

FRONT EX INDUSTRY SPACE DAY

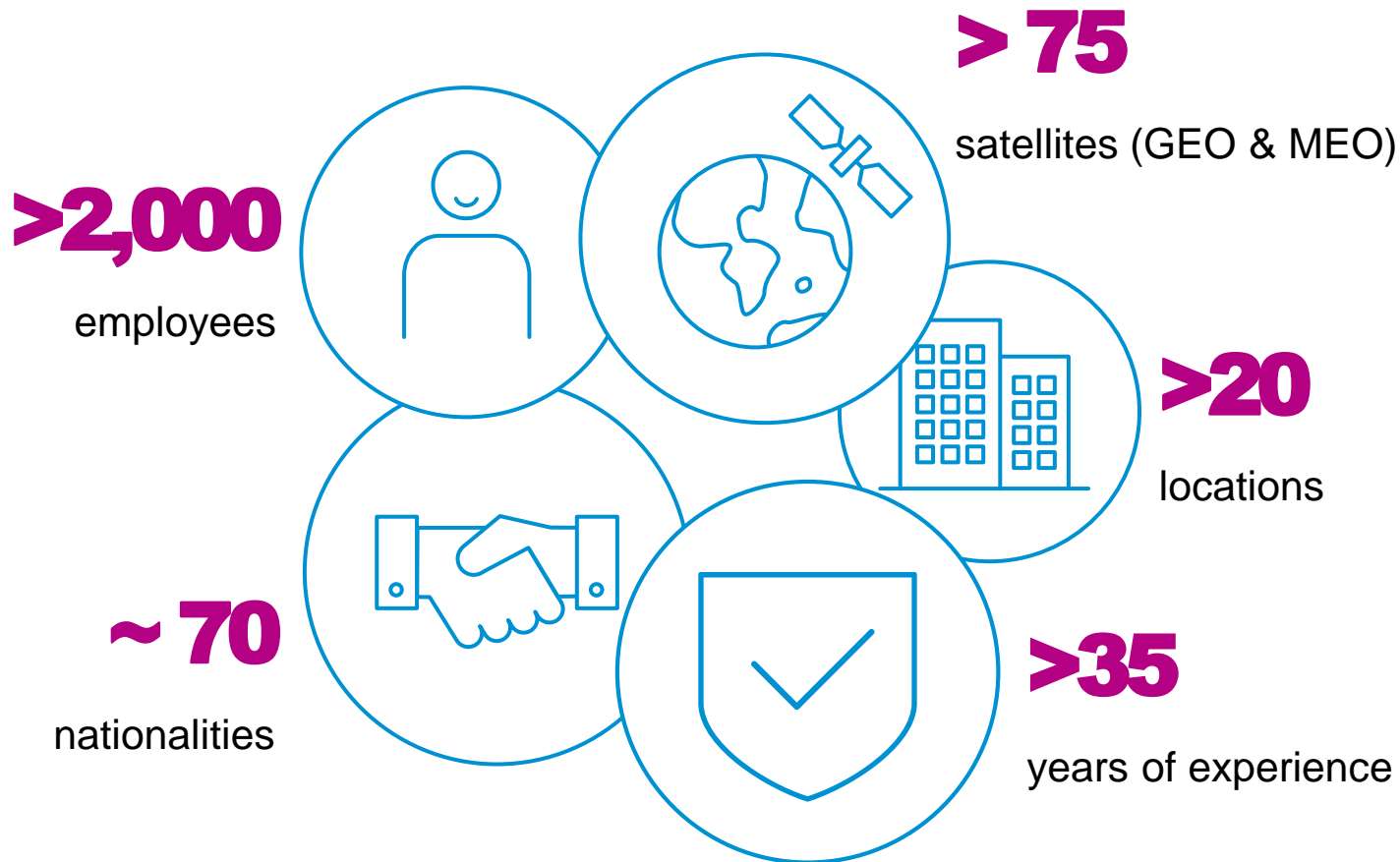
An introduction to the
SES GovSatCom Services

