



**Xavier Pons**

6G NTN<sup>2</sup> NEXUS – Technical Manager

Airbus Defence and Space



**6GSNS**



# Project Facts



## Call:

- JU-SNS-2025-01-STREAM-B-03-01

## Budget:

- 8 Meuro

## Kick-off:

- September/October 2026

## Duration:

- 3 years

## Coordinator:

- Alessandro Vanelli-Coralli, University of Bologna

## Technical Managers:

- Nicolas Chuberre, Thales Alenia Space
- Xavier Pons, Airbus Defence and Space

## Consortium

- 27 Partners

# The consortium



# Scope



The **6G-NTN<sup>2</sup> NEXUS** project has the ambition to **research, design, assess, and demonstrate novel system-level techniques and reinforced TN-NTN integration** for the 6G 3GPP NTN standard.

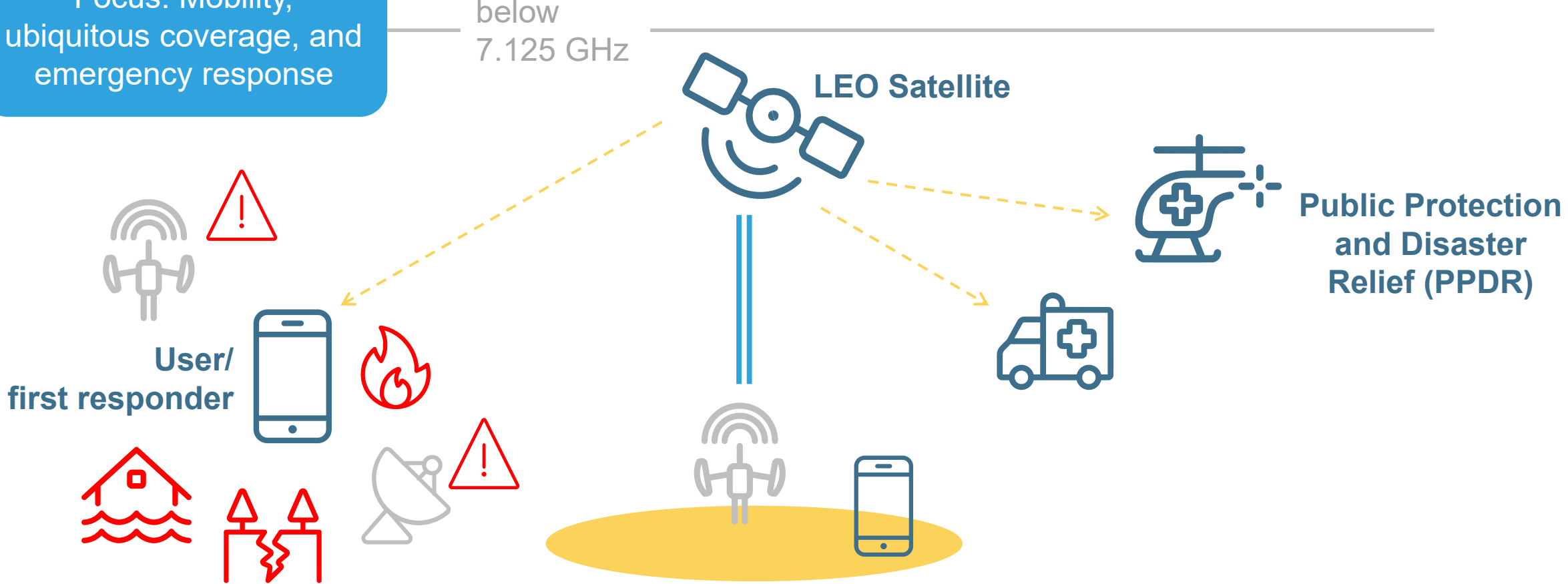
**6G-NTN<sup>2</sup> NEXUS** will ensure that the 6G developed technology framework meets the **IMT-2030 requirements of the satellite part**, currently being defined in ITU-R WP4B

