IRIS²

Regulation 2023/588 is in force since **20 March 2023**

Signature of the Regulation by EP President and Swedish Presidency

IRIS²
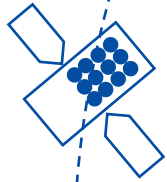## Governance of the Programme
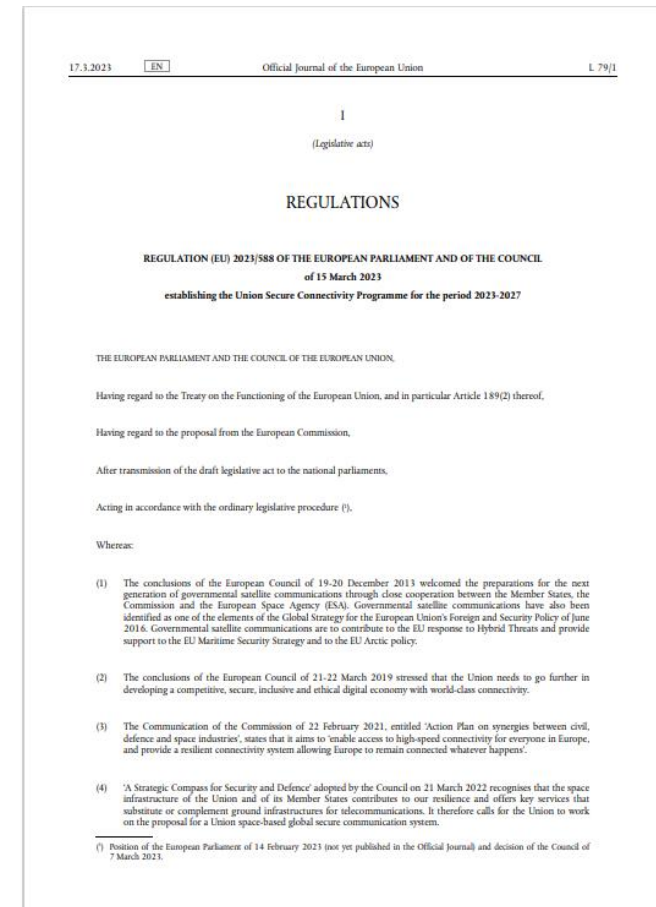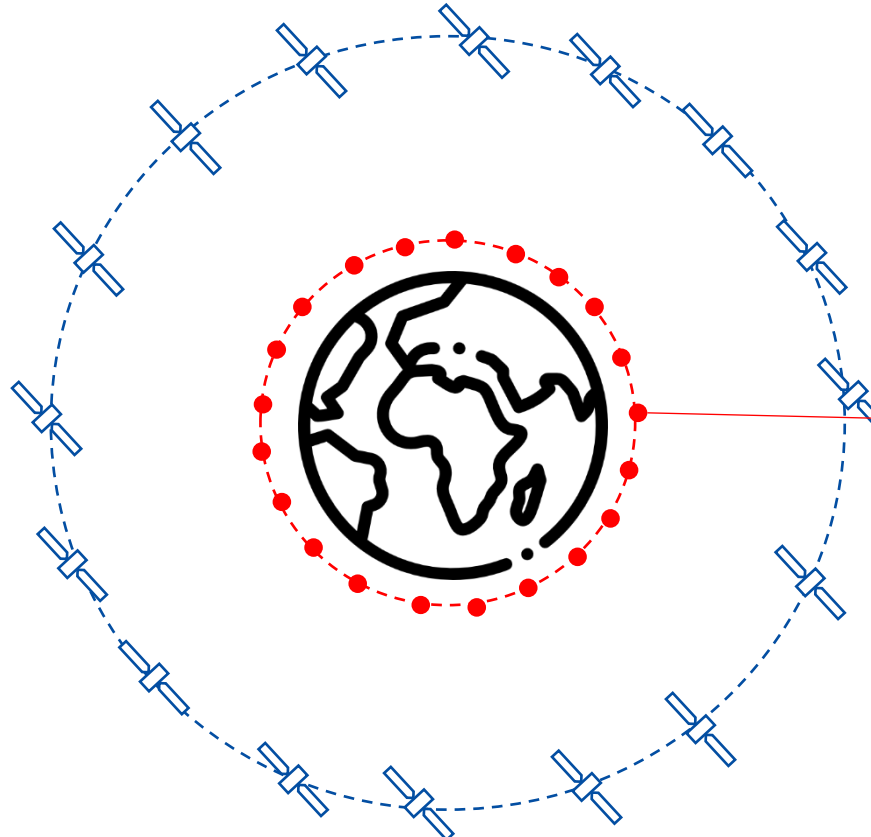
Principles of governance
(Article 24)

European Commission
overall responsibility

Member States

EUSPA
accreditation, operational management, service provision

ESA
supervision of development and validation, EuroQCI

Why IRIS²

IRIS² **complements** existing EU infrastructure

IRIS²

Existing: Medium Earth Orbit
Altitude: 8 000 km
Latency: 125-250 ms

Existing: Geostationary Earth Orbit
Altitude: 36 000 km
Latency: 600-800 ms

Low Earth Orbit
Altitude: 600 - 1 200 km
Latency: 30-50 ms

European Commission

Why IRIS²

IRIS² ensures **sovereignty** and security

Incident technique
sur le satellite KA SAT

Un incident technique a lieu en ce moment, nos équipes sont mobilisées pour rétablir le service dans le meilleurs délais.

