



EGNOS in Aviation: Service Provision and Implementation Status

Online - EGNOS Service Provision Workshop

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EGNOS Workshop 2021



EGNOS SoL Service Provider



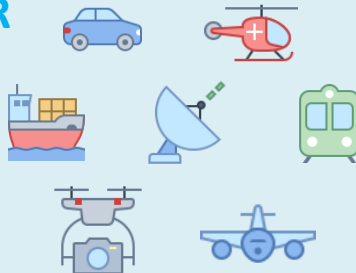
SYSTEM



SIS



USER/RECEIVER



SAFETY
of
LIFE
SERVICE



NAVIGATION



EWA

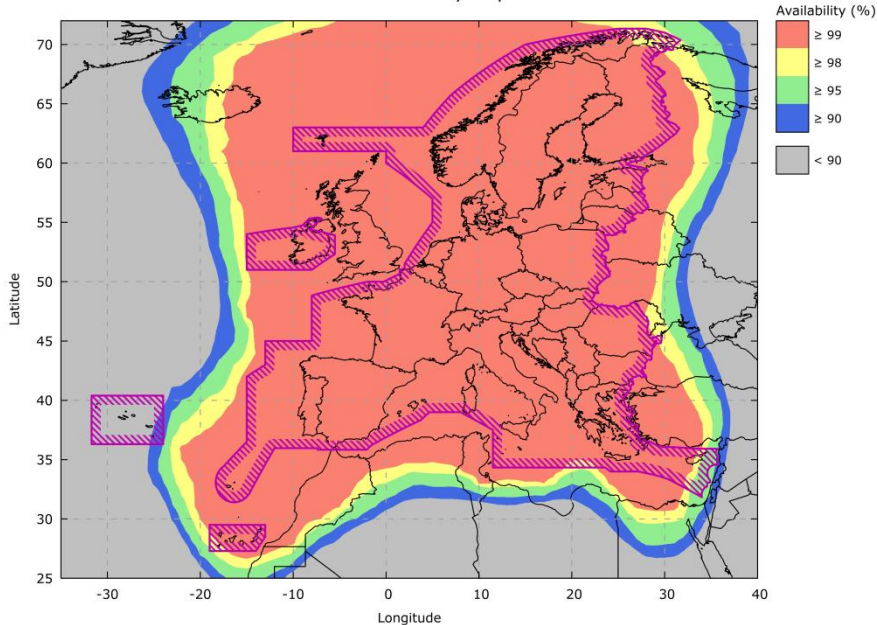


EGNOS SoL Service Provision

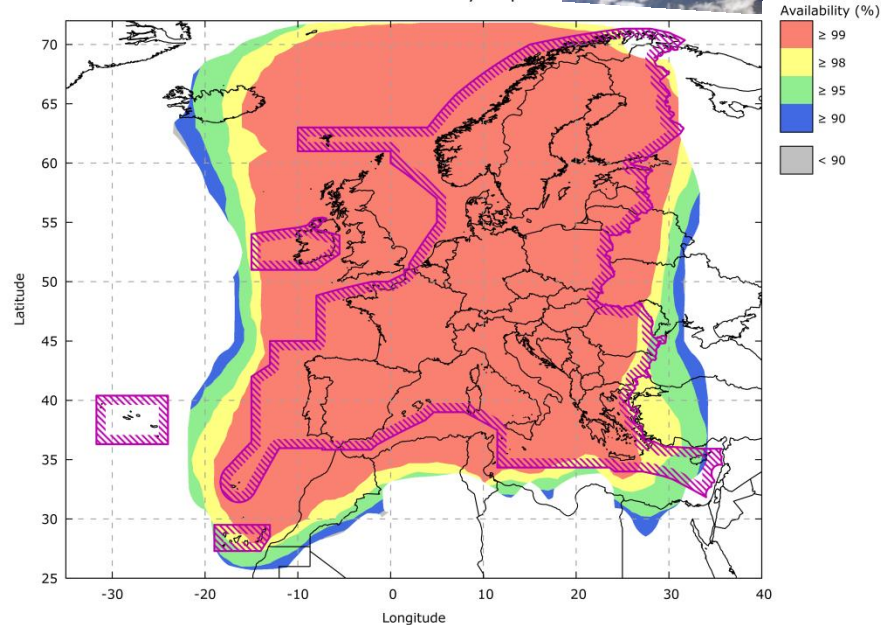
SDD v3.4 (May'21)



