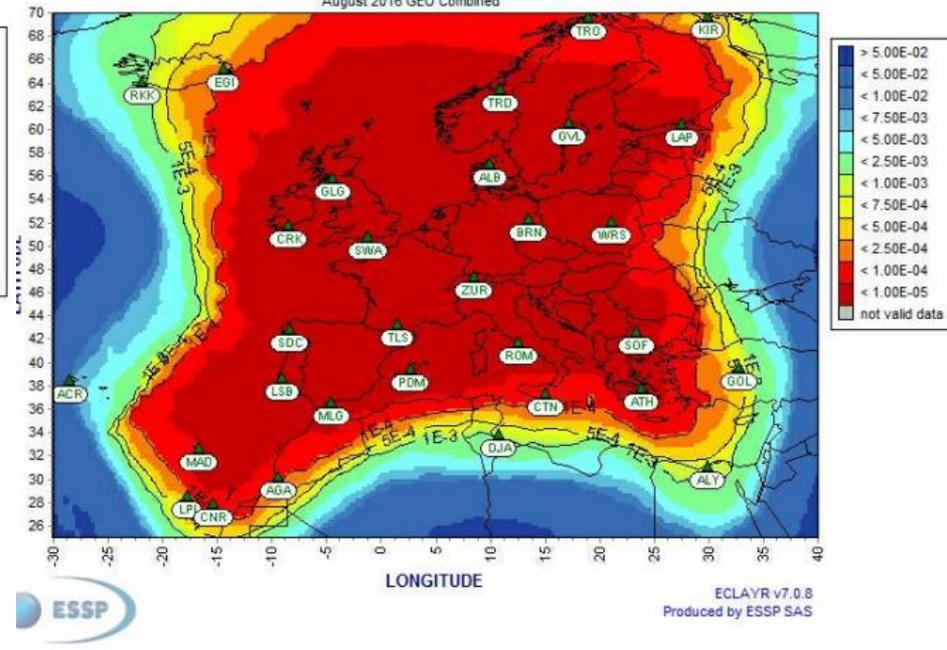
Service Performance – August 2016

APV-I availability and continuity

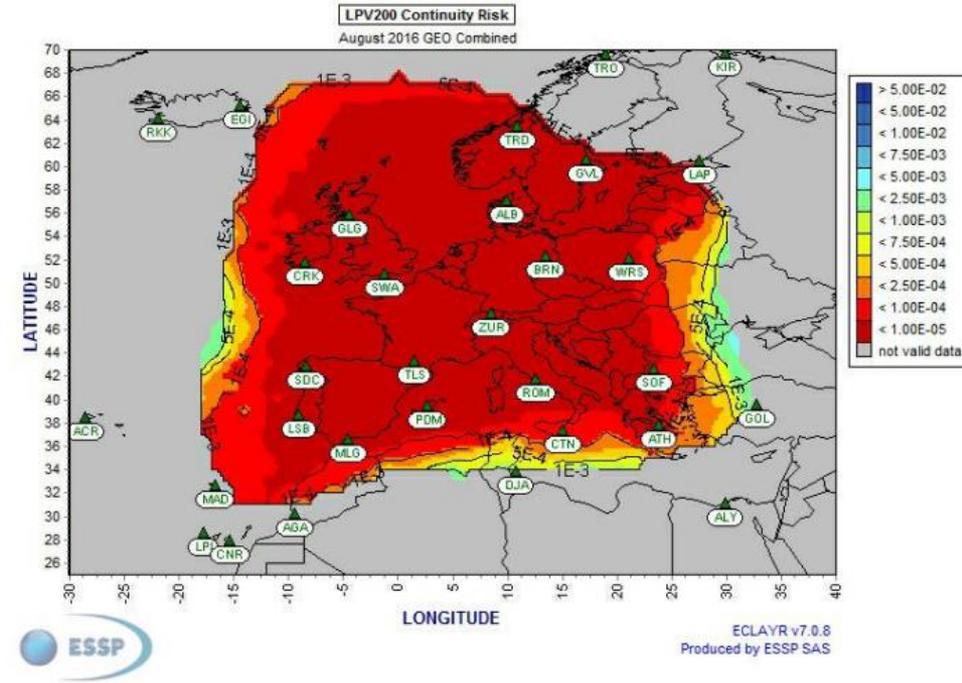
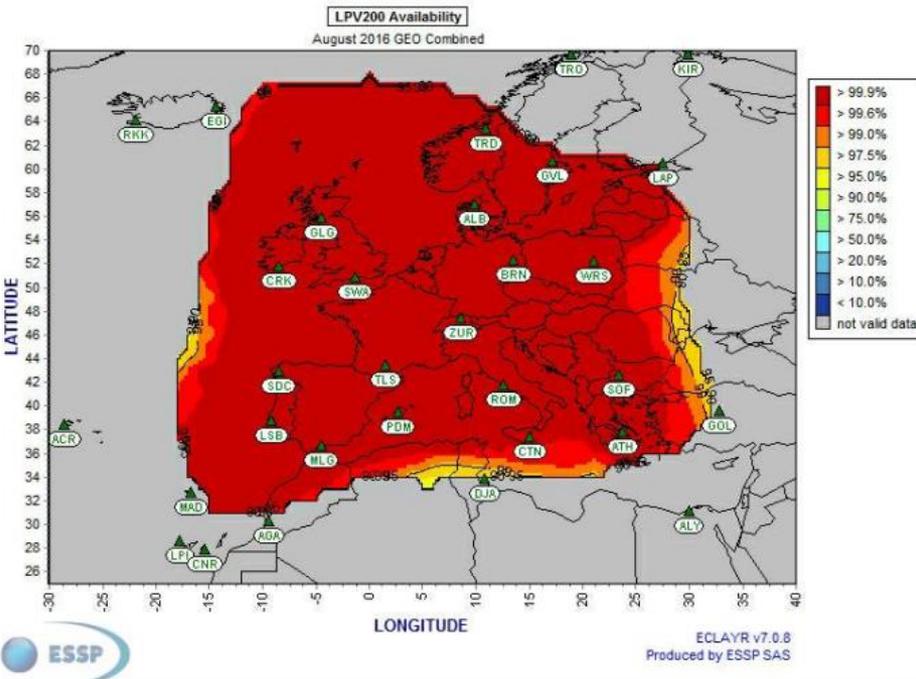
