



2018
World ATM Congress



SESAR
walking
tours



#PoweredBySESAR

Stand 890

Italian solution to enable U-space in the national environment



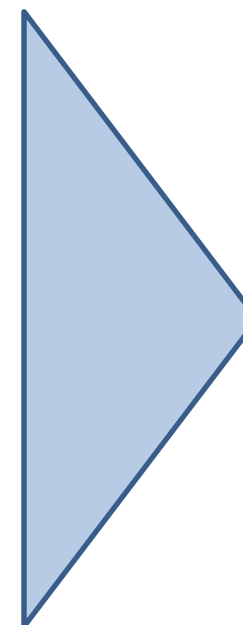
2018 World ATM Congress





Setting the scene - challenges

ANSP responsibilities		Drones threats and opportunities
	Airspace safety & reliability	Rapid growth of drones, without proper regulation and dedicated supporting services, impacts airspace safety and reliability
	Airspace accessibility	Drones need to be safely accommodated
	Creation Of Public Value	Strong concerns about security and privacy Urgency to unlock the enormous potentials promised by full exploitation of drone based services
	Financial sustainability	Innovative services offered to new kind of users need to be financially sustainable and can generate new revenue streams



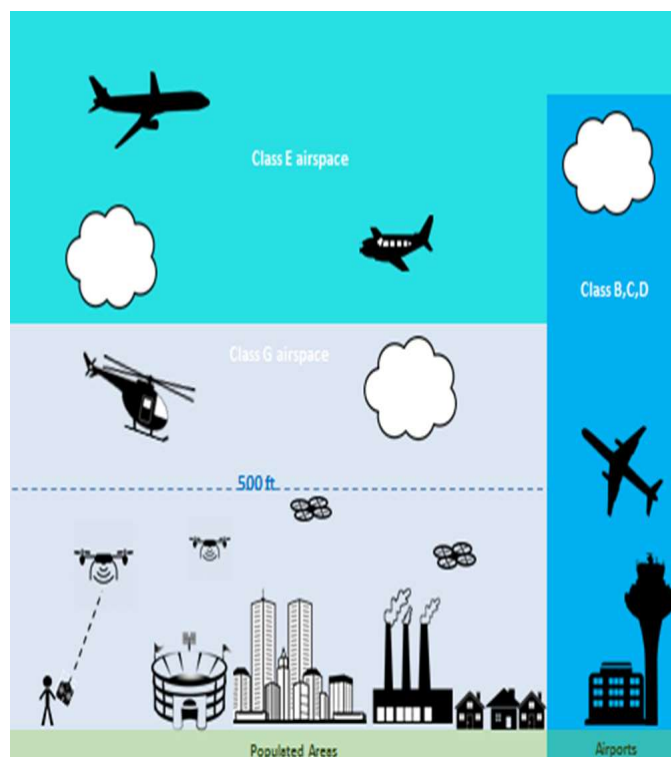


Our view on U-Space

Definition

The scope of the Italian U-Space relates to:

- Unmanned Air Vehicles (UAVs) flying **up to 500 feet** from the ground
- It is the enabling factor for Beyond Visual Line of Sight (**BVLOS**) flights and autonomous operations
- It should allow **safe operations** for a high level of UAVs within the same airspace
- It should ensure **monitoring** and **traffic management** also with regards to obstacles, non-accessible areas and potential collisions
- UAVs have to be able to fulfil their tasks assuring **safe operations** and safety to people and objects





Implementing the UTM - answers



Participation to international activities (ICAO, EASA, SESAR JU, EUROCAE, GUTMA, ...)



Partnership with the National Aviation Authority



Collaborative environment with Users to launch BVLOS operations



Development and deployment of the Italian UTM solution



2018 World ATM Congress





- **Registration** and (static) **identification** of drones
- **Maps** and **No Fly Zones**
- Useful **public information** about drones



2018 World ATM Congress

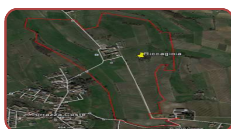




Initial achievements - BVLOS

ENAV and CAA joint work to develop an **BVLOS Operational Concept** in 2016.

In 2017 validation exercises with key stakeholders covering different fields, a report has been published which includes *results, lessons learned* and *recommendations*



ENVIRONMENTAL MONITORING



FISHING



ELECTRICITY



In 2018 a full plan of exercises with additional companies in the field of oil, gas, railway, TV, etc.



