



Digital European Sky Industrial Research IR 02 CNS Enhanced Capabilities (WA3-2) SPESAR project (ex POLARIS name)

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Managing increasing air traffic complexity while preparing the future for safer and greener skies



**GROWING AIR TRAFFIC VOLUME
& AIRSPACE DENSITY**



LACK OF AIRSPACE COVERAGE
OCEANIC & NON GROUND EQUIPPED AREAS



**SURVEILLANCE INFRASTRUCTURE
RATIONALIZATION**



**HIGH SAFETY
& SECURITY STANDARDS**



EXPLOSION OF CYBER THREATS
JAMMING & SPOOFING



TRAJECTORY-BASED OPERATIONS



SUSTAINABILITY

Satellite-based ATC surveillance

An opportunity to build a new European asset serving ANSP around the world optimizing costs & performance



Enhance Performance & Safety

Fusion of terrestrial & satellite surveillance data
Reduce AC separation
Long range traffic visibility & anticipation



Extend Coverage

From low to high density airspace
From oceanic to continental area
Towards a seamless national/regional coverage



Increase Resilience

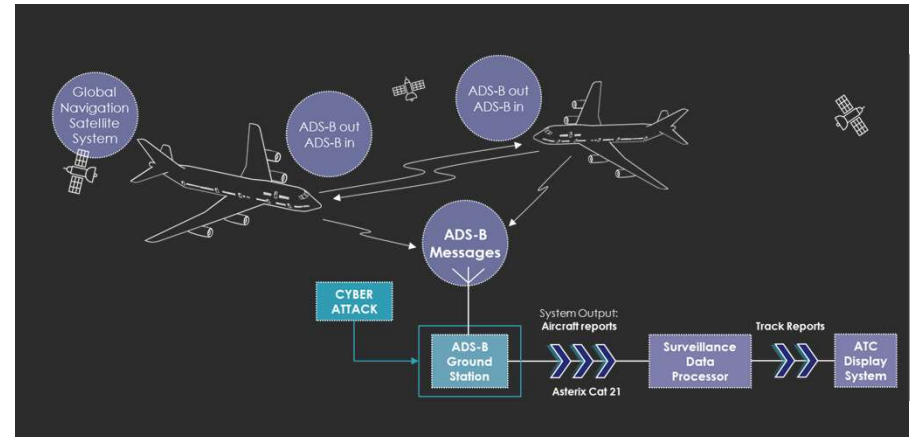
Resilience to cyber threats and to GNSS RF interference (jamming & spoofing)



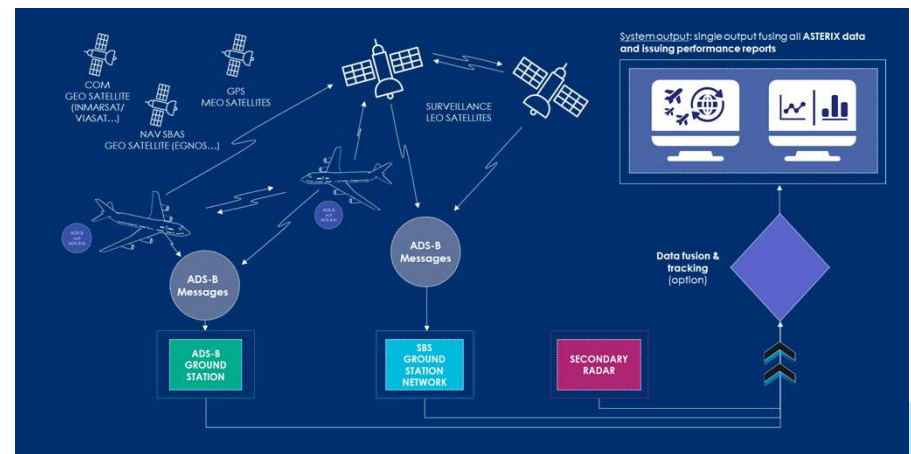
Optimize Infrastructure Costs

Ground-based infrastructure rationalization
Total cost of ownership

Before: only ground infrastructures and maintenance services



Tomorrow: global surveillance data as a service to ANSPs



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Partnership – 18 participants



