



# EU GNSS Interference Task Force (EGITF)

Its role and link to EU's RFI-monitoring plans

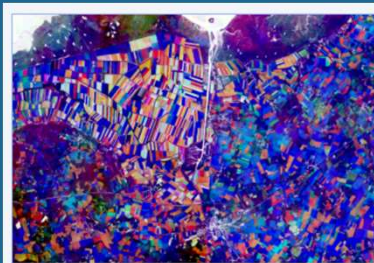


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## The specific objectives of the Task Force are:

- To map, understand and assess interference risks on services and events that may affect and/or affect GNSS signal reception.
- To share best practices and experience with EU countries and beyond aimed at mitigating/preventing GNSS interference.
- To propose recommendations on the way forward at policy, legal and technical levels
- To propose and discuss activities on technologies and methodologies for monitoring the GNSS spectrum, detect the jamming/spoofing and localizing the source of interference.

# The EU Space Programme components



Copernicus

Europe's Eye's on Earth



Galileo

Satellite navigation, made in Europe



EGNOS

Europe's regional satellite navigation system



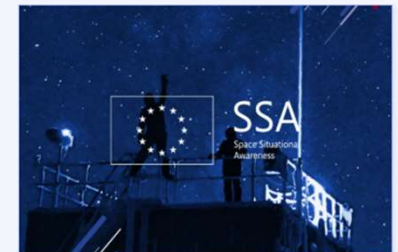
GOVSATCOM

Robust satellite communications for governmental users



IRIS<sup>2</sup>

Infrastructure for Resilience, Interconnectivity and Security by Satellite



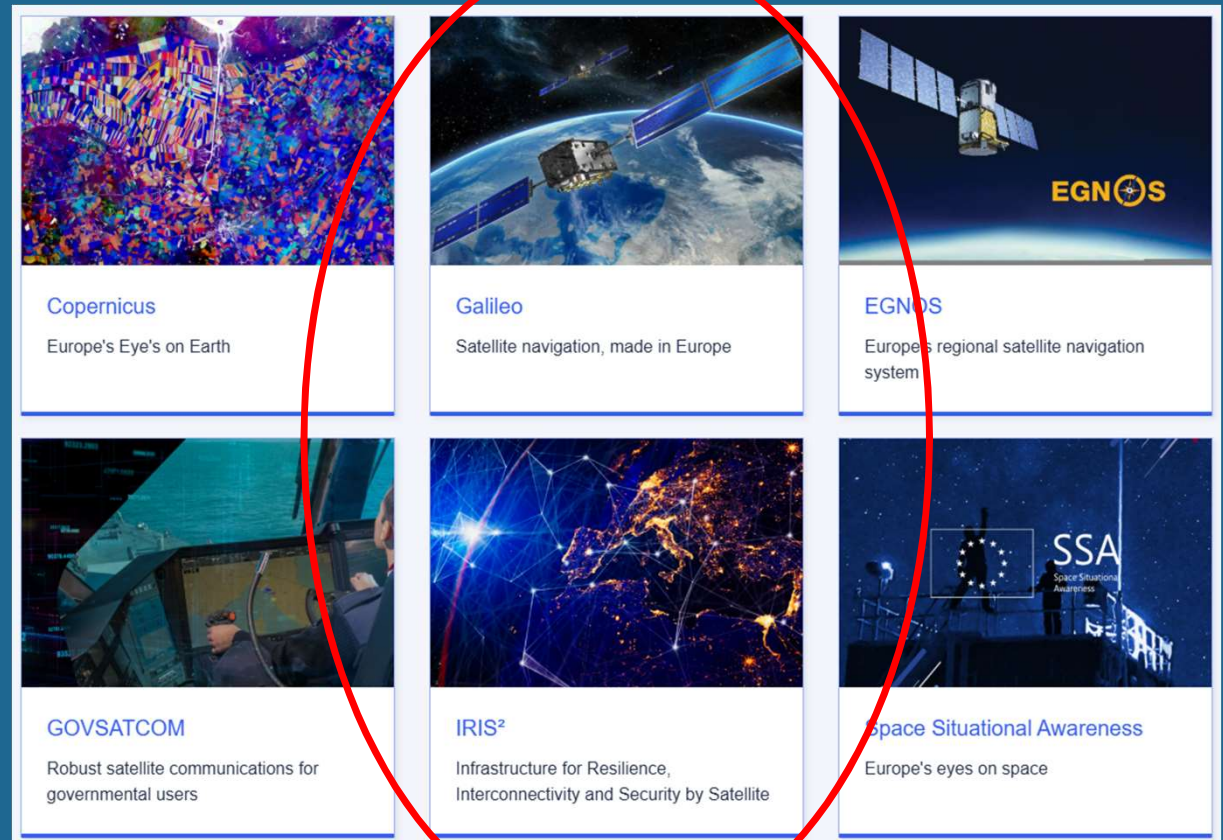
Space Situational Awareness

Europe's eyes on space

Source: [https://defence-industry-space.ec.europa.eu/eu-space\\_en](https://defence-industry-space.ec.europa.eu/eu-space_en)

# The EU Space Programme components

- Especially in focus: Synergies between GNSS (Galileo) and the space based broadband initiative IRIS2.
  - › Resilience through Fused-PNT (positioning, navigation, timing)
  - › RFI-monitoring (radio frequency interference)



Source: [https://defence-industry-space.ec.europa.eu/en-space\\_en](https://defence-industry-space.ec.europa.eu/en-space_en)

