



U-space webinar

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Why webinars?

- Stay connected with the stakeholder community
- Share results of research and innovation
- Make use of content intended for WAC 2020
- 3 sessions
 - Session 1: 28 April, 10:00
 - Session 2: 28 April, 14:00
 - Session 3: 30 April, 10:00



Session 1: U-space from concept to reality

- 10:10 U-space concept of operations (CORUS)**
Andrew Hately, Eurocontrol
- 10:20 Putting U-space services to the test in Denmark, France and The Netherlands (PODIUM)**
Anastasiia Sobchenko, Eurocontrol
- 10:30 A Spanish view of U-space service provision, technologies and services (IMPETUS/TERRA/SAFEDRONE/DOMUS)**
Pablo Sanchez-Escalonilla, CRIDA
- 10:40 Demonstrating safe and secure operations in Italy (DIODE)**
Luigi Brucculeri, Technosky for ENAV
- 10:50 Questions and answers**



Session 2: Taking up the U-space challenge

- 14:10** Improved tracking and monitoring of drones (CLASS)
Ellen Malfliet, Unifly
- 14:25** Ensuring unmanned and manned integration in very low-level airspace (SAFEDRONE)
Antidio Viguria, CATEC
- 14:40** Empowering heterogeneous aviation through cellular signals (EMPHASIS)
Petr Casek, Hi S.R.O.
- 14:55** Questions and answers



Session 3: Demonstrating U-space

- 10:10** **Open and competitive drone ecosystem – Perspective of SESAR GOF** **USPACE**
Thomas Lutz, Frequentis
- 10:20** **Validating U-space in urban and rural areas – Netherlands (VUTURA)**
Henk Hesselink, NLR
- 10:30** **Demonstrating safe and flexible integration of initial U-space** **services**
in real environments – Belgium (SAFIR)
Ellen Malfliet, Unifly
- 10:30** **Practical use cases from DOMUS U-space demonstration**
Daniel Garcia-Monteavaro Vizcaino, Enaire
- 10:55** **Questions and answers**



Housekeeping for the sessions

- **Chat:** The chat is open to all attendees and speakers
- **Questions:** Questions can be raised by any attendees and will be taken at the end of each session.
- Webinar and **presentations** will be uploaded to the JU website
- A **recording of the webinar** will be placed on the SESAR JU Youtube channel