SpaceX says Ukraine weaponized Starlink

The Krasukha-4 Jammer is one of Russia's most sophisticated electronic warfare systems. Credit: Vitaly V. Kuzmin

CONNECTING KEY INFRASTRUCTURES

CRISIS MANAGEMENT AND EXTERNAL ACTIONS

SURVEILLANCE

IRIS²
Programme Objectives

Ensure secure, autonomous, high-quality, reliable & cost-effective satellite governmental communication services to government-authorised users

Article 3

Enable commercial services, or services offered to government-authorised users based on commercial infrastructure at market conditions

European Commission

6

IRIS²
Use cases

GOVERNEMENTAL SERVICES

COMMERCIAL SERVICES

CONNECTING KEY INFRASTRUCTURES

- Governmental & Institutional secure communications (Embassies, EUROPOL)
- Management of Infrastructures (air, rail, road, traffic management
- Galileo (augmentation), Copernicus (data relay)
- Command and control of smart grids and M2M (energy, finance, health, data centres)
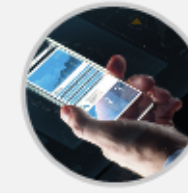
CRISIS MANAGEMENT & EXTERNAL ACTIONS

- Civil protection
- CFSP-CSDP
- 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
- Space surveillance

MASS-MARKET

- Mobile Broadband
- Fixed Broadband
- B2B services
- Satellite access for transportation – for ships, airplanes, drones, connected cars.
- Cloud based services

IRIS²

Four **governmental services** will be offered

Service #1:	Service #2:	Service #3:	Service #4:
Robust Worldwide Low-latency Service	Robust Space Data Relay	Assured Worldwide Low-latency Service	Assured Worldwide Narrowband Service

The detailed service characteristics have been set out in the **Commission Implementing Decision** (EU) 2023/1053 adopted on 30 May 2023.

The mission foresees **worldwide coverage**, including **Africa** and **Arctic region**. The global coverage is aimed by **2027**.

- The above services will complement the services offered under the **GOVSATCOM** space programme component

- Through its **Commercial Services**, IRIS² should support EU partner countries which currently do not meet the digital targets for broadband connectivity, in particular the countries in the African continent, in the Arctic as well as in the Baltic, the Black Sea, Mediterranean regions and the Atlantic.

