



EGNOS Programme Update

Pieter De Smet, European Commission
ICTP Conference, Trieste, 1 December, 2014



**REGULATION (EU) No 1285/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 11 December 2013
on the implementation and exploitation of European satellite navigation systems and repealing
Council Regulation (EC) No 876/2002 and Regulation (EC) No 683/2008 of the European
Parliament and of the Council**

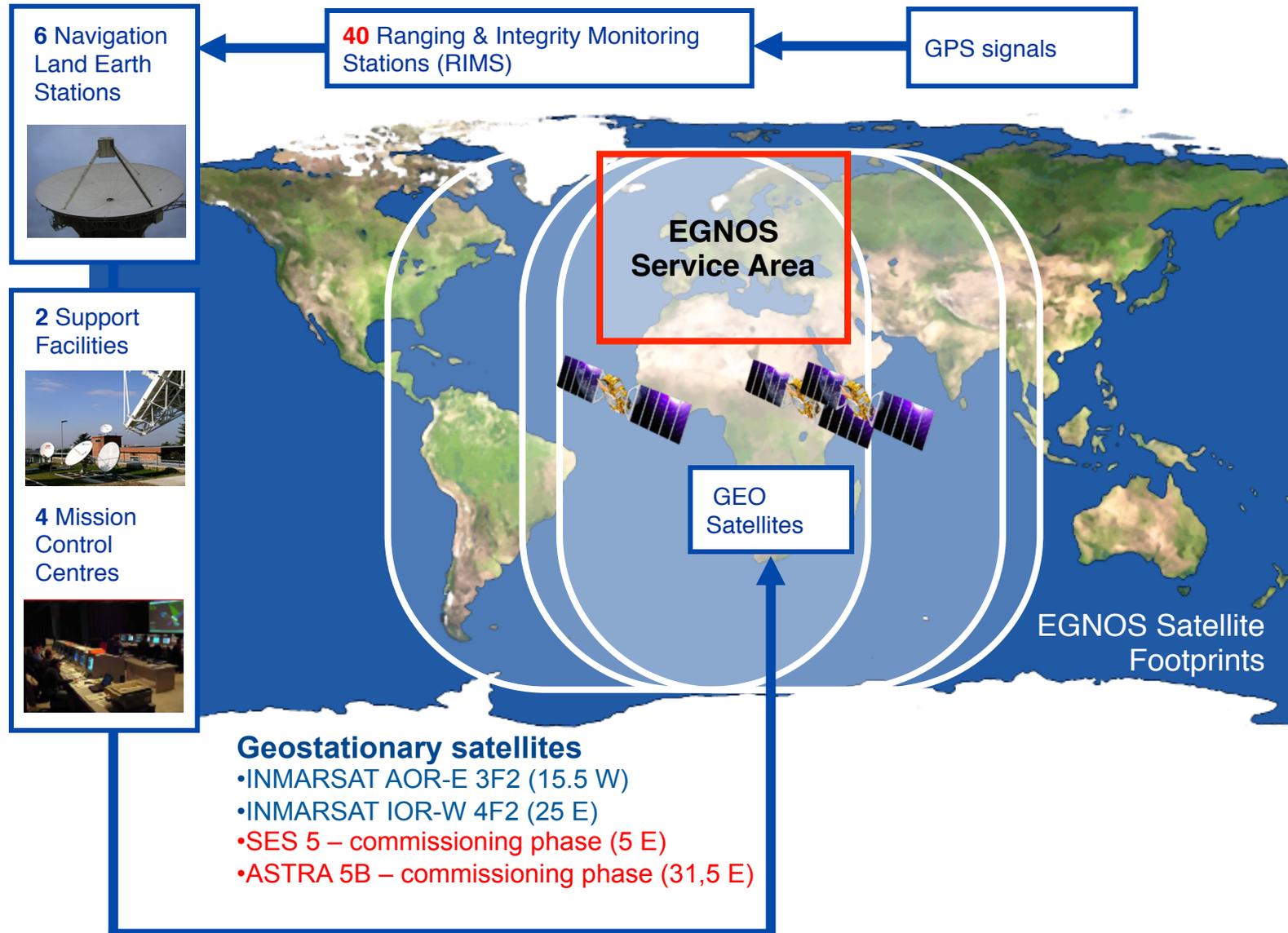
- ✓ A stable 7 years perspective
- ✓ A substantial budget
- ✓ A new governance scheme driven by exploitation