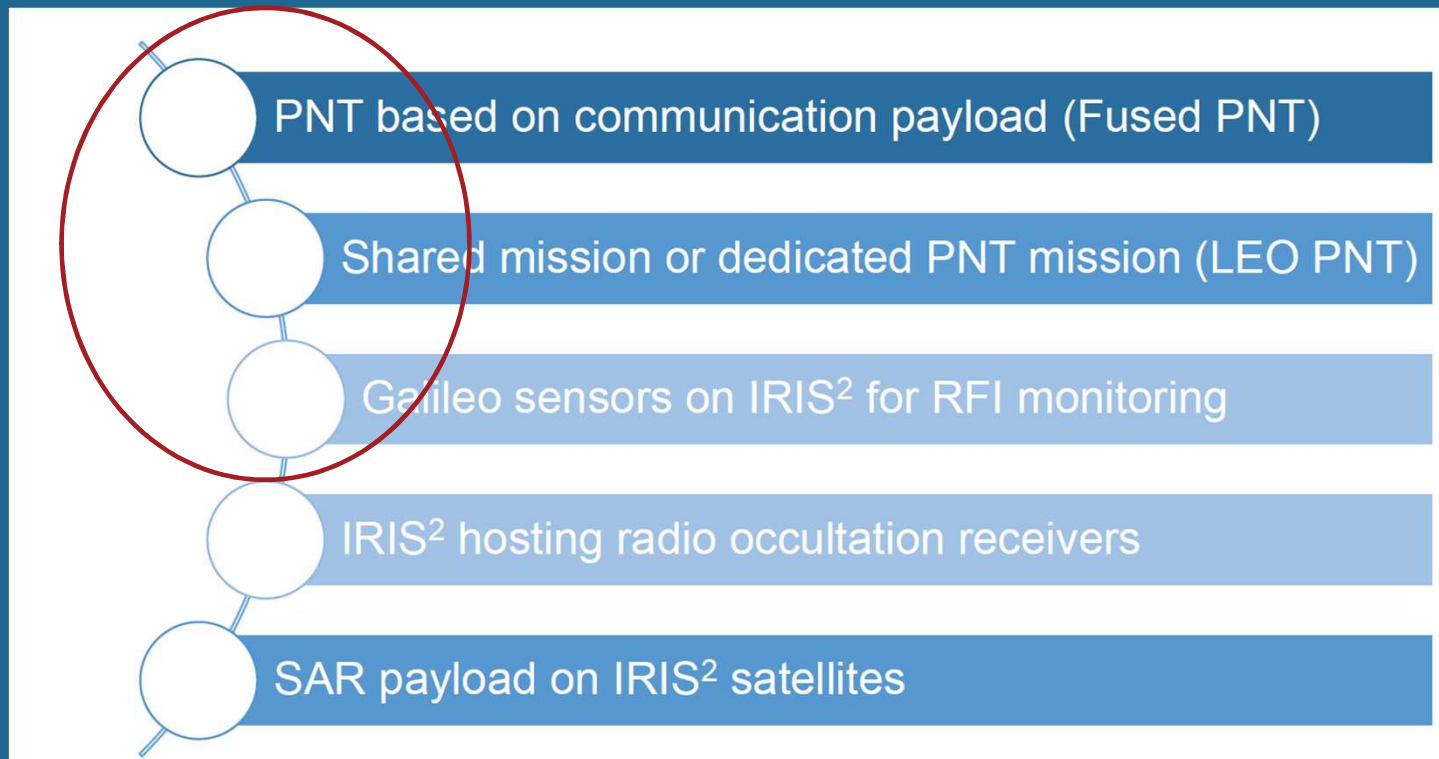


# Briefly on IRIS2

- **264** LEO satellites and **18** MEO in a unified air interface
- **FOC: 2030**
- **2 850** Gbps in total