APV-I Availability Map



LPV200 Availability Map



EGNOS SoL Service Provision

2021

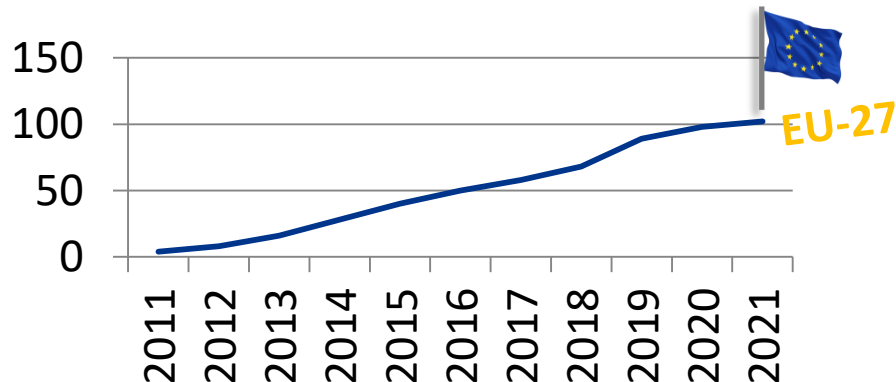
ATC
AFIS
Military
Rotor



7/6/21



EWAs:

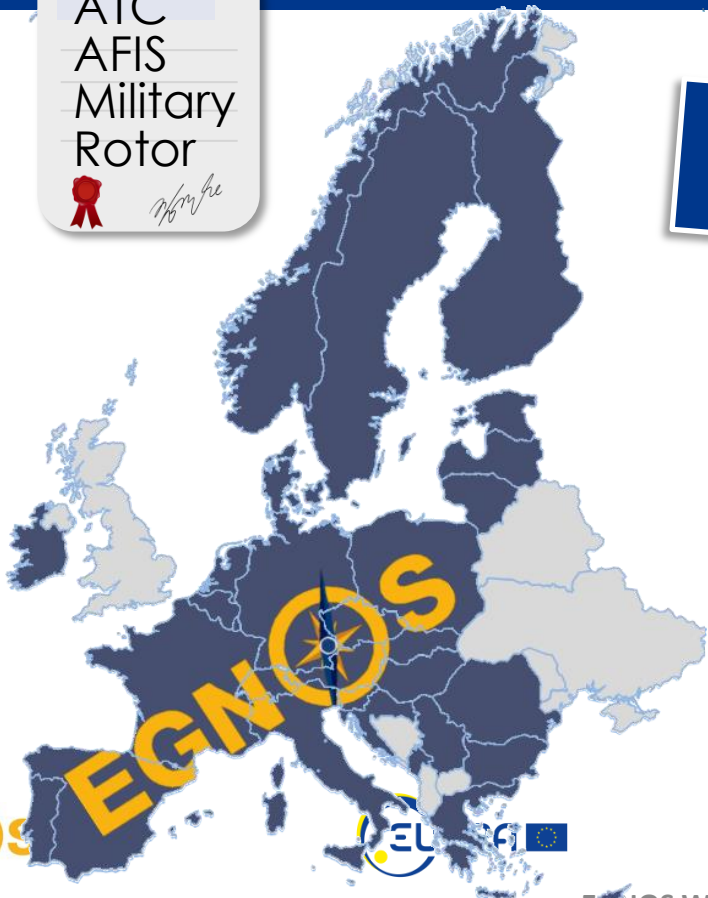
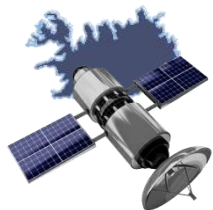


EGNOS SoL Service Provision

ATC
AFIS
Military
Rotor



7/6/2021



The EWA guarantees harmonization in the implementation of EGNOS based procedures



EGNOS is possible thanks to you



NAVIGATION
MADE IN
EUROPE

SBAS/LPV Benefits

Safety

- Vertical guidance to all IREs
- More stable than ILS
- No catching of ILS secondary lobes

- Increased pilot situational awareness with respect to VOR & NDB approaches

- Less CFIT
 - *Not linked with QNH setting*
 - *Not affected by temperature*

Economic

- **Savings due to avoided disruptions**
 - *Weather conditions (ceiling, RVR)*
 - *Unstabilised approaches*