U-space is the solution for safe & secure drone operations in Europe



U-space in SESAR



800+
experts



11
universities



186
flight missions
conducted



125
entities



19
countries



25
air navigation
service
providers



65+
start-ups &
businesses



25
european
airports



19
projects



850
hours
flights across
Europe



19 projects



U-space webinar sessions 



A short & complex timeline



Outlook study



Blueprint



Architecture principles



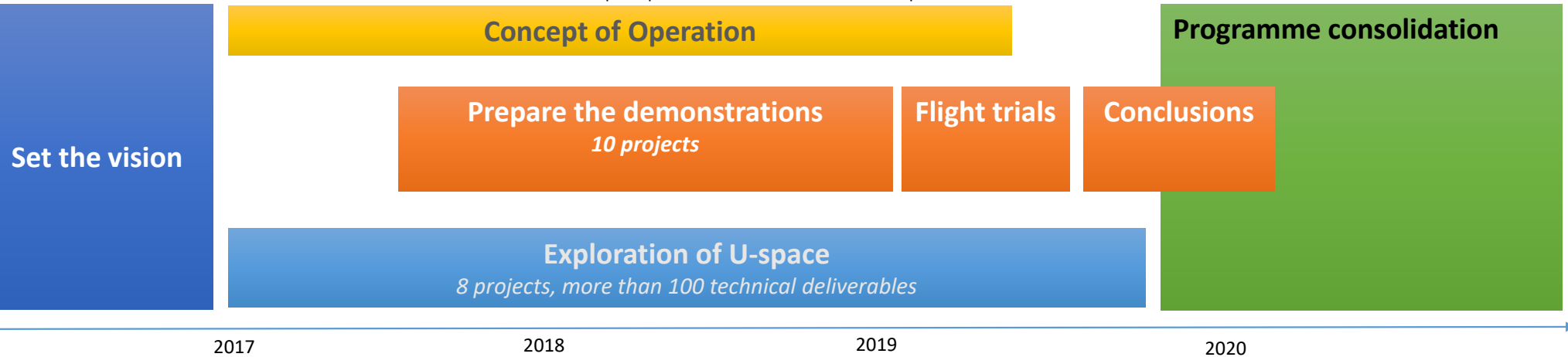
Concept of Operation



Preliminary U-space brochure



Final U-space brochure



Geographical coverage



Urban



Sub-urban



Rural



Forestry



Airport



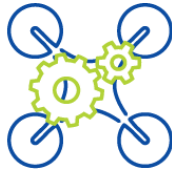
Maritime



Main research topics



Datalink
and spectrum



Aircraft
systems



Multiple
service providers



High level
of air/ground
automation



Security, including
physical security &
Cyber resilience



Concept of
operations
and procedures



Drone information
management
including geo-awareness



Ground-based
technologies



Sense & avoid
and separation
provision



Our key findings

Concept of operations

Multiple service provision

Foundation services

Strategic conflict resolution

Tracking

Open solution and SWIM principles

Cloud-based, micro-services, SoA

Reliable communications

Monitoring and situational awareness

Interface with the manned aviation

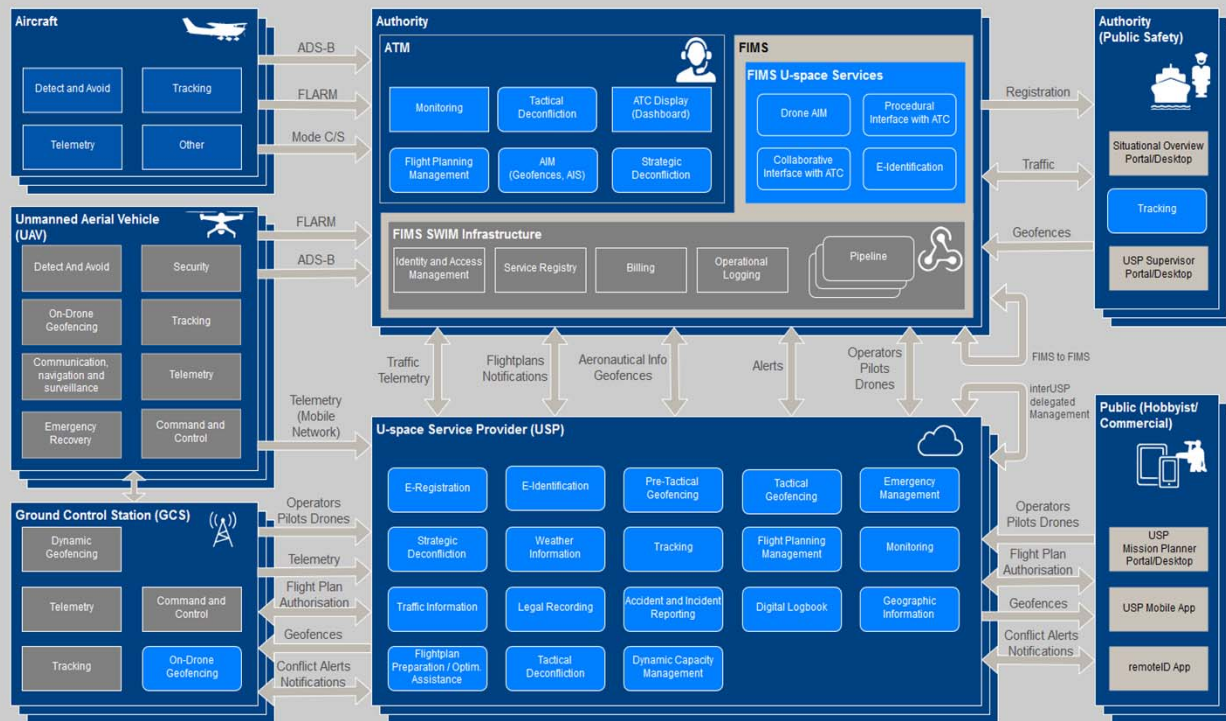


Strong multi-stakeholder participation



U-space is an eco-system

GOF USPACE VLD - Design & Architecture



- U-space is more than a set of services
- U-space is a system with
 - Dependencies
 - Minimum Performances
 - Data



U-space is U-space

- U-space and ATM have to live together, interfaces are required
- U-space can learn lessons from ATM (e.g. information management)
- U-space has its own specificities
 - Vehicles
 - Infrastructures
 - Service provision
 - Missions



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U-space videos



MORE COMING SOON...