- **360** Gbps for the HardGov – Surge to **441** Gbps in boosted mode



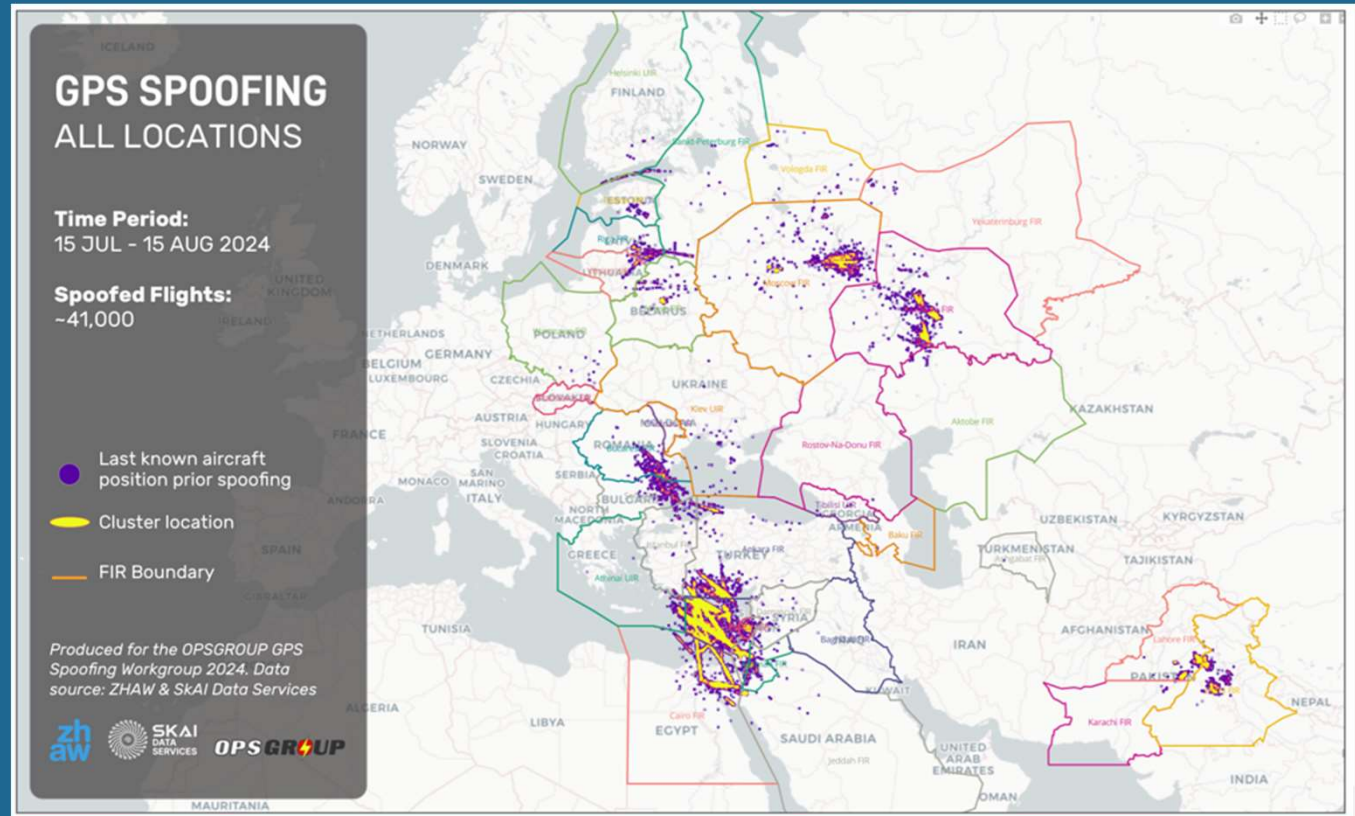
# Potential synergies for more resilient PNT with IRIS2