- Navaid rationalisation, **decrease in airport charges**

- **Fuel and CO₂ emission savings**

- **Cost of human life?**

- SBASs are interoperable i.e. **same avionics for all areas**

Operational

- Increased landing chances
 - *LPV vs NPA&Baro DH*
- ILS may not be available in all RWYs

- PBN 'normal means' by 2030

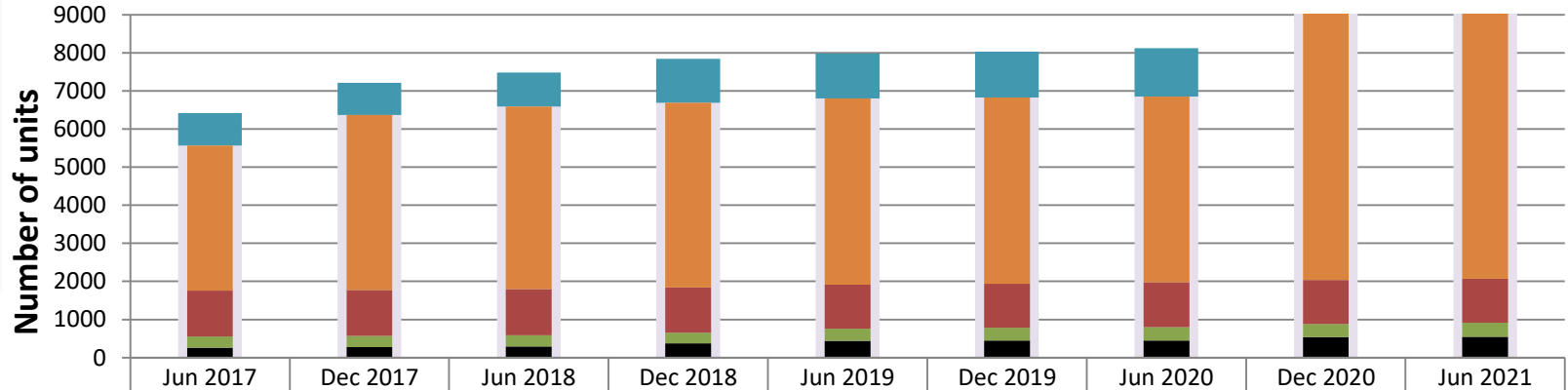
- Closer alternates with CAT-I means
- No procedure base turns, racetracks...

- SBAS for RNP AR (on-going)
- Reduced pilot workload
- No RAIM check

Monitored aircraft with LPV capability

ESSP Monitored Aircraft LPV capability imp. Status*

*Considering EU27 + Norway, Switzerland, Iceland, Jersey, Guernsey, Serbia and Montenegro.