APV-I Availability
August 2016 GEO Combined



APV-I Continuity Risk
August 2016 GEO Combined

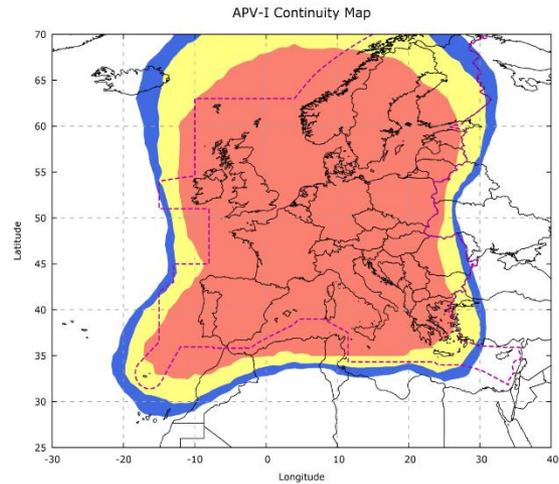
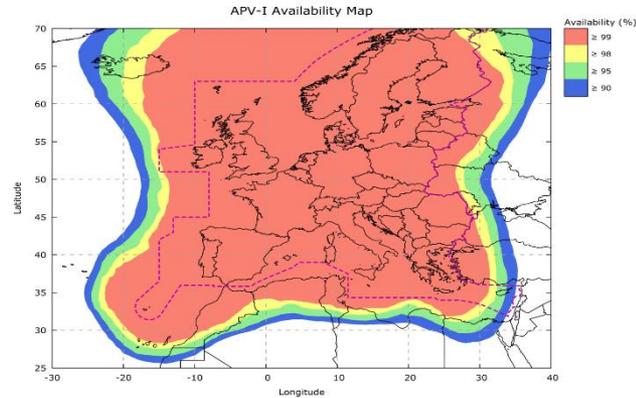