Source: DEFIS presentation at SPC-GEC #14 03-04 December 2024

# RFI-monitoring

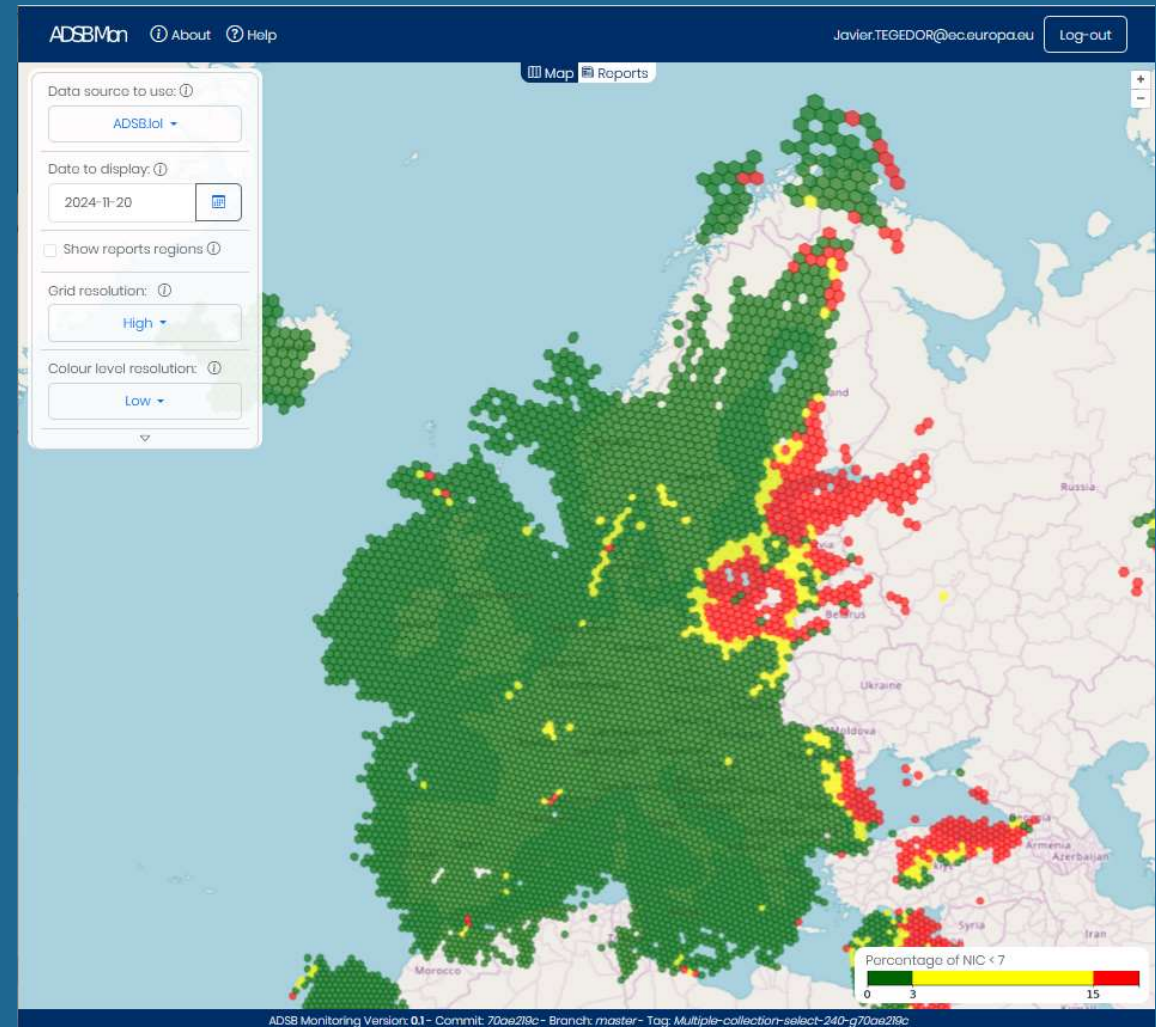
- Spoofing and jamming a problem in aviation leading to potentially dangerous situations
- JRC analyzing daily ADS-B based performance using space-based data
- Since early 2022: notable increase in GNSS jamming and spoofing, particularly in Mediterranean, Black Sea, Middle East, Baltic Sea, Arctic.