# Scenario 1:

# Direct-to-Device (D2D) & Public Safety

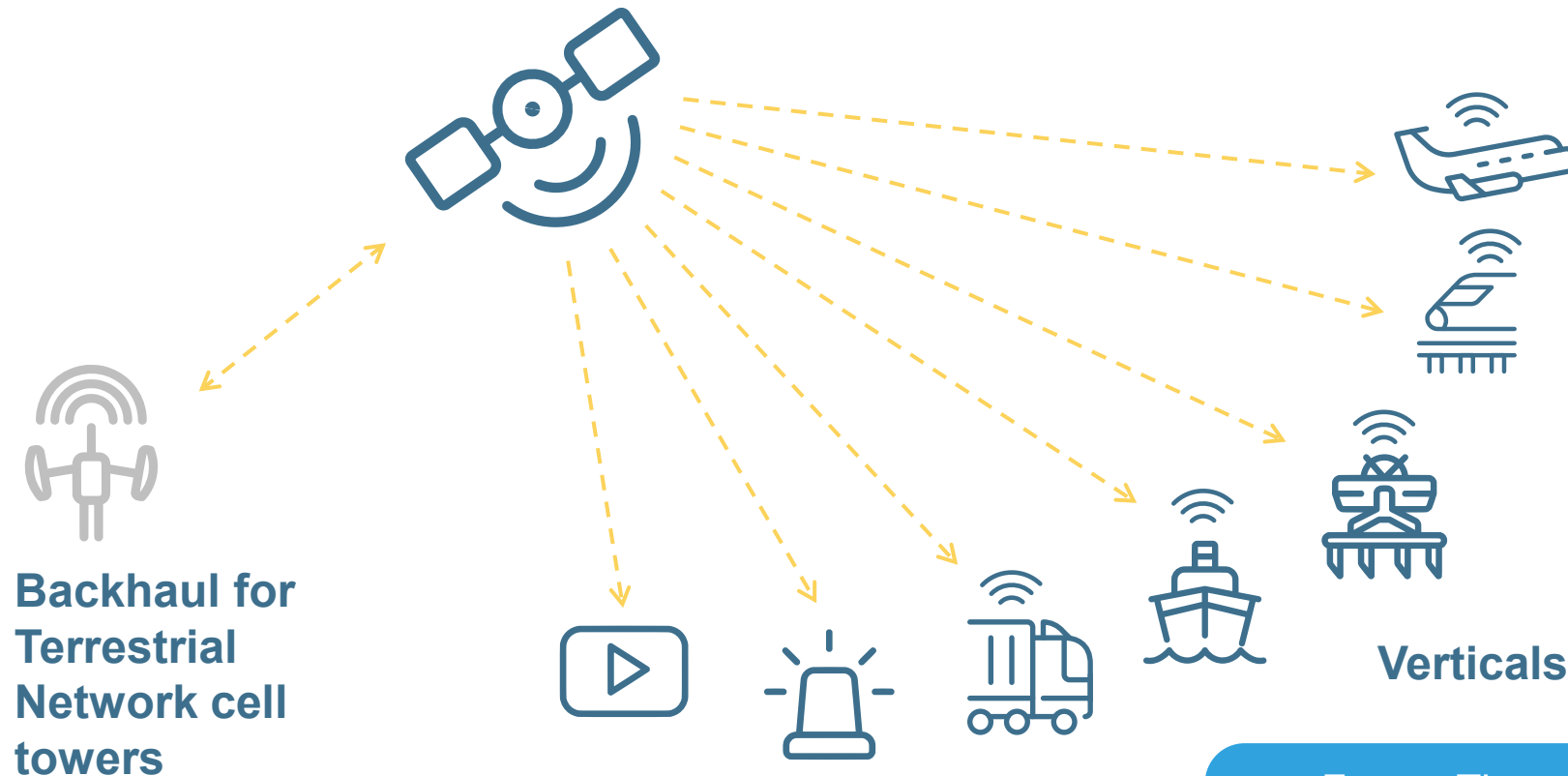
Focus: Mobility, ubiquitous coverage, and emergency response

