

EGNOS



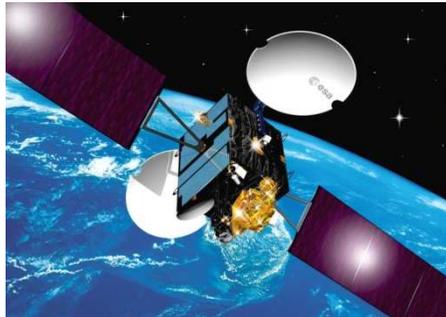
EGNOS and ESSP Certification

ESESA Aviation Workshop
26th - 27th October 2010

Content

1. Certification needs and framework
2. SES Certification regulations
3. Certification activities
4. Current Status and Service Agreements

1. Certification Needs and Framework



EGNOS

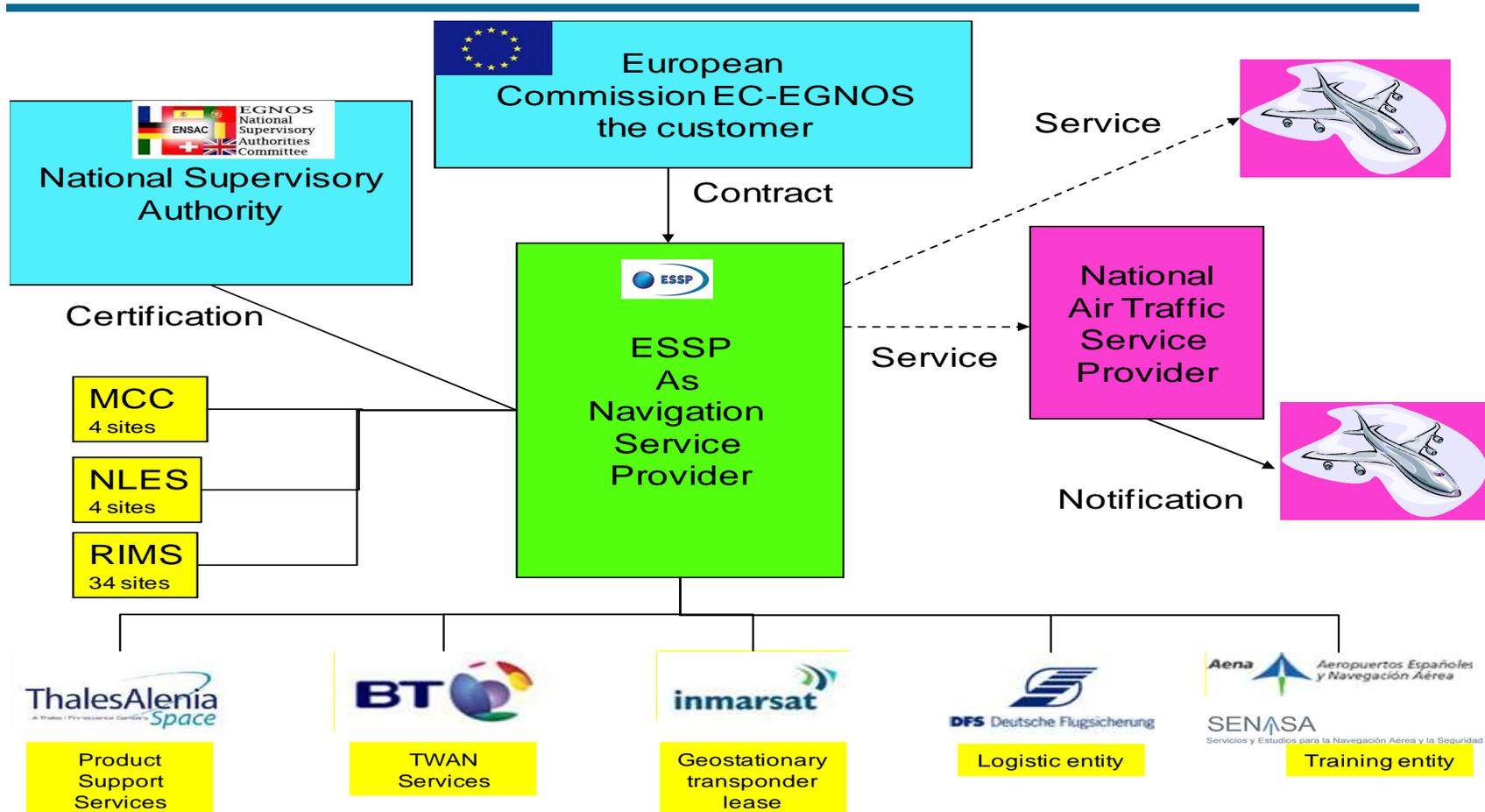
The need for Certification

To provide the SoL Service for Aviation, ESSP has to be certified as ANSP according to the EC-SES **Single European Sky regulation**

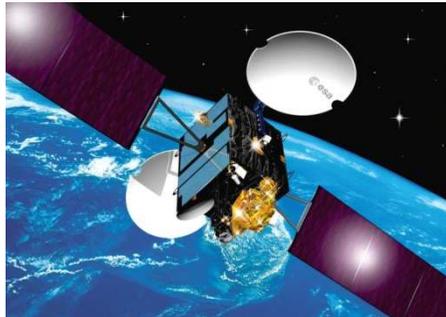
The (SES) Certification process is managed by the **French National Supervisory Authority (NSA)**

Seven other NSA are associated to the process:
Belgium, Germany, Italy, Portugal, Spain,
Switzerland, United Kingdom

Certification Framework (Actors, Roles)