Source: EUROCONTROL presentation at EGITF #15 2024

# RFI-monitoring

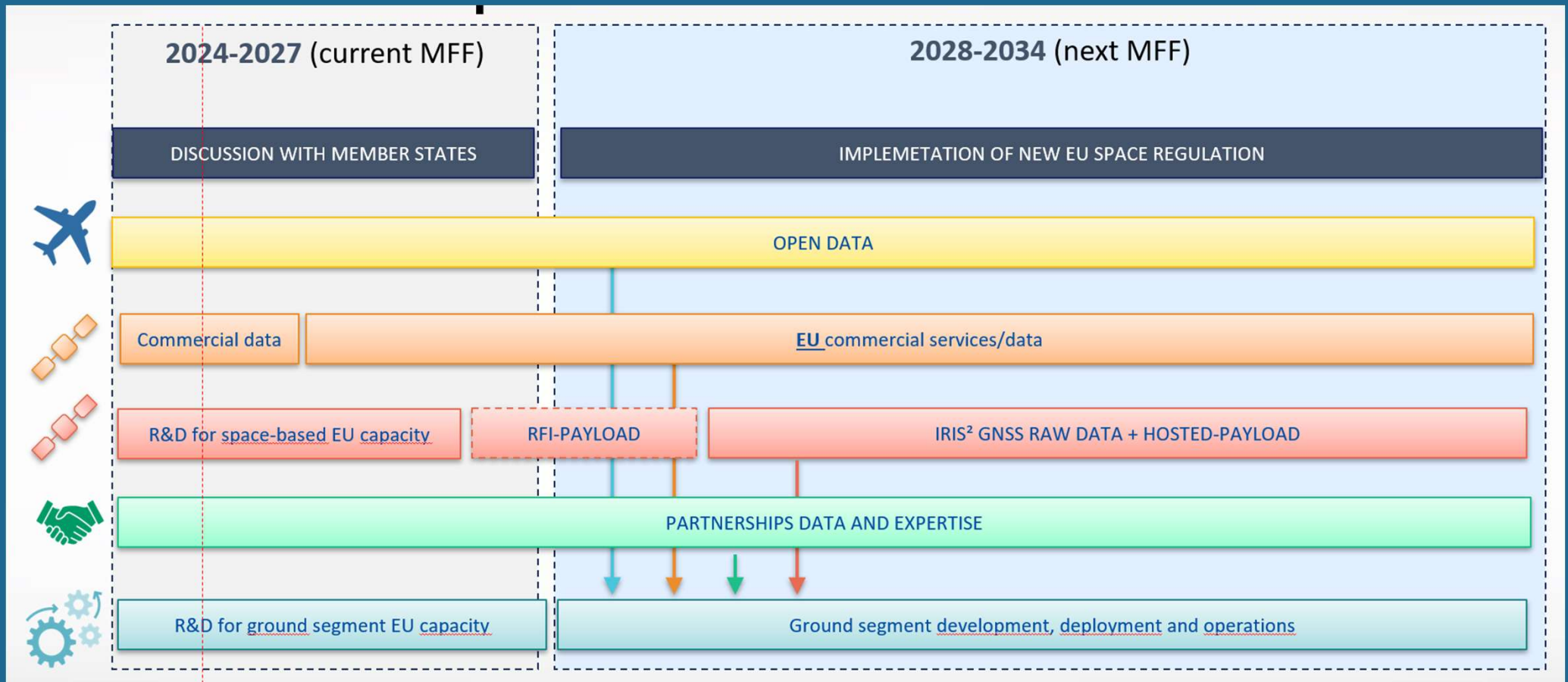
- Currently monitoring the effect rather than the source of interference
- COM proposes to develop a GNSS RFI Monitoring service to ensure the usability of the Galileo and EGNOS signals and services
- An EU paper on governance in discussion with Member States.
- Objective: clearer picture on the possible path forward in Q1 2025