IRIS² Services

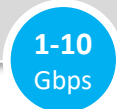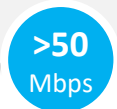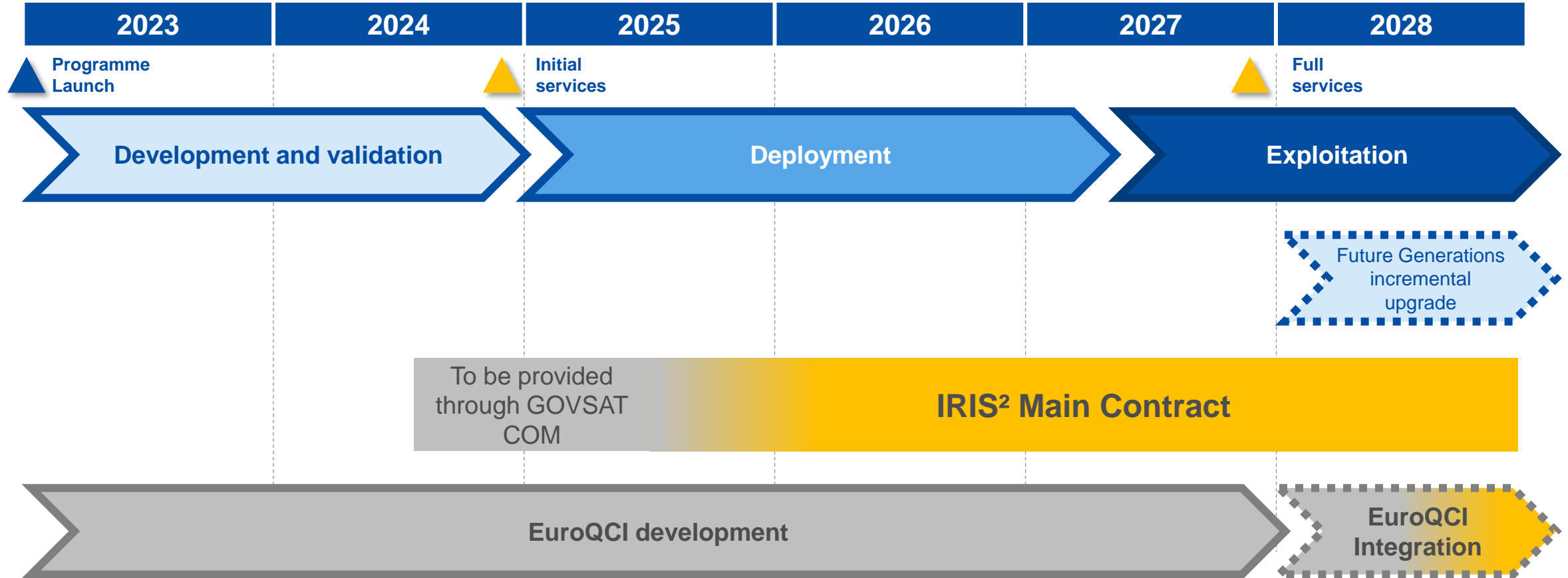| Service	Hardgov		Lightgov	
	Service #1 **Robust Worldwide Low-latency Service**	Service #2 **Robust Space Data Relay**	Service #3 **Assured Worldwide Low-latency Service**	Service #4 **Assured Worldwide Narrowband Service**
Frequency band	• Ka- Gov; others	• Optical		
Data rate	FWD/RTN throughput per user: • Low: <1Mbps • Medium: >=1Mbps and <5Mbps • High: >=5Mbps and <50Mbps • Very High: >=50Mbps	• Depending on the connectivity scenario (combination of user and destination entities): • >=1Gbps and <10Gbps • >=10 Gbps	FWD/RTN throughput per user: • Low: <1Mbps • Medium: >=1Mbps and <5Mbps • High: >=5Mbps and <50Mbps • Very High: >=50Mbps	• FWD/RTN throughput per user: 2 Kbps to 1 Mbps
Geographical coverage	• Global	• Global	• Global	• Global
Availability	• 99.5%		• 99.5%	• 98%
Latency	• Less than 40 ms (one way end-to-end) over the EU continental territory • Less than 80 ms (Internet Round-Trip Time) over the EU continental territory		• Less than 50 ms (one way end-to-end) over the EU continental territory • Less than 100 ms (Internet Round-Trip Time) over the EU continental territory	• Less than 75 ms (one way end-to-end) over the EU continental territory • Less than 150 ms (Internet Round-Trip Time) over the EU continental territory
User terminal	• Fixed/On-the-move/Nomadic	• Satellites of the system implementing the Union Secure Connectivity Programme • Third-party satellites • Aerial platform • Ground station	• Fixed/On-the-move/Nomadic	• Internet Of Things (IOT) user equipment
Robustness and security	• Robust	• Robust	• Assured	• Assured

>50 Mbps **<40 ms** **1-10 Gbps** **>50 Mbps** **<50 ms** **2-10 kbps** **<75 ms**

Commission Implementing Decision (EU) 2023/1053

↓

IRIS² Mission Requirements Document

↓

Industry-led design

Source: Commission Implementing Decision (EU) 2023/1053 (OJ L 141, 31.5.2023, p. 44–48)

European Commission

9

IRIS²

Programme timeline

2023	2024	2025	2026	2027	2028

Programme Launch

Initial services

Full services

Development and validation

Deployment

Exploitation

Future Generations incremental upgrade

To be provided through GOVSAT COM

IRIS² Main Contract

EuroQCI development

EuroQCI Integration

European Commission

IRIS²
Current Status

20 March 2023: Regulation (EU) 2023/588 establishing the **Union Secure Connectivity Programme (IRIS²)**

30 May 2023: Adoption and publication in the Official Journal of the EU of **three Implementing Acts**

- **IRIS² Service Portfolio**: Commission Implementing Decision (EU) 2023/1053 on the operational requirements for governmental services provided under Union Secure Connectivity Programme and its service portfolio
([OJ L 141, 31.5.2023, p. 44–48](#)).

- **GOVSATCOM Service Portfolio**: Commission Implementing Decision (EU) 2023/1054 on the service portfolio for the Governmental Satellite Communications services
([OJ L 141, 31.5.2023, p. 49–56](#));

- **GOVSATCOM Sharing and Prioritisation**: Commission Implementing Decision (EU) 2023/1055 setting out the rules on the sharing and prioritisation of satellite communication capacities, services, and user equipment
([OJ L 141, 31.5.2023, p. 57–66](#));

30 May 2023: Call for tender for a concession contract for the implementation of the EU Secure Connectivity Programme entered the second procurement phase with the **Invitation to submit an Initial Proposal**.

Thank you

In cooperation with

IRIS²

European Commission