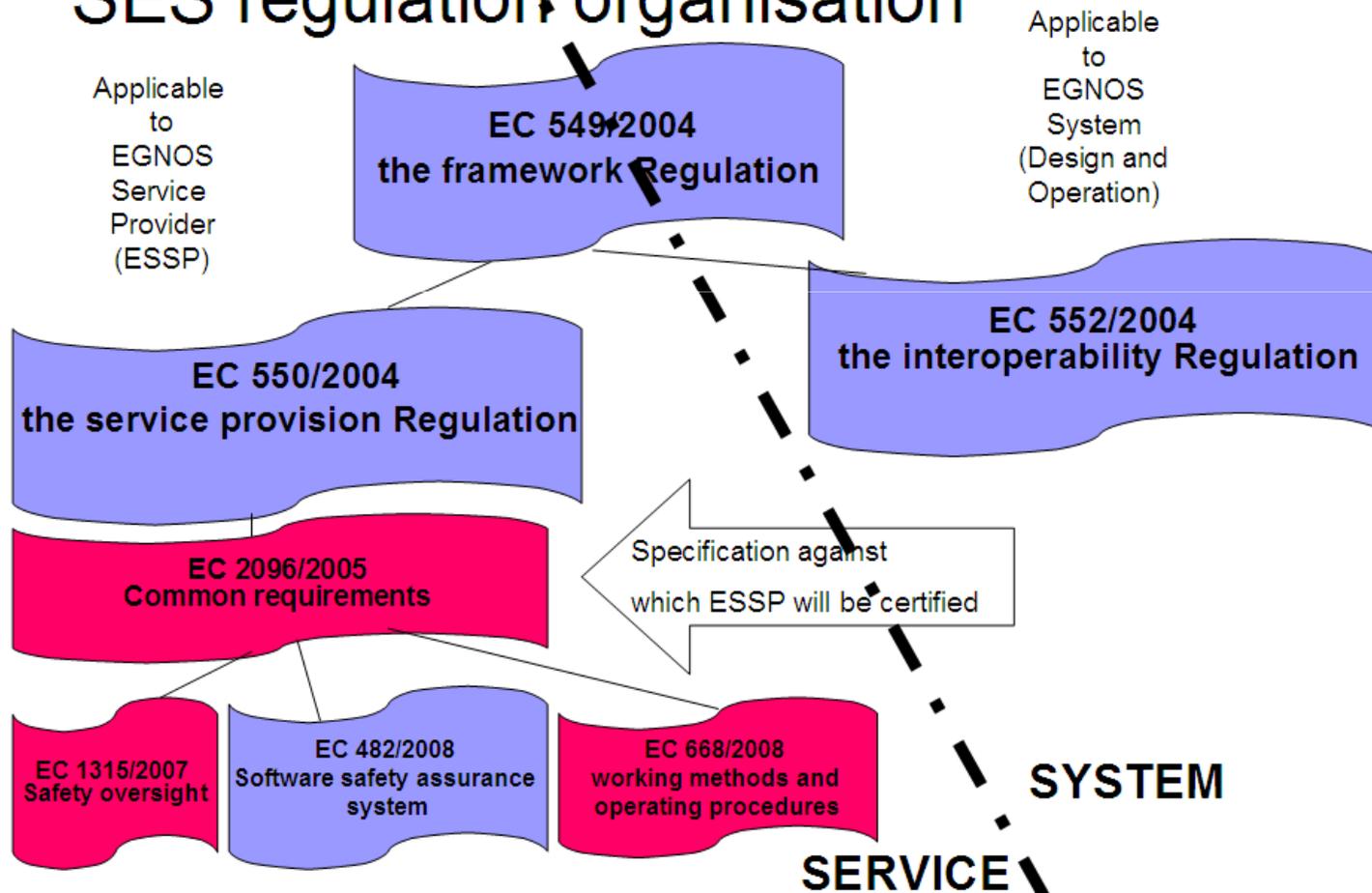


2. SES Certification regulations

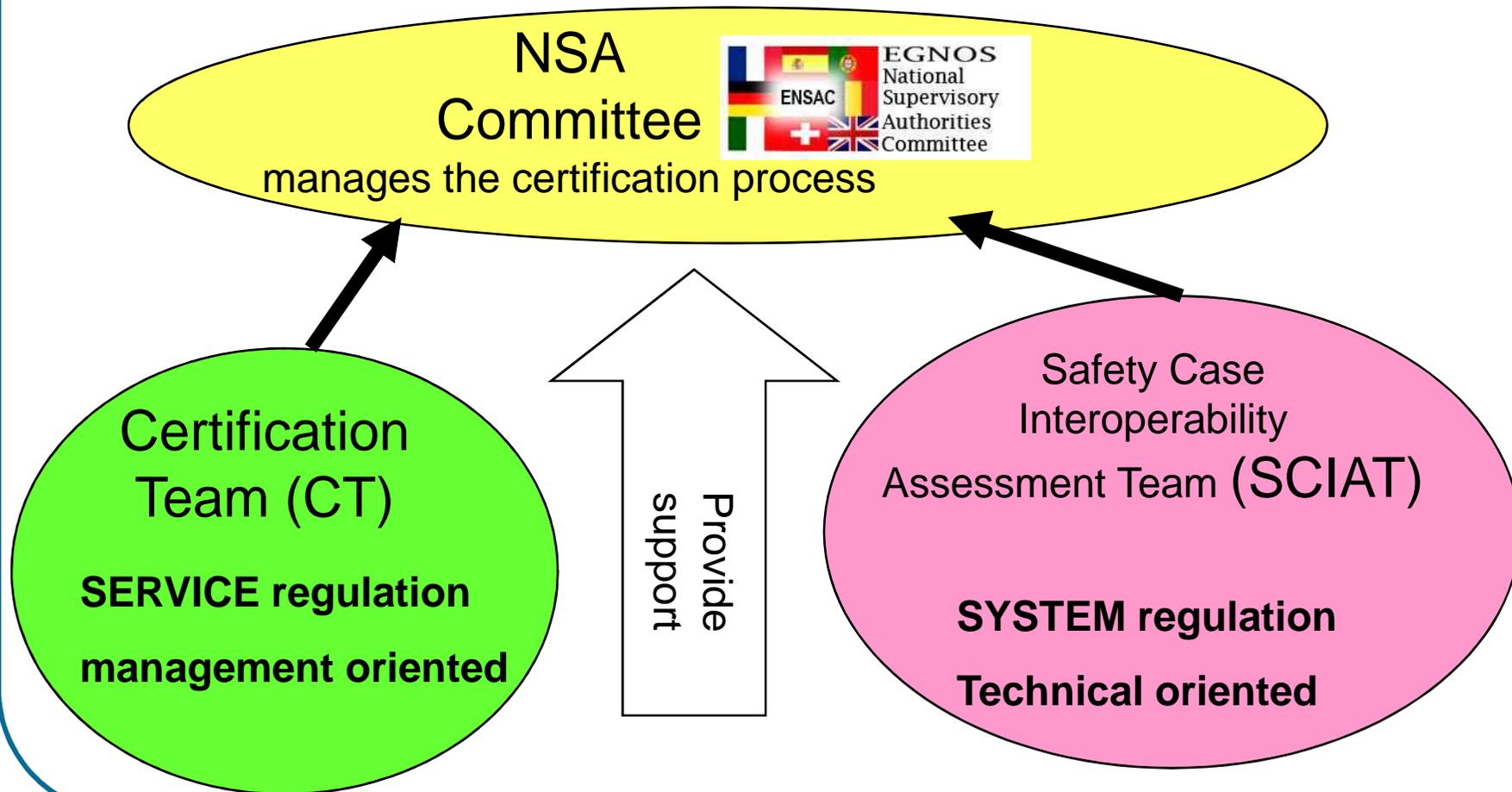


SES Applicable Regulations

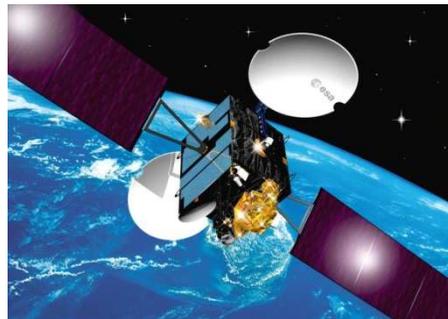
SES regulation organisation



NSA Organisation

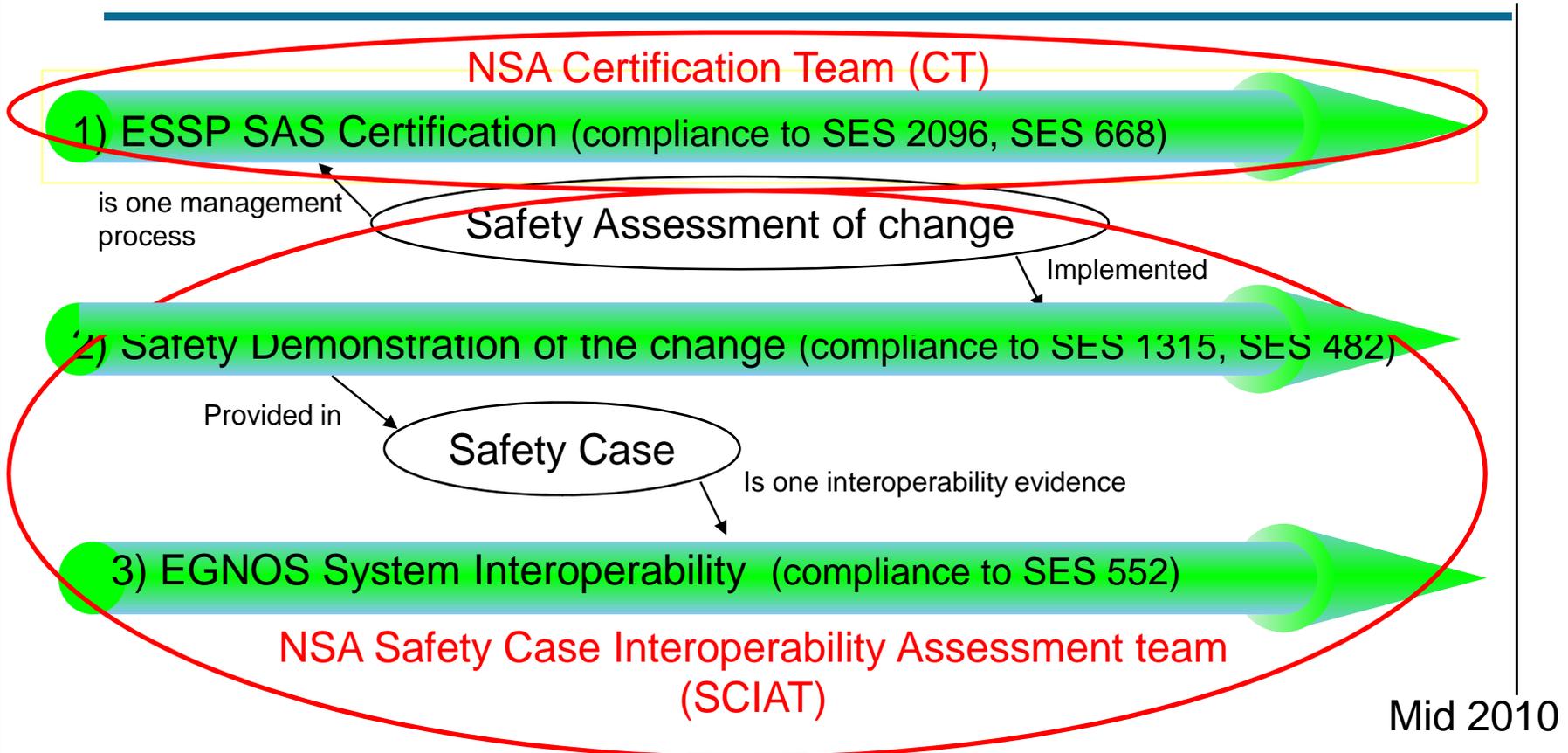


3. Certification activities



