



USER CONSULTATION PLATFORM GOVSATCOM SESSION SECURE SATCOM CAPABILITIES IN THE EU



Agenzia Spaziale Italiana

Italian Space Agency

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 870330.



European **N**etworking for satellite
Telecommunication **R**oadmap
for the governmental **U**sers requiring
Secure, **i**n**T**eroperable, **i**nnovative**E**
and standardise**D** services



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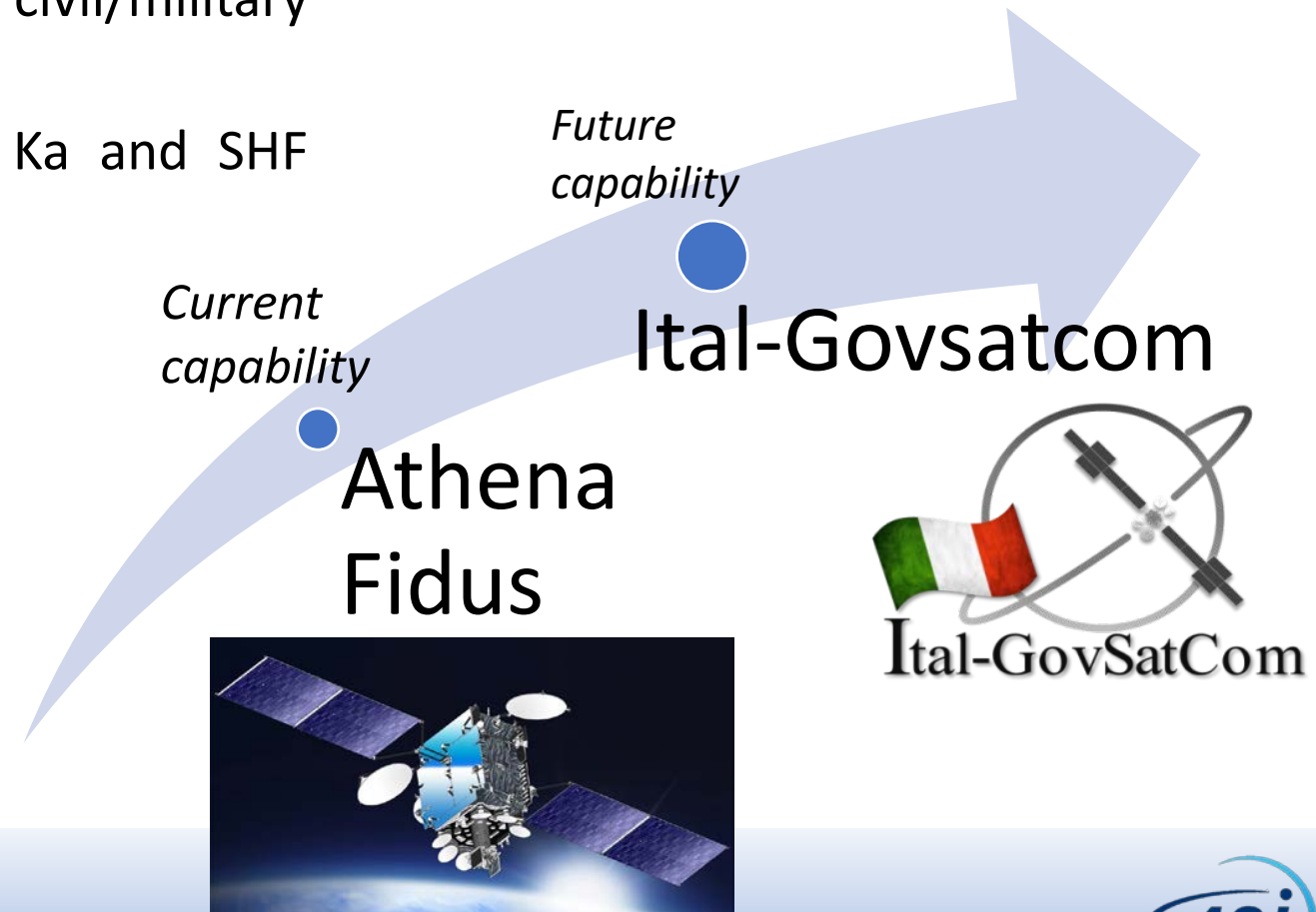


CURRENT STATUS OF INSTITUTIONAL SATCOM IN ITALY

Italian SATCOM systems for institutional users:

- **Athena Fidus:** launched in 2014, dual civil/military satellite, Ka band
- **Ital-GovSatCom:** fully operational in 2026, Ka and SHF bands

Ital-GovSatCom will be an evolution w.r.t. Athena Fidus system, offering larger coverage, larger capacity and high security level.