2014-2020

- 1,930 B€ for Galileo Deployment**
- 3 B€ for Galileo Exploitation**
- 1,580 B€ EGNOS Exploitation**



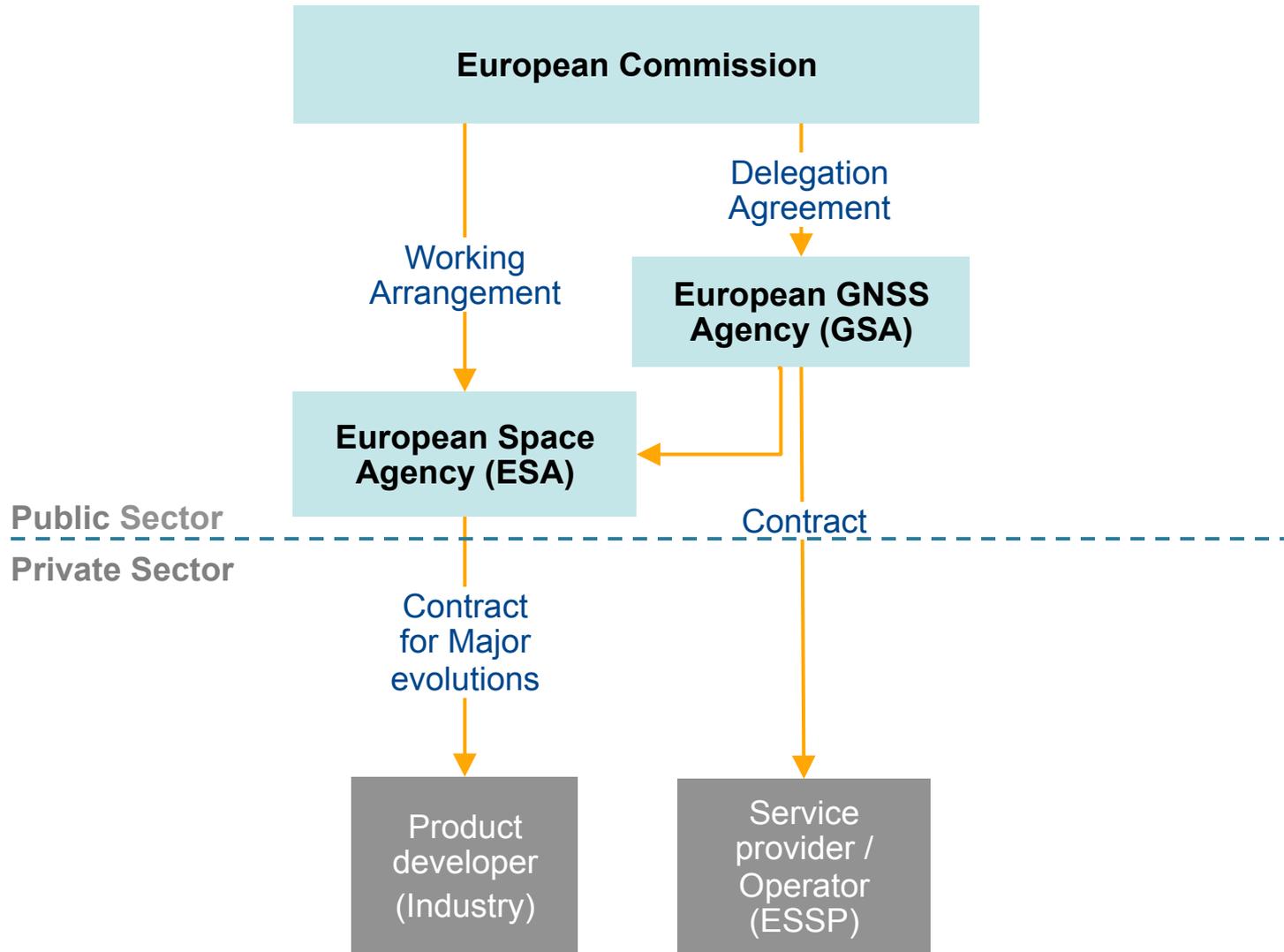
Recap: EGNOS System Architecture and Service Area



EGNOS will deliver its services on a long-term basis (>20 years)

Service	Characteristics	Service Status	
Open Service	accuracy ~1m, free	available since October 2009	
Safety of Life Service	accuracy ~1m, compliant to aviation standards	Available since March 2011	
EDAS	accuracy <1m, corrections are provided by terrestrial networks	experimental service since 2008; official service made available in 2012	