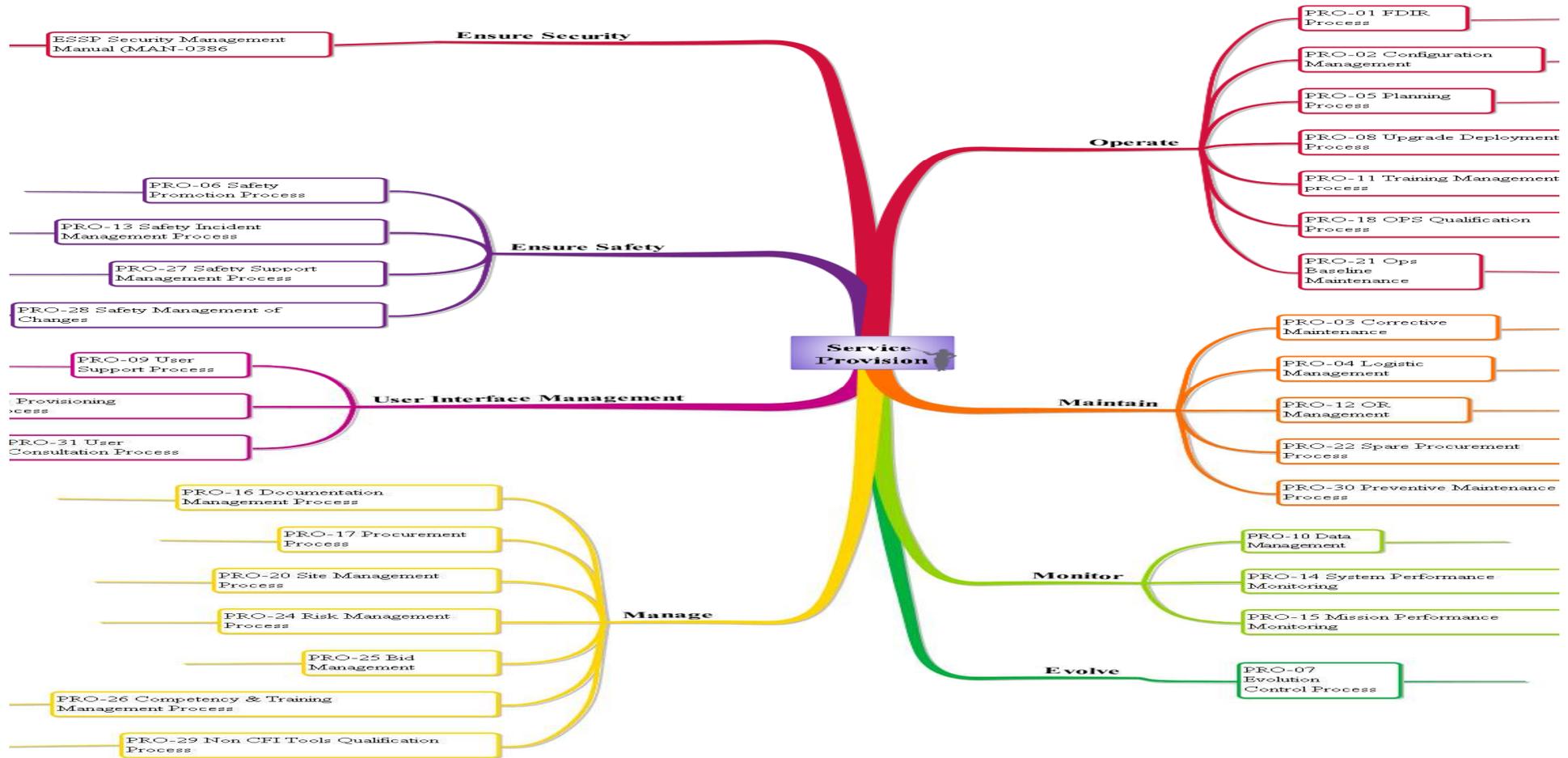
EGNOS

Certification activities



- ESSP to provide the 3 demonstrations of compliance
- NSA (CT and SCIAT) to assess the compliance

ESSP SAS Certification



The conditions for a safe and efficient provision of air navigation services

(in compliance with the Common Requirements : organisational