Source: COM presentation at EGITF #15 2024



# RFI-monitoring, Roadmap



Source: COM presentation at EGITF #15 2024

# Roadmap

- EU initial proposal to next Multi Annual Financial Framework (MFF)
- Inputs to ESA CMIN 2025 process
- Programme proposal to be ready by June 2025
- Governance along the lines of Galileo PRS
- Implementation would potentially start during next MFF 2028 - 2035



# Thank you

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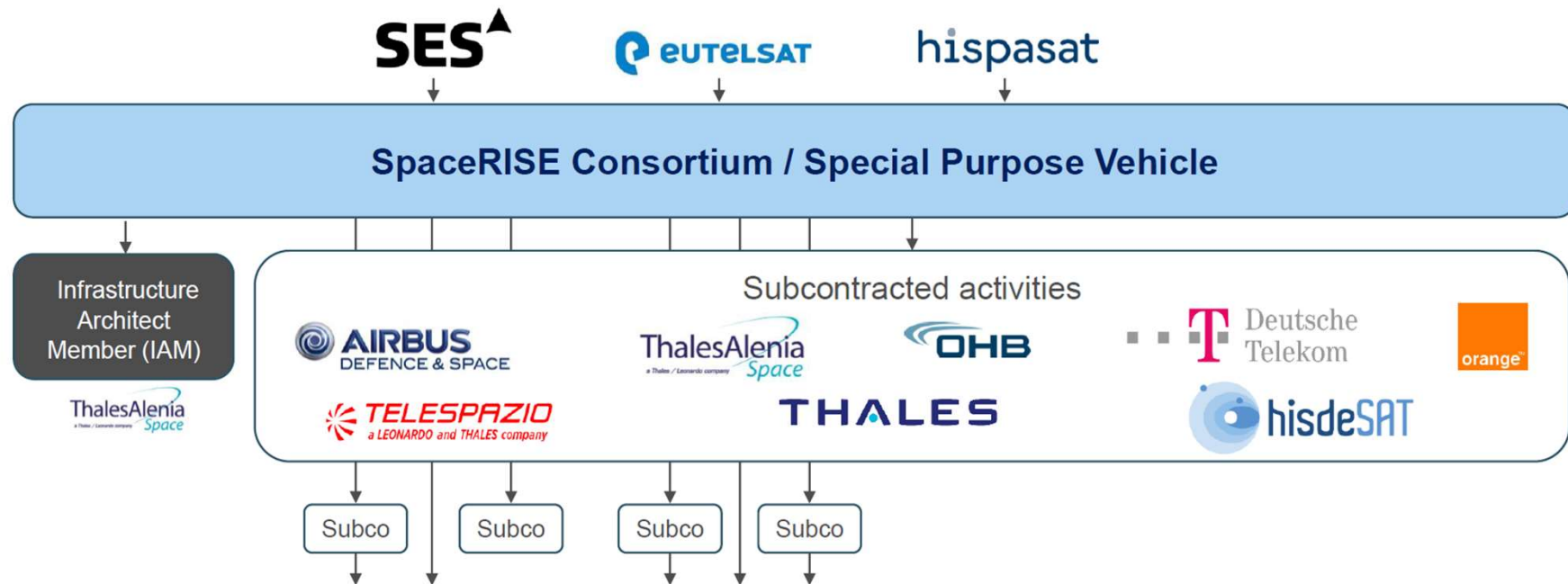
Backup



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# SpaceRISE consortium established



Source: DEFIS presentation at SPC-GEC #14 03-04 December 2024