Service Performance – August 2016 LPV-200 availability and continuity

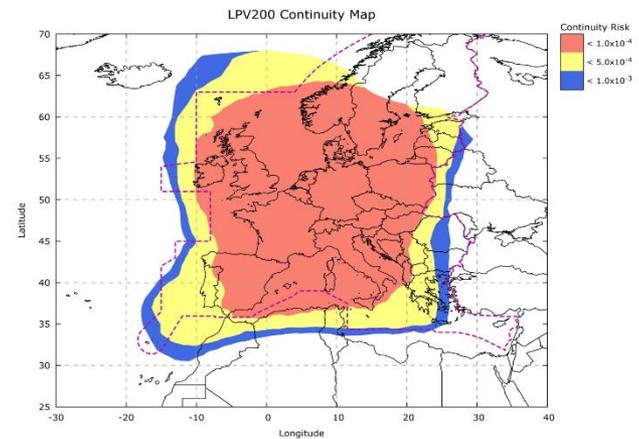
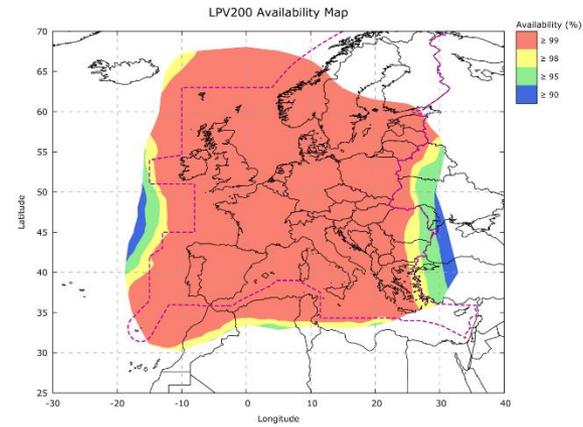