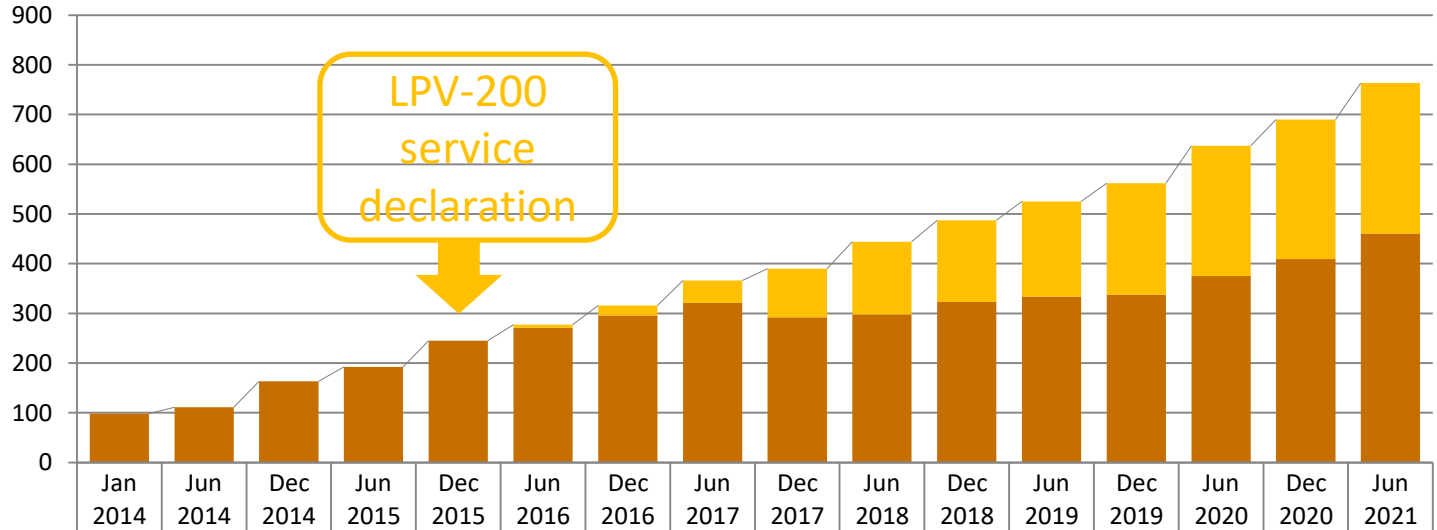
	Jun 2017	Dec 2017	Jun 2018	Dec 2018	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021
New orders	846	841	896	1160	1175	1205	1267	2	61
Monitored units in service	5568	6369	6588	6684	6804	6824	6855	12269	11440
Certification Unknown	3813	4592	4791	4846	4889	4886	4873	10235	9371
Certified	1203	1205	1212	1188	1157	1158	1183	1152	1153
Under Certification	291	293	293	277	318	329	349	348	369
Certified & Operational	261	279	292	373	440	451	450	534	547

Procedures implementation in Europe 2014-2021

*Considering EU27 + UK, Norway, Switzerland, Iceland, Jersey, Guernsey, Serbia and Montenegro.

ESSP Stakeholders LPV Procedures Metric Evolution

Number of procedures

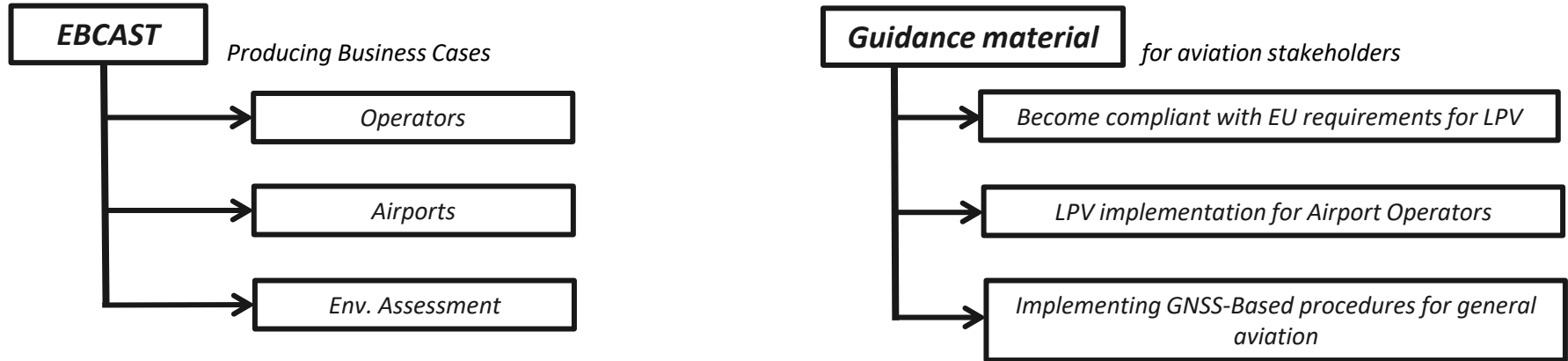


■ LPV-200 Service Level						6	20	45	98	146	164	191	224	262	281	302
■ APV-I Service Level	98	111	163	192	245	271	296	321	292	298	323	334	338	375	409	461
Total Procedures to LPV minima	98	111	163	192	245	277	316	366	390	444	487	525	562	637	690	763

EGNOS aviation ecosystem

ESSP Tools

Free on-line access to all tools and docs at the [EGNOS USER SUPPORT WEBSITE](#)



TRAFFIC ASESMENTS and **CBAs** under request at egnos-adoption@essp-sas.eu

CBAs



Traffic Assessments

Thanks for your attention!



**Now it is
your turn**

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