IRIS²: INFRASTRUCTURE FOR RESILIENCE, INTERCONNECTIVITY AND SECURITY BY SATELLITE

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

IRIS² KEY OBJECTIVES

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

Enable the provision of commercial services by the private sector, by allowing 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
- Capacity to host additional non-communication payloads (public/private)
- 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

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

EUROQCI

Encryption capability
- Government and institutional users
- Data centres
- Satellite communication networks
- Banking industry
- Other industries
**SPECIAL CHARACTERISTICS**

--- 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.

--- 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.

**SECURITY**

**INNOVATION**

**CAPABILITY**

--- **EU BUDGET** from various EU programmes relevant for Secure Connectivity.

--- **MEMBER STATES** either through financial and/or in-kind contributions.

--- **ESA CONTRIBUTION** through optional ESA programmes.

--- **PRIVATE SECTOR** to leverage the mass-market component.

The blending of the above funds will be in the form of a **Public-Private Partnership.**

--- **GOVERNMENTAL INFRASTRUCTURE**

--- **SHARED ELEMENTS**

--- **COMMERCIAL INFRASTRUCTURE**

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**PUBLIC-PRIVATE PARTNERSHIP**

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