PRESENTED BY
SES TechCom Team

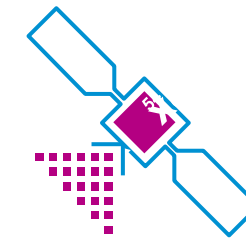
PRESENTED ON
23/11/2023

The Leader in Global Content Connectivity Solutions

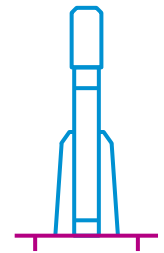
SES in Figures



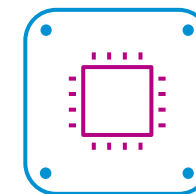
Driving Space Innovation



**ELECTRIC
PROPULSION**



**ROCKET
REUSABILITY**



**GOING
DIGITAL**



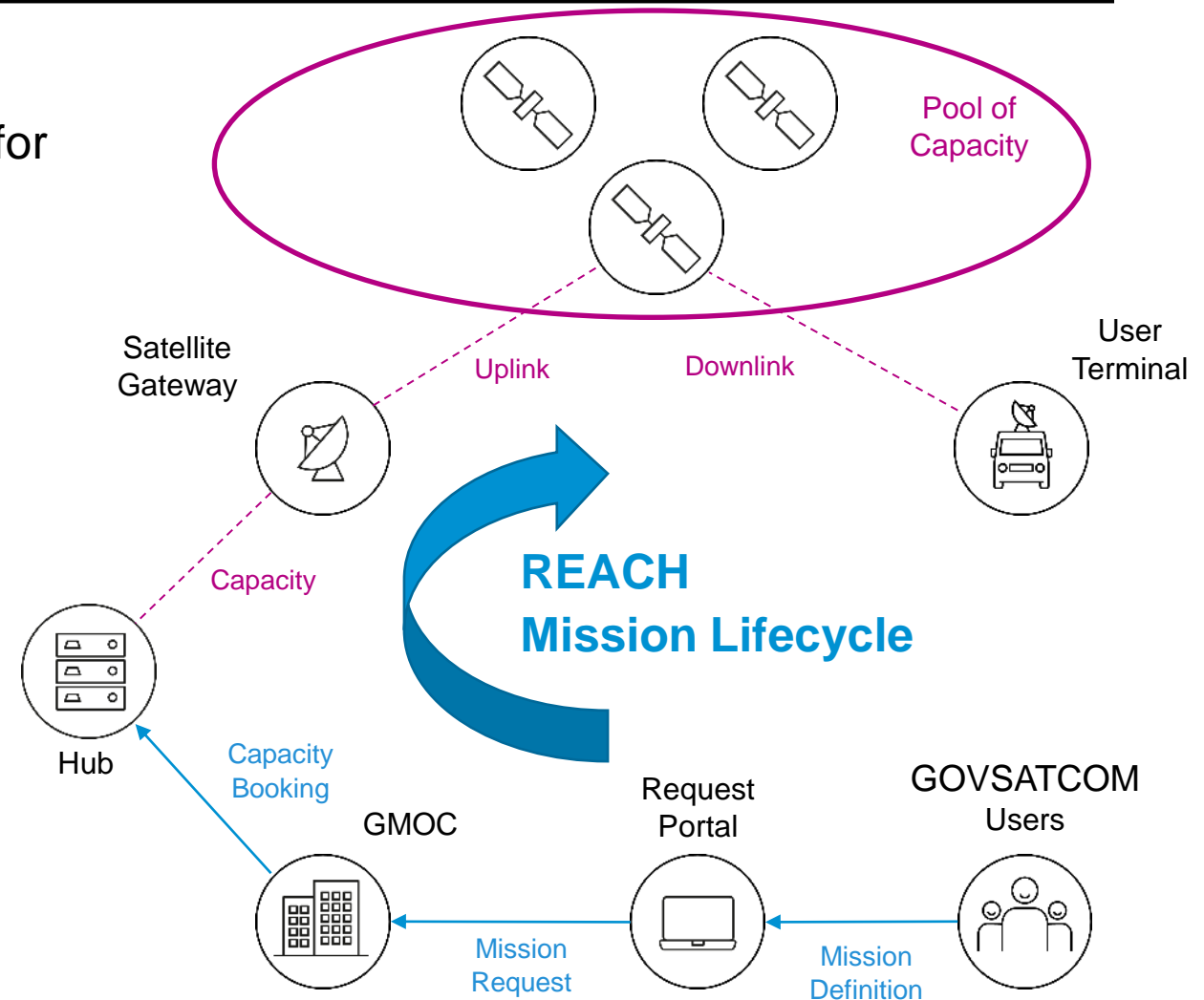
**QUANTUM KEY
DISTRIBUTION**

SES GOVSATCOM Solution: REACH

- ▲ Highly available, Secure, Resilient and Affordable access to Government communications services for Europe
- ▲ High and efficient throughput for new demands