MIRROR GOVSATCOM: A SPACE ECONOMY NATIONAL PROGRAM



Mirror GovSatCom

- **PPI (ASI)** A Public Private Partnership for Innovation for the realization of the **Ital-GovSatCom** satellite system.
- **PMR(MISE)** A Multi-Regional Cooperation Program: additional “**Research & Innovation**” projects to develop innovative technological items complementary to Ital-GovSatCom.
- A **Jointed Support Action (JSA)** to assure support to the program during all its duration. ASI interfaces **institutional users**, collecting **user needs and requirements**; provide the capabilities of Athena-Fidus satellite to perform **demonstration** and **tests** of services prototypes.



EU GOVSATCOM

- EU GOVSATCOM will be a satellite communication program specifically dedicated to institutional users. The objectives are:
 - to provide SATCOM services with high level of **reliability, availability** and **resiliency**;
 - overcome the fragmentation of GOVSATCOM users on European scale, seeking **synergies** between the civil and military domains, optimizing financial resources.
- ASI is participating to H2020 **ENTRUSTED** project (coordinated by GSA), to establish a **Network of Users** for governmental Satellite Communications, and to collect user needs and requirements common to user communities.



ITAL-GOVSATCOM: A PUBLIC PRIVATE PARTNERSHIP FOR INNOVATION (PPI)

The contract for the Public Private Partnership for Innovation has been assigned to the Consortium composed by Thales Alenia Space Italia, Telespazio, Leonardo, Sitael, Airbus Italia.



ITAL-GOVSATCOM: PROGRAM SCHEDULE

We are here!



PHASE		2019				2020				2021				2022				2023				2024				2025				2026			
Project Phase	ECSS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1 - Preliminary Design	A			█	█																												
	B					█	█	█	█	█	█	█	█																				
Phase 2 - Detailed Design & Implementation	C													█	█	█	█																
	D																	█	█	█	█	█	█	█	█								
Phase 3 - Launch, Orbit Raising & Initial Sperimental Operations	E1																									█	█	█	█				
Phase 4 - Full Operational Life	E2																																

13 years

Currently the Program is in Phase 1, which corresponds to Phase A/B according to ECSS standards.

The main objectives of Phase 1 are:

- mapping the user needs and requirements
- preliminary design definition of overall system
- pre-developments of innovative components
- interaction and demonstrations with users