structure and management , safety, quality, security, human resources, financial strength, liability and insurance, quality of service, reporting)

Change 0 Safety Case

CHANGE 0 SAFETY CASE



Safety Case
Part A
Design is safe

Introduction of
EGNOS in
EATMN is
safe



Safety Case
Part B
Operation and
Maintenance
of EGNOS
are safe



Interoperability Dossier

In compliance with the applicable Essential Requirements (ER)
(Seamless operation, Support for new concepts of operation, Safety, Environmental constraints, Principles governing the logical architecture of systems, Principles governing the construction of systems)

Declaration of Verification

(PROCEDURE of verification that the system is compliant to the ER)



Declaration of Suitability for Use

(compliance EVIDENCE of the constituent to the ER)

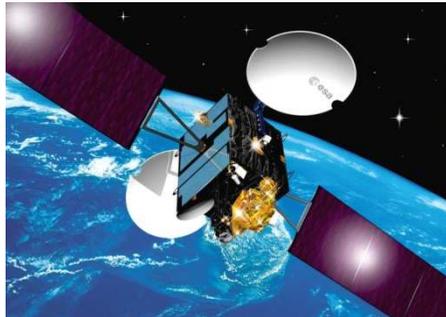
ThalesAlenia
A THALES COMPANY
Space

Technical File

(compliance EVIDENCE of the system to the ER)