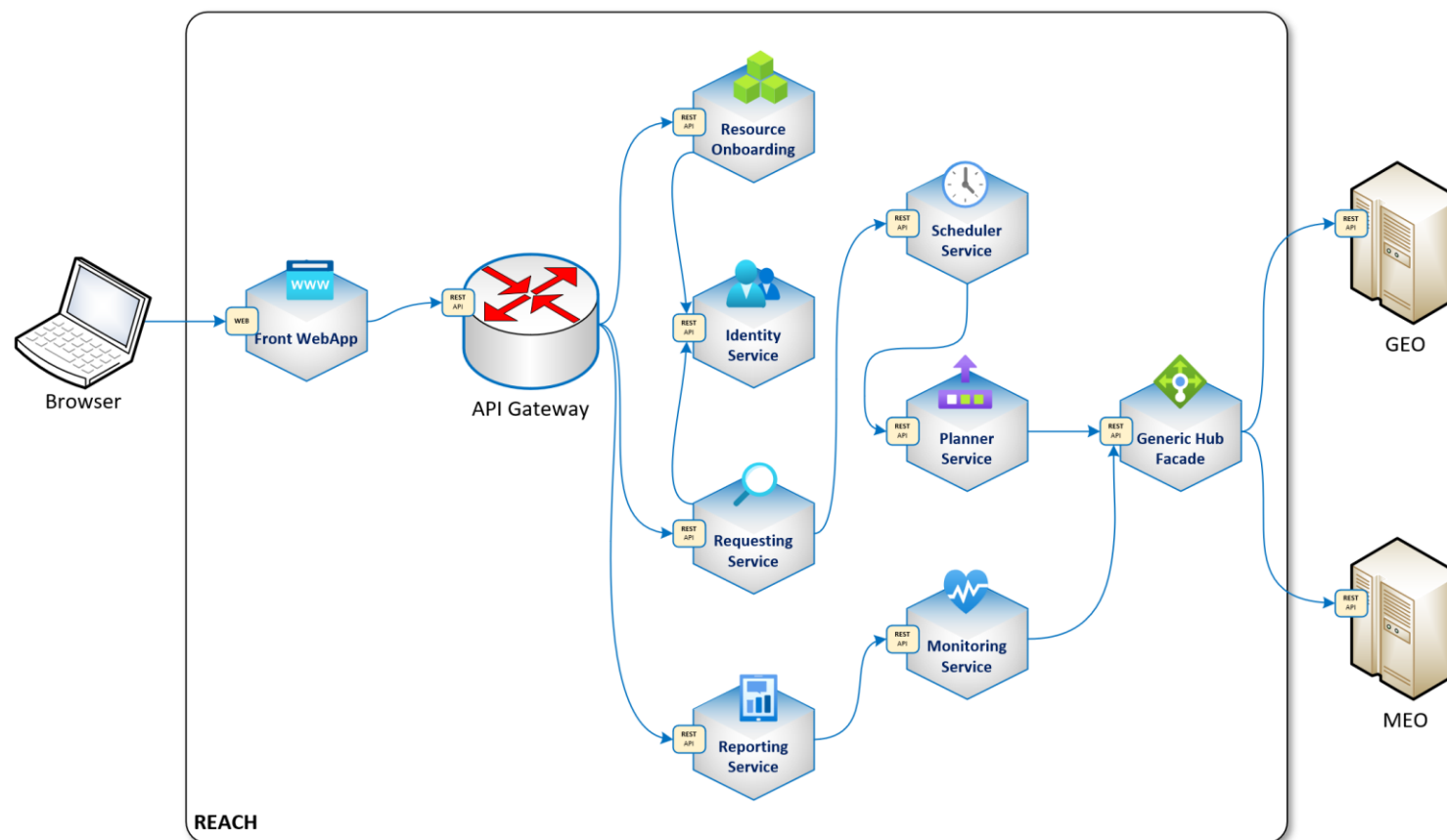
VISION

High availability	through a dedicated pool of shared assets.
Secured	designed and built according to national and EU security legislation.
Resilient	through complementarity of ground, space and terminal assets, roaming capability.
Flexible	platform-based pooling & sharing system and innovative connectivity packages.
Service Oriented	modular range of managed services, customer defined SLAs and KPIs.
Independent	of non-European technology and non-European service providers.
Scalable	from Regional (Europe) to Global.