Updated SoL Service Definition Maps

APV-I



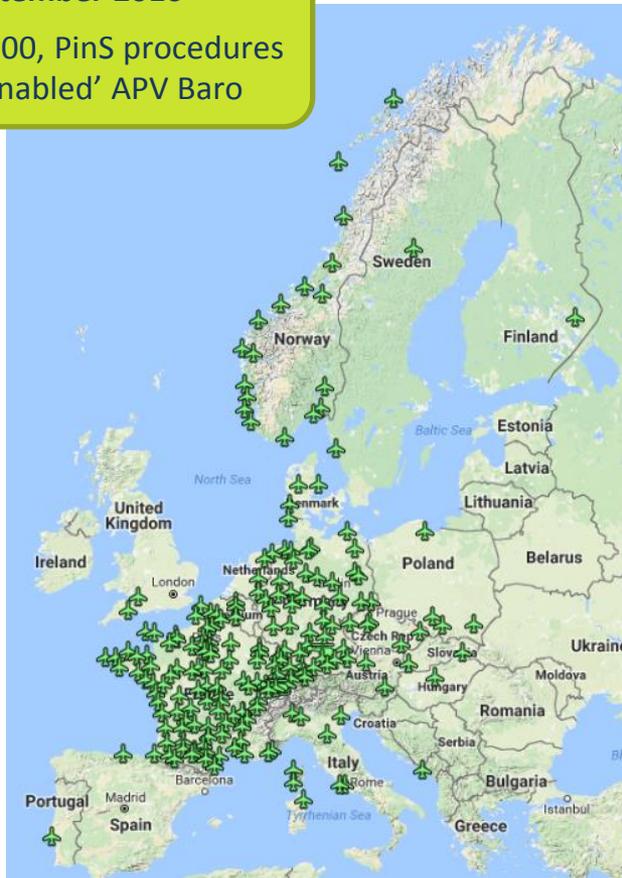
LPV-200



LPV procedures in Europe

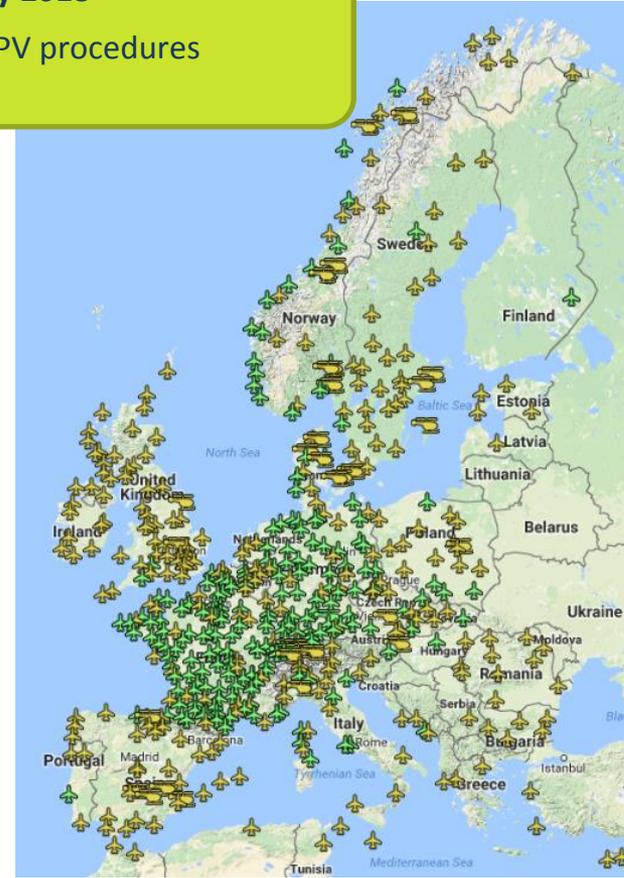
As of 15th September 2016

296 LPV, LPV200, PinS procedures
+88 'EGNOS enabled' APV Baro



Plans by 2018

> 440 LPV procedures



http://egnos-user-support.essp-sas.eu/egnos_ops/lpv_map/map.php

Operational System Releases Plan – 2017-21

MAJOR Releases	241N				242	
Minor Releases		241N YSR2	241N YSR3	241N YSR4		242 YSR
Entry in Operations	Q1-2017	Q3-2017	Q2-2018	Q1-2019	End 2020	Q2-2021
Main features	- GEO-2	- Anomalies resolution - Operability improvement	- RIMS Haifa - 72°N - Anomalies resolution - Operability improvement	- Anomalies resolution	- Obsolescence resolution	- Anomalies resolution

EGNOS V3 - Status

- Programmatics:
 - Following 2015/1183 Commission Decision on EGNOS V3 implementation:
 - GSA has started with ESA the EGNOS V3 acquisition process
 - EC-GSA Delegation Agreement revision in 2016 defines new tasks:
 - EGNOS V3 Initial Operations
 - Study EGNOS V3 extension to Africa
- On-going main procurement actions:
 - DFMC Aviation prototype receiver for flight tests
 - GEO-3 Navigation Payload services
 - EGNOS V3 System Phase C/D (through ESA)
- Standardisation preparation:
 - DFMC Definition Doc. and SBAS L5 ICD developed by IWG to be released end '16
 - Initiated: ICAO SARPS and EUROCAE/RTCA MOPS preparation

THANK YOU