(EDAS: EGNOS Data Access Service)



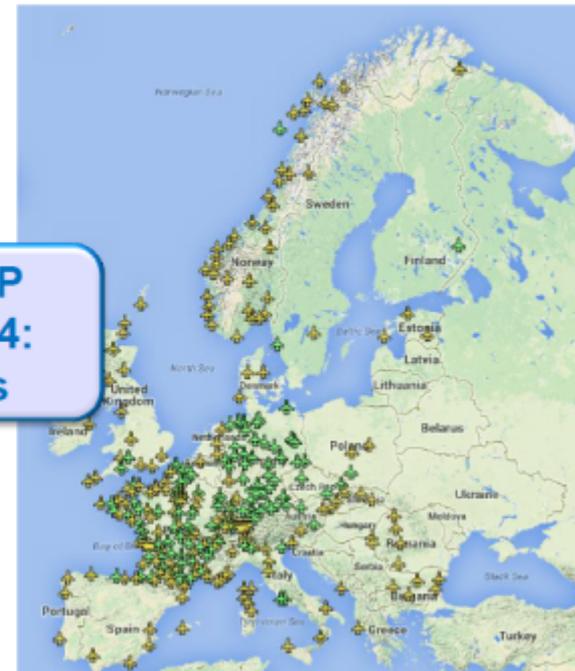
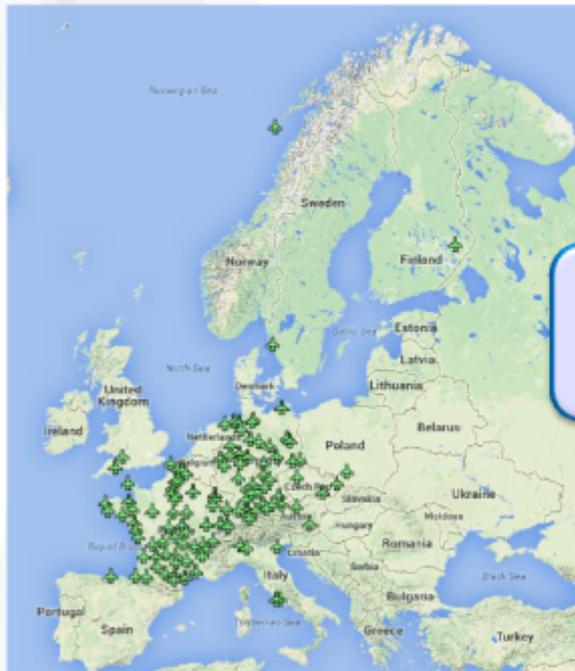


As of 18th Sept 2014

128 LPV serving 86 airports
76 runways served by EGNOS enabled APV Baro

Plans by 2016

>320 LPV planned by 2016



**GSA/ESSP
target 2014:
184 LPVs**

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

Other examples of increasing uptake of EGNOS

- ★ The French air navigation service provider (DSNA) plans to modernise and rationalise their landing system infrastructure, taking into account that EGNOS-aided landing is equivalent to that of ILS Cat I

- ★ The options list for the new Airbus A350 aircraft now includes EGNOS-aided landing. Out of 750 firm orders, most have chosen this option
 - ★ Qatar Airlines expects to fly the first A350 commercial flight by early 2015 (using EGNOS when certified approaches are available)

(ILS: Instrument Landing System)

EGNOS services will further improve over time

2014

- ★ Publication of new version of the Service Definition Documents for the OS, SoL and EDAS planned for end of 2014, beginning of 2015

Medium term

- ★ Full coverage of 28 EU Member States' territory (geographically located in Europe)
- ★ Implement LPV200 service level

Long term

- ★ EGNOS version with dual (L1/L5) frequencies, also to enable augmentation of Galileo and potentially other GNSS
- ★ Subject to conclusion of necessary contracts and agreements, extension of the EGNOS coverage to EU neighbouring countries and regions, including Africa.

(SoL: Safety of life, LPV: Localizer Performance with Vertical guidance, EDAS: EGNOS Data Access Service)

A Galileo satellite is shown in orbit above the Earth. The satellite has a purple body with gold-colored solar panels. A yellow orbital path is visible against the black background of space. The Earth's blue and white surface is on the right side of the frame.

Questions?



EGNOS

Navigation solutions powered by the European Union

<http://ec.europa.eu/galileo>