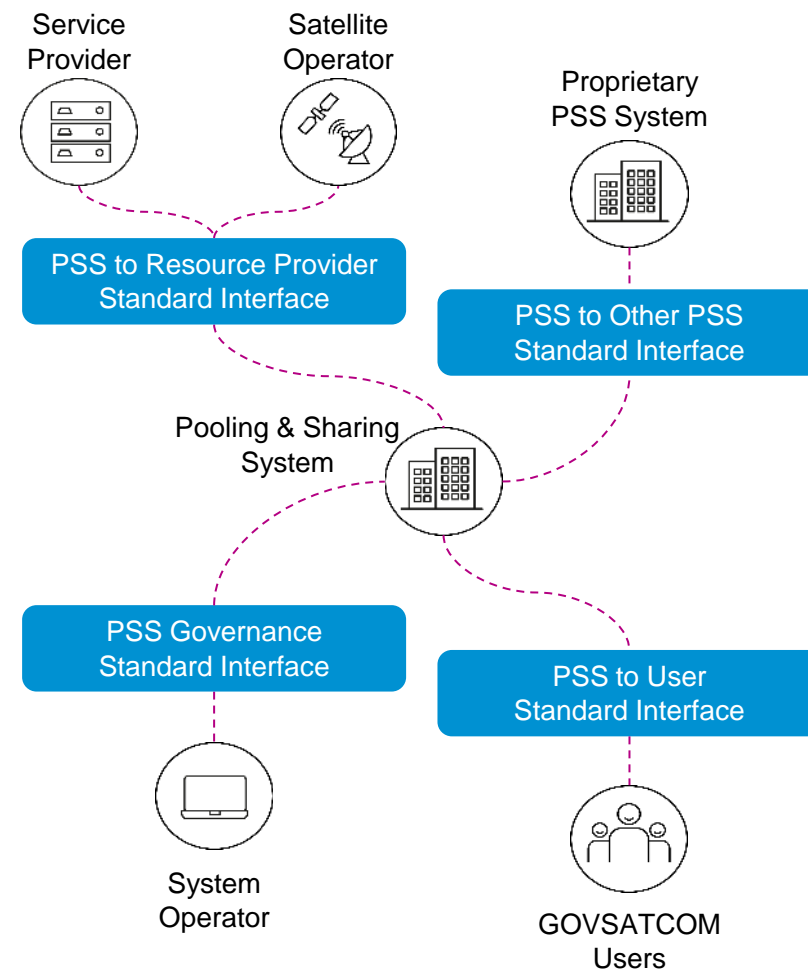
SES GOVSATCOM Solution: REACH

- ▲ Micro-services architecture.
- ▲ On-premise deployment on 1:1 redundant platform for both the GIOC and the VSAT Hub platforms.
- ▲ Initially developed in the frame of ESA's PACIS1 precursor, now called REACH as commercial product.
- ▲ REST APIs aligned with ESA4S P&SID (Pooling & Sharing Interface Definition).



Pooling and Sharing Interfaces Definitions (P&S ID)

- ▲ Develop a set of common standardised PSS-solution agnostic interfaces, targeting a near to market implementation acceptable by many commercial operators, service providers and PSS solution providers.
- ▲ Allowing the interoperability between individual systems and with other operators.
- ▲ An opportunity for European satellite operators and service providers to combine forces in a coordinated way.
- ▲ Permitting a natural evolution of the platforms into an appealing ecosystem that allow other operators to join seamlessly.
- ▲ Resulting in a probable defragmentation of the market.



MEO Extension

- ▲ Provision of GEO and/or MEO Satellite Capacity, IP and internet connectivity between a users' VSAT and the SES network at the gateway along with the ability to switch between these orbits:
 - Dedicated Satellite Capacity MEO and/or GEO
 - Managed Services MEO, MEO + GEO
 - Asymmetrical or Symmetrical Data Rates
 - Ability to Modify Active and Future Missions/Services
 - Start/Stop(Pause) Active missions
 - Cancel/Extend Active Missions (Extension depends on available capacity)
 - Automatic Interference Mitigation
 - Managed SD-WAN/WIFI
 - MEO + GEO Satellite services with automatic or manual switching
 - MEO High Data Rate (up to 200Mbps up and 600 Mbps down)/ Low Latency