INDUSTRIAL CORE TEAM : BENEFICIARIES



ICT PARTNERS: BENEFICIARIES



ANSPs: BENEFICIARIES



ANSPs: ASSOCIATED PARTNERS

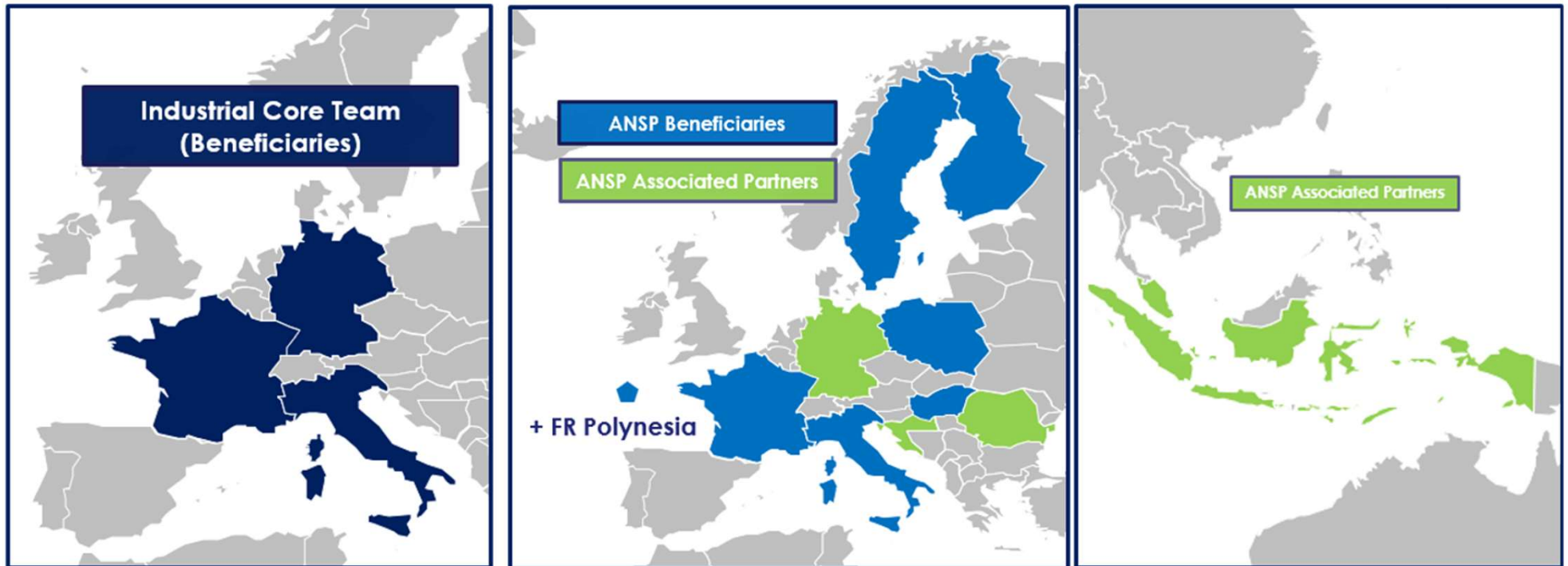


INSTITUTIONS: EXTERNAL ADVISORY BOARD

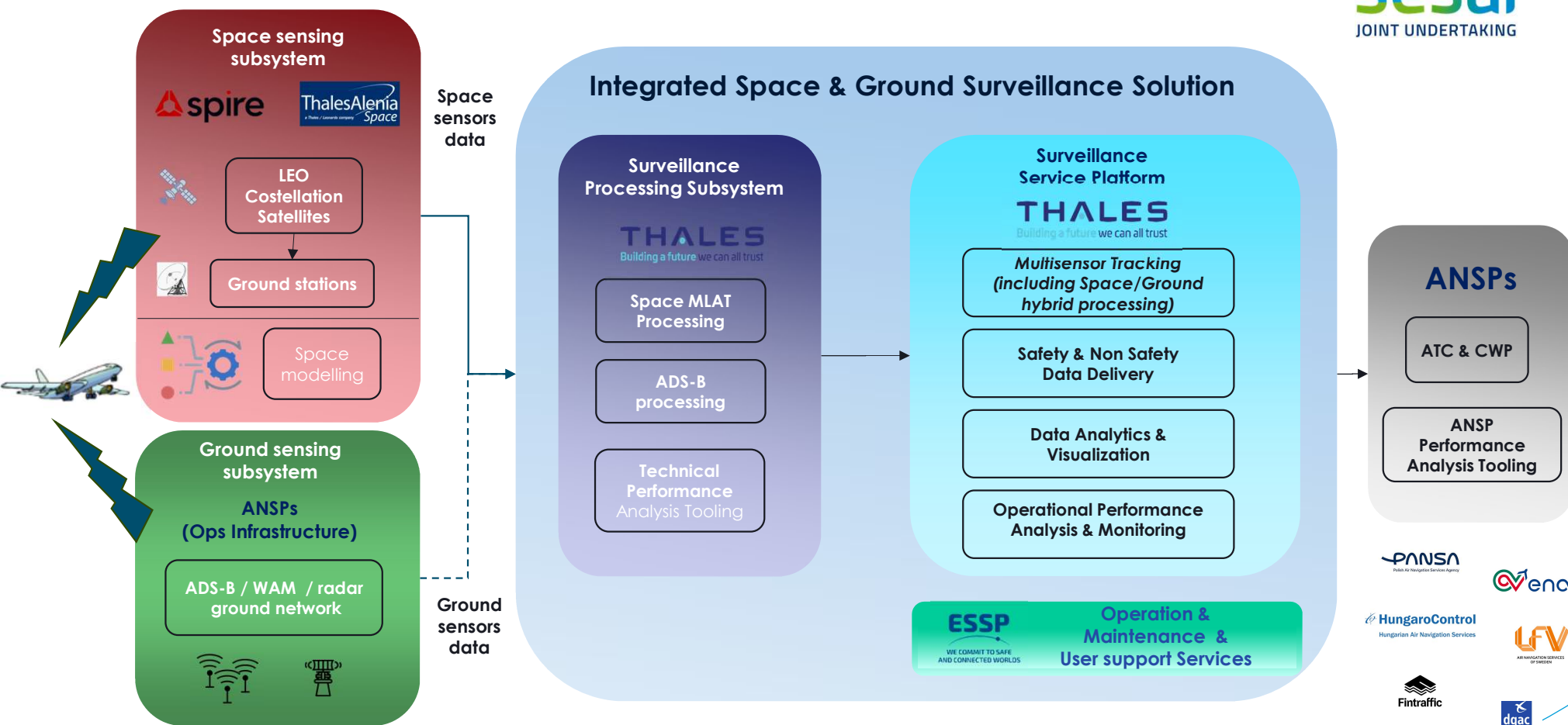