3. Current Status and Service Agreements



EGNOS

Current status/ progress

ESSP Certification as ANSP

Safety, Quality and Security audits have been held successfully

No major non conformity identified

Interoperability Dossier

Convergence on format and content of DOV and TF has been reached

Delivery of Interoperability dossier for last review on 16/06/2010

Introduction of EGNOS in EATMN

Delivery of safety argument for last review on 16/06/2010

Final steps before first EGNOS introduction in EATMN

ESSP certification: **12-July-2010**

Formal delivery by ESSP of Interoperability and safety dossiers: **13-July-2010**

Formal acceptance by NSA of EGNOS introduction in EATMN: **30-July-2010**

The future

Oversight of ESSP Certificate by EASA,

Safety Management of next Changes

EGNOS Service Agreements

The need for

SES regulation requires that ANSPs using services from another ANSP

shall formalise their working relationships by means of **written agreements**

setting out the specific duties and functions assumed by each provider

allowing for the exchange of operational data between the service providers

Those arrangements shall be notified to the national supervisory authority

EGNOS Service Agreements: Objectives

To trigger the definition of an **harmonized approach or the implementation of EGNOS** based procedures by interacting with the appropriate stakeholders (ANSPs, NSAs, EC, etc.)

To gather the **ANSPs operational** needs and integrate them into the initial general agreement proposed.

To set a formal interface with the ANSP's and define the appropriate points of contact (PoC) in every relevant matter within every ANSP for any coordination needed.

To understand the ANSP implementation plan for RNAV procedures based on EGNOS **to ensure the availability of such Service Agreement** to enable the corresponding approval processes.

EGNOS Service Agreements: Implementation Schedule

Progress on Service Agreement (SA) definition:

- General draft version already available

- General final version by end of July

- First SA ready for signature before the SoL Service declaration to users

ANSPs involved so far:

- Interaction mainly with ESSP shareholders for SA definition

- Next step: Contact with the rest of European (EU) ANSPs and
Contact with non-EU-with-coverage

EGNOS Service Agreements: SA's structure (1/2)

Main structure of the agreement address legal and contractual clauses

For the time being the SA includes:

- ANSP and ESSP respective duties

- Liability allocation rules

- Service commitment (Annex 1)

- Operational coordination (Annex 2)

EGNOS Service Agreements: SA's structure (2/2)

Annex I: The SoL service commitment

equivalent to the content included in the SoL Service Definition Document (SoL SDD – EC programme document)

establish the terms & conditions of the Service provided together with the performances & associated coverage areas as committed by the industry

Annex II: Service Arrangements

Operational coordination identified to be included within the agreement scope (e.g. NOTAM Proposal origination)

SoL Service Definition Document (1/3)

Define the conditions of access to the EGNOS SoL Service

EC Programme document

Prepared jointly by ESSP and EC

Part of the EGNOS Service Agreements with ANSPs

SoL Service Definition Document (2/3)

Draft SoL SDD version: end July 2010

Before MT0 removal

Final SoL SDD version: latest November 2010

Ready for SoL Service Declaration

EC Programme document



SoL Service Definition Document: Content (3/3)

Terms and Conditions of use for SoL service

General disclaimer & Warning

EGNOS information

Service Provision Environment

EGNOS SIS

Certification & Receivers

EGNOS SoL Service Performance Commitments

Definitions

Commitments: Accuracy, Availability, Continuity, Integrity & Service Area

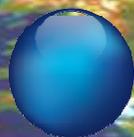
Real Performances

EGNOS SoL Service Limitations

EGNOS SoL Service real performances



Thank You!



ESSP

The EGNOS Services Provider

Questions?

