



GOF USPACE validation project at a glance

Flight Information Management System (FIMS), based on SWIM principles



- ⇒ Integration of UTM and ATM systems
- ⇒ Cross-agency / country drone (UAV) information management system
- ⇒ Accessibility of a Common operational picture
- ⇒ Enable Joint Operations / authority collaboration
- ⇒ 19 partners (ANSPs, USPs, Operators, Infrastruct.)

Large scale demonstration

MEMBER OF
SESAR
JOINT UNDERTAKING

U-space



UAV use-case demonstrations



Urban drone fleet ops in Helsinki with Police intervention



Model flyers, general aviation and drones sharing same airspace



Maritime SAR exercise with helicopters in Gulf of Finland



International parcel delivery between Finland and Estonia



Urban drone fleet ops in Tallinn in controlled airspace



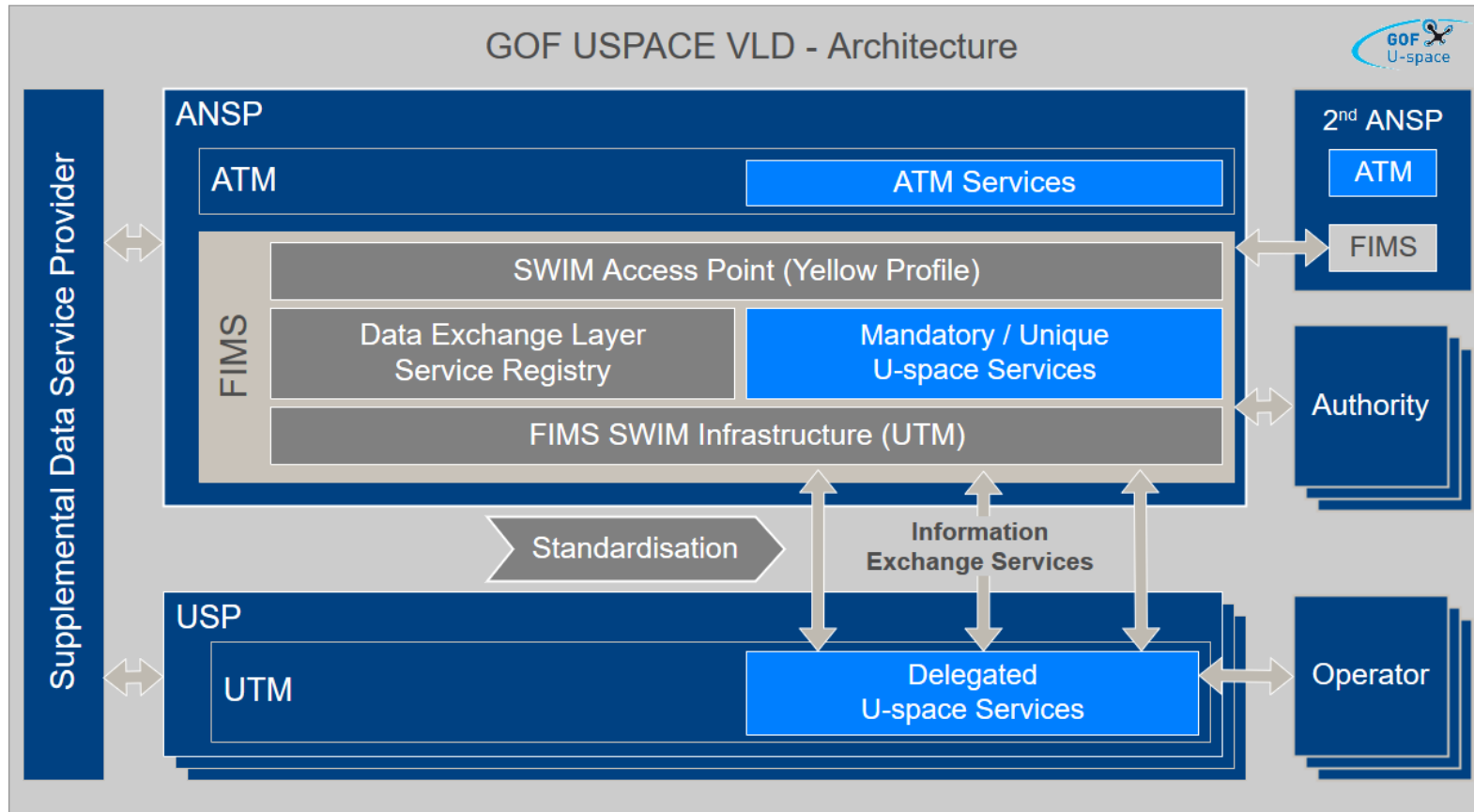
100km+ inspection flights in forestry



Urban Air Mobility flight at Helsinki-Vantaa airport



Tangible results for organisations:



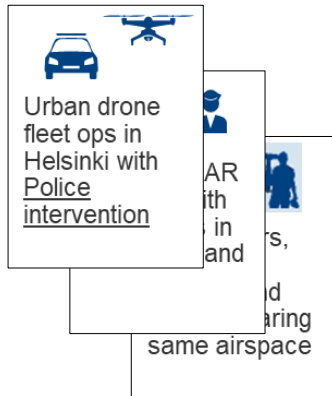
GOF High Level
Architecture – strong &
flexible