below 7.125 GHz



## Scenario 2:

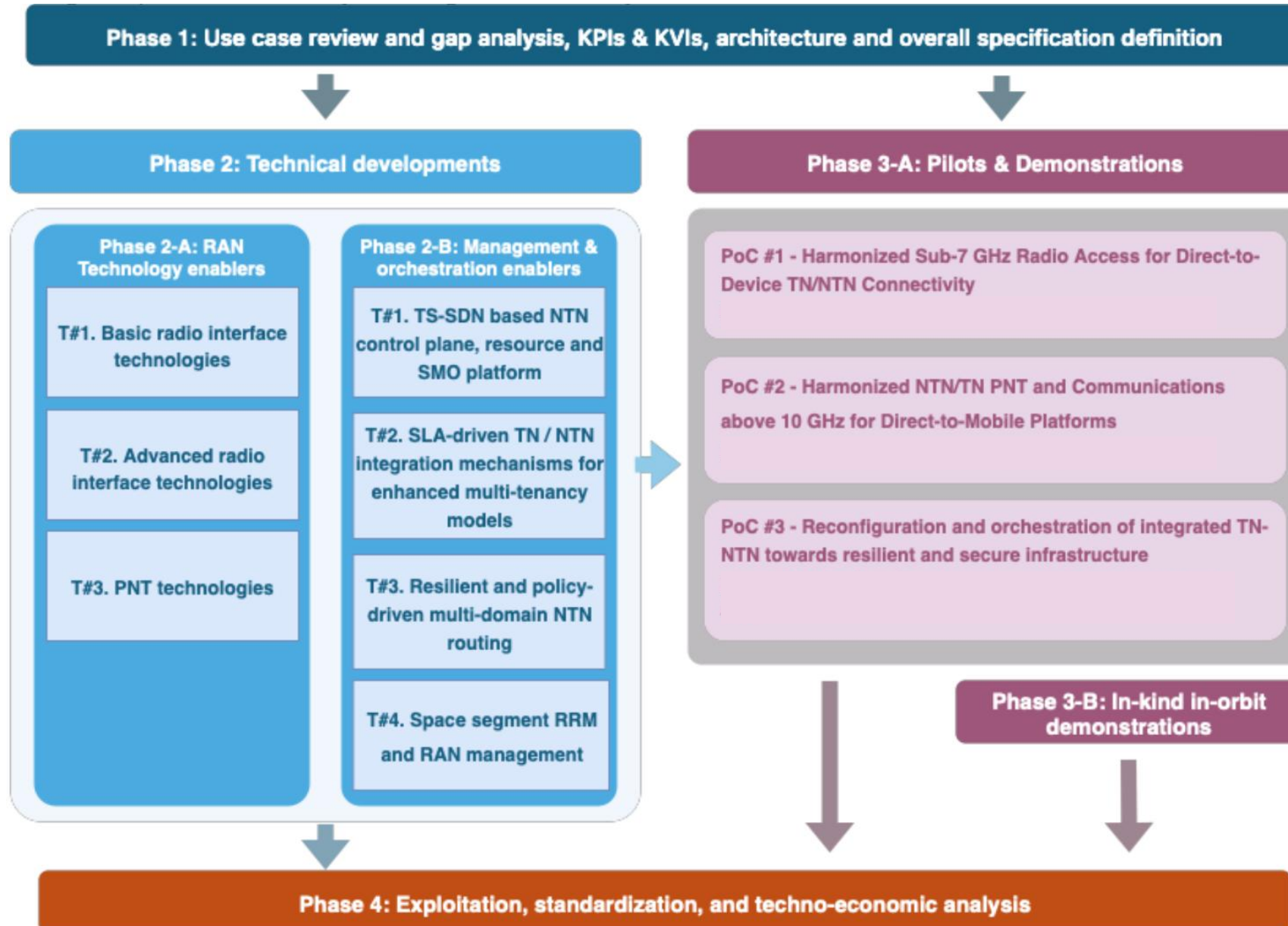
# High capacity Vertical Markets



above  
10 GHz

Focus: Throughput,  
industrial automation,  
transport, entertainment,  
public safety

# 4 Phases Approach



## Phase 3A – Pilots & Demonstrations

PoC#1 Harmonized sub-7GHz Radio Access for D2D  
TN-NTN connectivity

PoC#2 Harmonized TN-NTN PNT and communications  
above 10 GHz for Direct to Mobile platforms

PoC#3 Reconfiguration and orchestration of TN-NTN  
towards resilient and secure infrastructure

Phase 3B - In-kind in-orbit demonstrations



**6GNTN<sup>2</sup>**  
N E X U S



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