ITAL-GOVSATCOM PILLARS



Innovation

Applications
and services

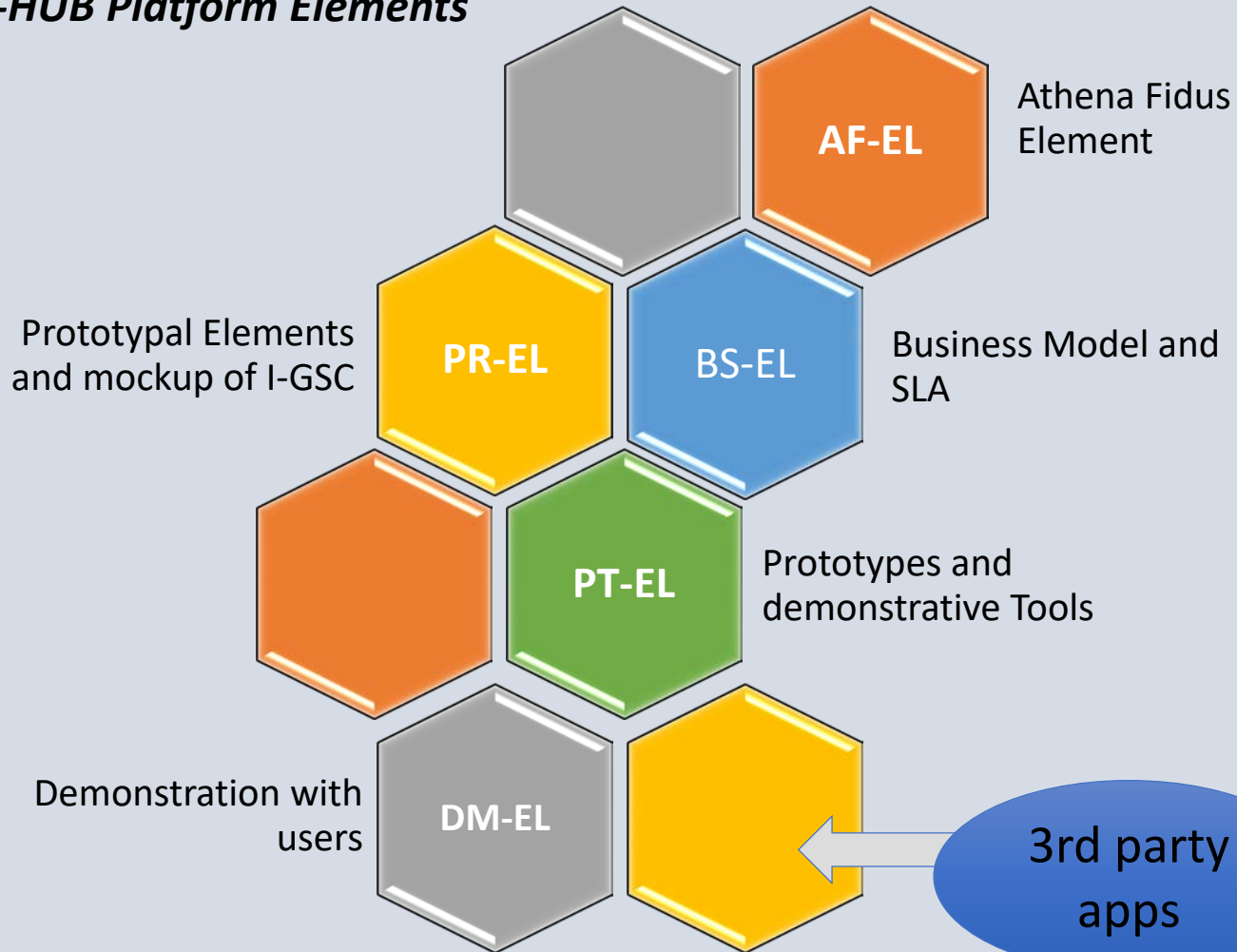


Security

- **INNOVATION:** development and implementation of **innovative** technology, as new modular structure for satellite platform, electric propulsion system, flexible and modular design for payload
- **APPLICATION** and **SERVICES:** service definition (including the provision model), interface with User Communities, development of an **Application Platform Ital-GovSatCom HUB (I-HUB)** for services validation and demonstration. I-HUB will be initially based on ATHENA-FIDUS capabilities and it will be integrated in Ital-GovSatCom system during the following development phases
- **SECURITY:** system will offer an appropriate level of **security** for institutional users

DEMONSTRATIVE AND PROMOTIONAL PLATFORM (I-HUB)