Tangible results for standardisation

Output-driven objectives

Advanced use cases shaped requirements



1. Common Understanding

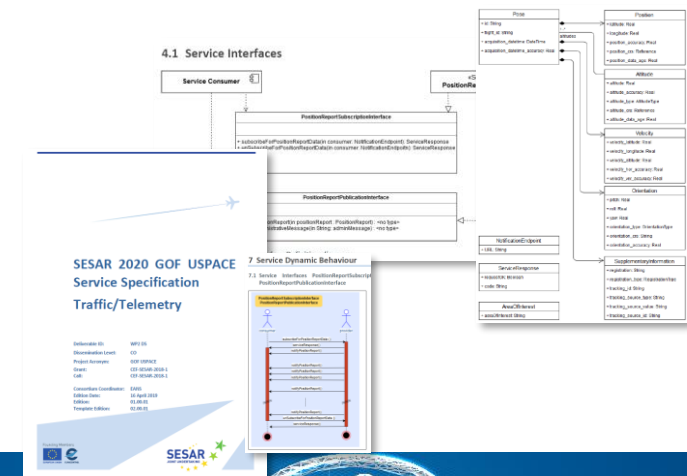
- Analyse Data Flow
- Identify **Inform. Exchange Services**
- Describe (without technology)
 - Context
 - Model
 - Interface
 - Behaviour

2. Technical Interfaces & Integration

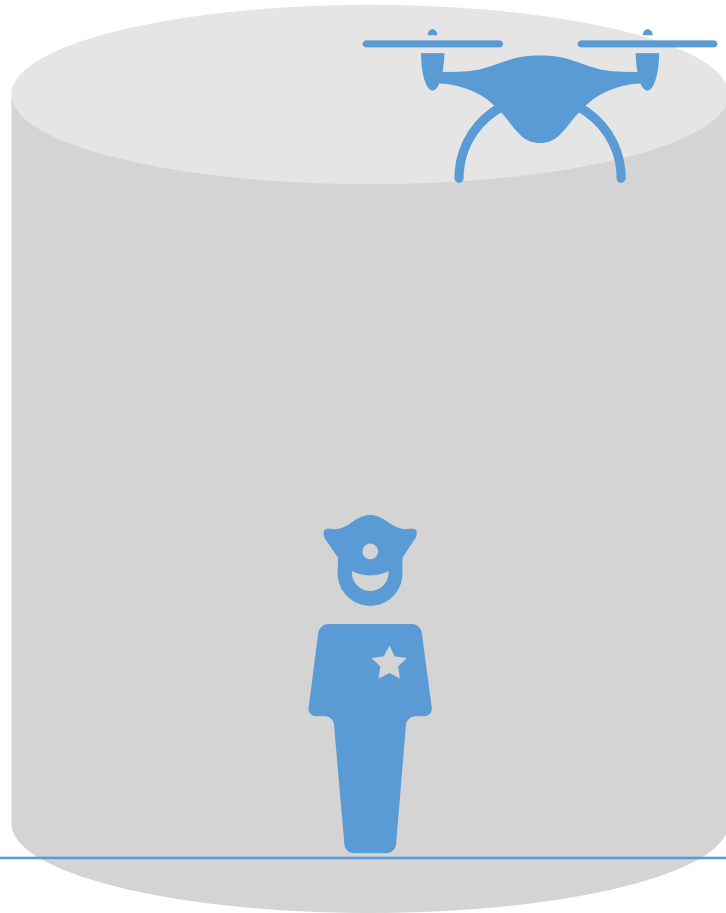
- Map existing technical interfaces
- Test integration

Service Specifications delivered for:

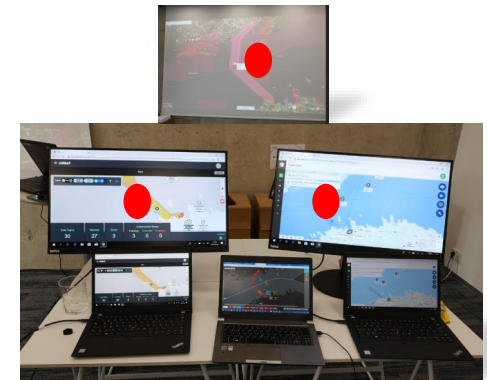
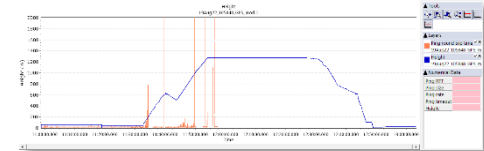
- Telemetry
- Flight plans
- AIM/Geofences
- Alerts
- Registration



Tangible for drone operators



- Dynamic geofencing demonstrated
 - Without pilot interference
 - Action taken within seconds
- Common situational display achieved
 - ATM and UTM data sharing
- Flight Plans shared
 - Created by one partner
 - approved by a different partner
 - In-flight FPL changes
- Context information available near realtime
- Progress on mobile network usage



Tangible results to move forward



Results for SESAR project partners



This U-space project has received funding from the SESAR Joint Undertaking under the European Union's Connection Europe Facility (CEF) programme under grant agreement SJU/LC/343-CTR





Thank you!

Thomas Lutz (Frequentis AG)
for
GOF partners



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