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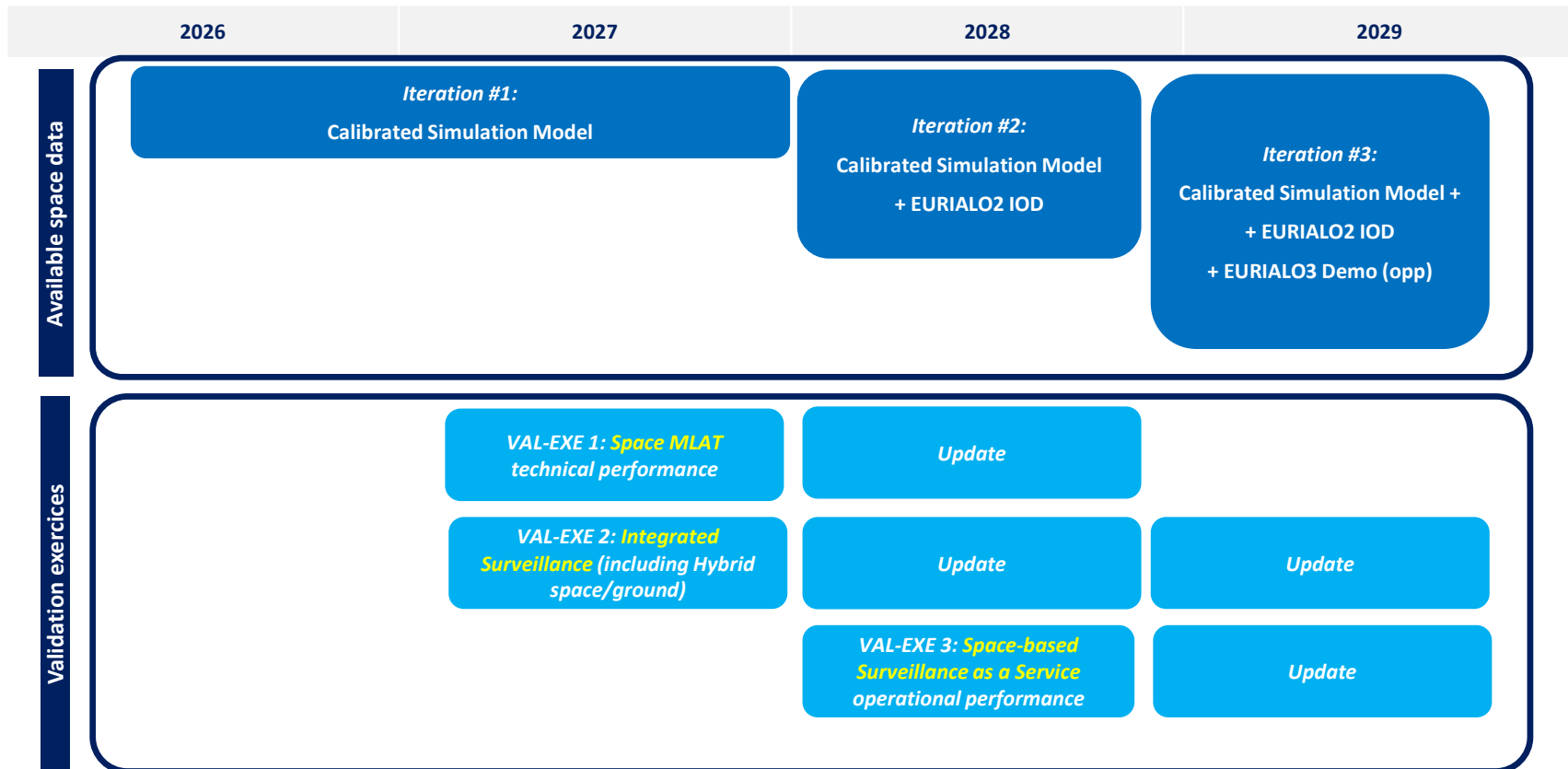


Integrated Space & Ground Surveillance as a Service



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Validation Strategy



Thank you!

SUPPORTED BY
sesar
JOINT UNDERTAKING



Co-funded by the
European Union