I-HUB Platform Elements

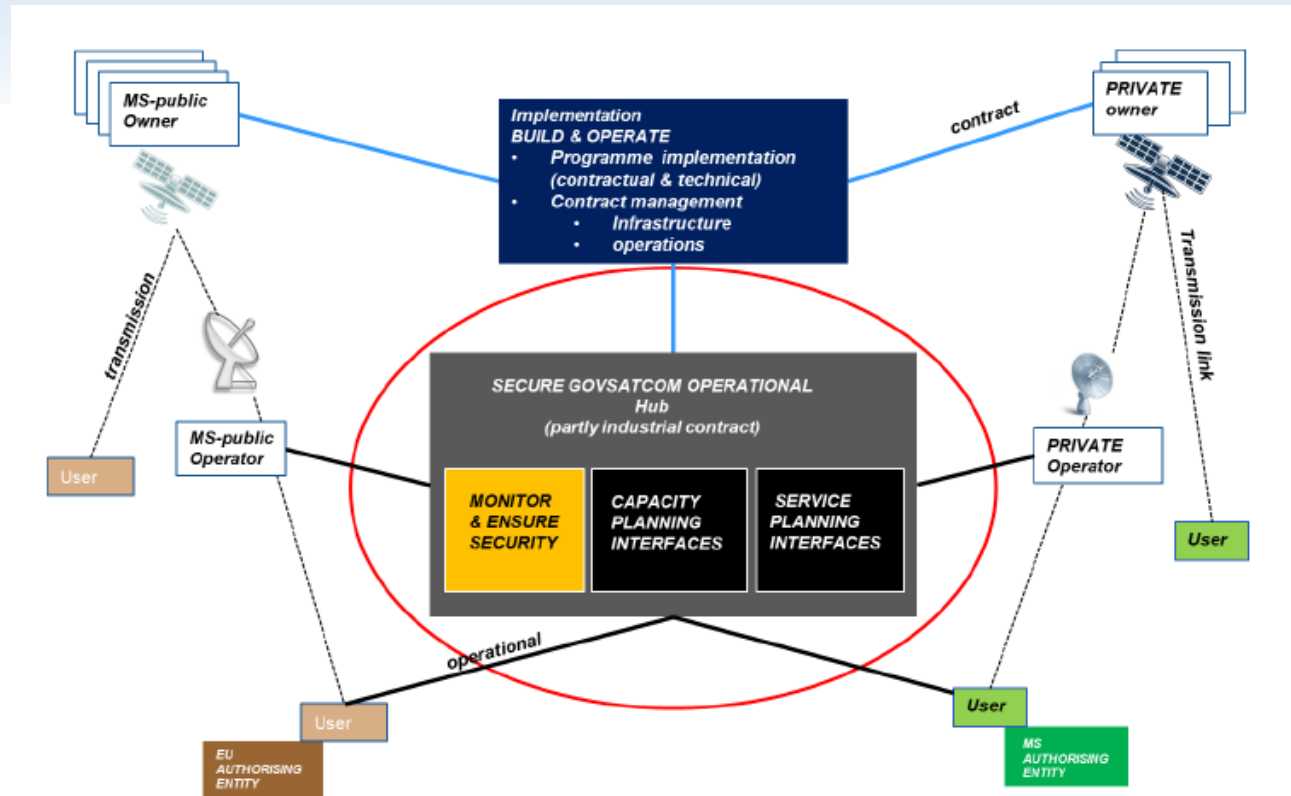
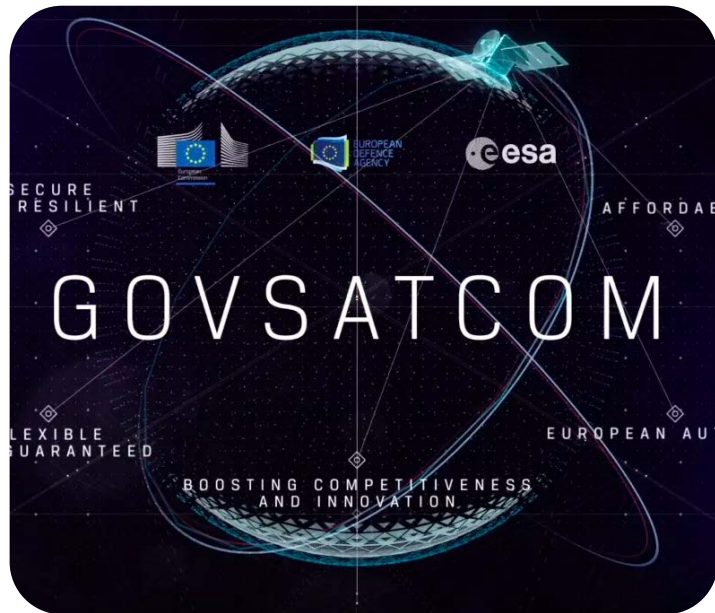


Phase 1: the platform has mainly a demonstrative purpose; it includes various elements, as demonstrations and prototypes

Phase 2-3: the Application platform will be integrated in the I-GSC system and services. It will be able to host Third Party applications (possible integration with EO/NAV application).

Pilot projects for application development can be supported in the framework of ESA/ARTES.

ITAL-GOVSATCOM AS THE ITALIAN CONTRIBUTION TO EU GOVSATCOM



ITAL-GOVSATCOM will represent the Italian asset to the European Govsatcom system, with the appropriate level of security and operated through the national reference industry

VISION ON FUTURE EU GOVSATCOM CAPABILITIES

An European capability for institutional SATCOM services will offer:

- Reliability
- Availability
- Resiliency
- Security
- Synergies between the civil and military domains
- Optimization of financial resources
- Synergies with others EU Space Programs (as Galileo and Copernicus) for integrated applications and services



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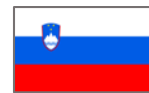
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