

# EU SPACE-BASED **SECURE** CONNECTIVITY SYSTEM

The need for a secure and resilient global connectivity increases with the digitisation of the economy and society, and the increasing geopolitical and cybersecurity threats.



### **INNOVATIVE MULTI-ORBITAL SPACE-BASED**

connectivity system

**RELIABLE, SECURE AND COST-EFFECTIVE** communications services

SPACE ENABLER FOR A DIGITAL AND RESILIENT Europe

#### **KEY OBJECTIVES**

Ensure worldwide access to secure governmental satellite communication services for the protection of critical infrastructures, surveillance, external actions and crisis management.

Allow for the provision of commercial services by the private sector, to enable the availability of high-speed broadband and seamless connectivity throughout Europe, removing dead zones.

#### **MAIN FEATURES**

- Multi-orbital, benefiting and using assets in Europe
- Integrating military needs
- Improving and expanding the capabilities and services of EU Space Programme components
- Governance and eligibility conditions to avoid any dependencies on third parties Expertise of EU industries, including New Space
- Allow connectivity over geographic areas of strategic interest (Africa, Arctic)

#### A RELIABLE, SECURE AND COST EFFECTIVE **GOVERNMENTAL COMMUNICATION SERVICE**



### Connecting key infrastructures

Command and control of smart grids (energy, finance, health, data centres...)

Management of Infrastructures (air, rail, road, traffic management)

Galileo (signal augmentation), Copernicus (data relayer)

Institutional communications (Embassies, EUROPOL,...)

Telemedicine



Crisis Management and external actions

Civil protection

Common Foreign & Security Policy -Common Security & **Defence Policy** 

Humanitarian aid

Maritime emergencies (search and rescue)



Surveillance

Border and remote areas surveillance

Remote Piloted Aircraft systems

Maritime surveillance

> Arctic region coverage

Complement to military missions

#### **MISSIONS/USE CASES**

**SECURE CONNECTIVITY INITIATIVE: MULTI-ORBITAL SPACE-BASED** STATE-OF-THE-ART CONNECTIVITY **SYSTEM** 



#### Allow Mass-market service

Mobile Broadband

Fixed Broadband

Satellite Trunking for B2B services

Satellite access for transportation for ships, airplanes, drones, connected cars

Reinforcement of terrestrial networks (resilience) – as an alternative in cases of disruptive events

Cloud based services

EUROQCI



Encryption capability

Government and institutional users

Data centres

Satellite communication networks

> Terrestrial communication networks

Banking industry

Other industries

#### SPECIAL CHARACTERISTICS

### **SECURITY**

— increased cyber resilience by defending against cyber threats; and integration of the European Quantum Communication Infrastructure (EuroQCI) to enable secure transmission of cryptographic keys.

 development of innovative and disruptive technologies and leveraging of the New Space ecosystem.

## INNOVATION

## **CAPABILITY**

— enhanced capability stemming from multi-orbital services; and complementarity with existing connectivity assets offering redundancy. Also, enhancing the capabilities and services of other Union Space Programme components.

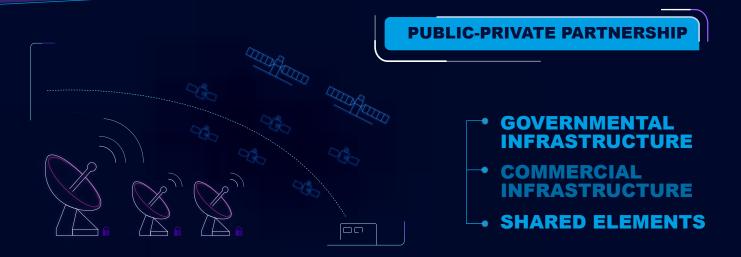
#### SECURE CONNECTIVITY IMPLEMENTATION SCHEDULE

2022 2023 2024 2025 2026 2027 2028 2029

DEVELOPMENT INITIA

**INITIAL SERVICE** 

**FULL SERVICE** 



- **EU BUDGET** from various EU programmes relevant for Secure Connectivity.
- MEMBER STATES either through in-kind contributions and/or their space national agencies.
- **PRIVATE SECTOR**, to leverage the mass-market component (InvestEU Strategic window, other private funding streams and/or in-kind contributions).

The blending of EU funds, Member States funds and private investments will be in the form of a **Public-Private Partnership.** 