2018 World ATM Congress



Further steps – be fit for purpose



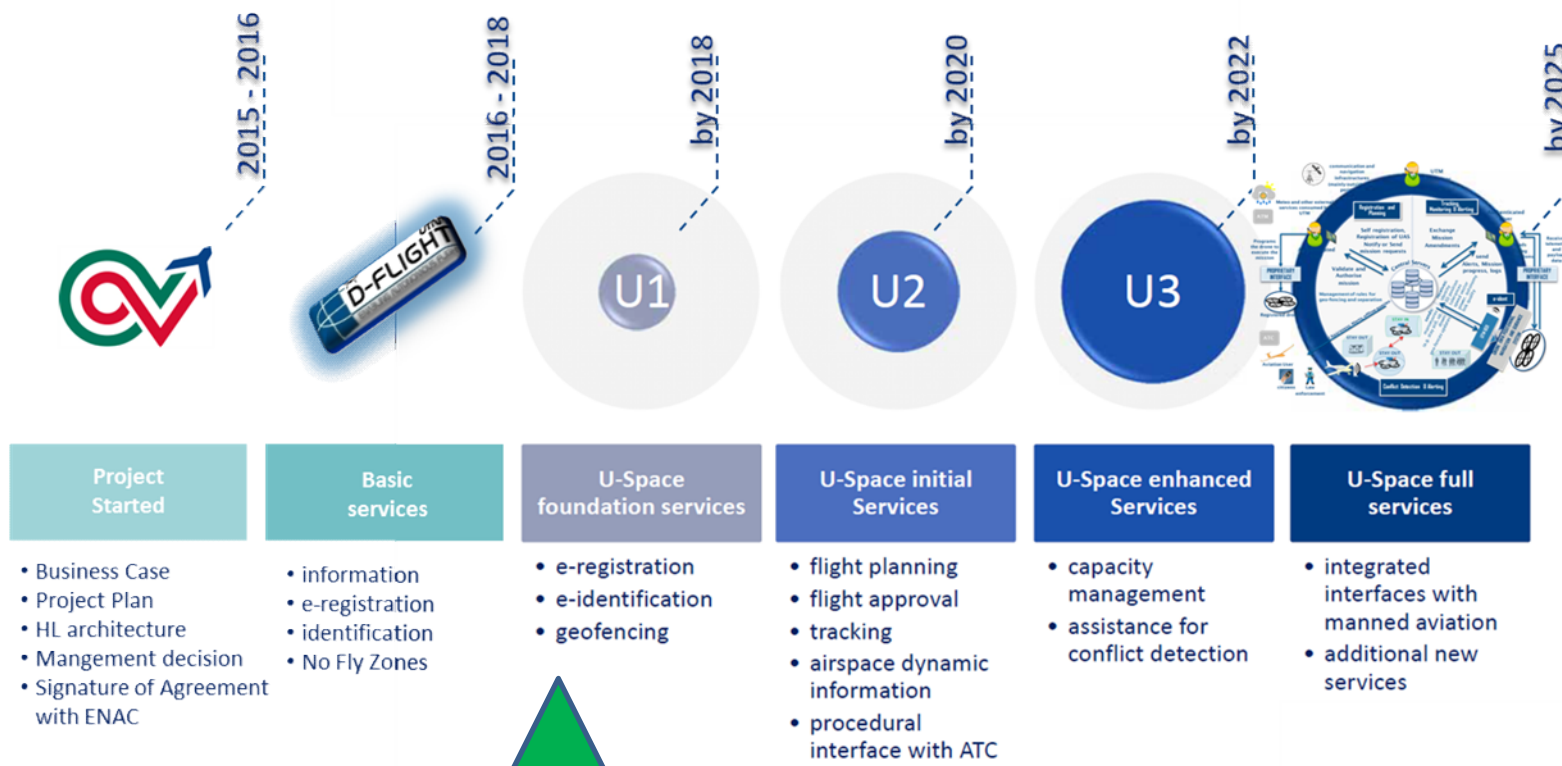
- D-Flight will be further **developed and deployed** by a **Public Private Partnership (PPP)**, between ENAV and an Industrial Partner, being selected through a open competitive tender. Selection process is ongoing:
 - started in August 2016
 - will be finished by March 2018
- The industrial partner will act as the main **technological supplier**
- ENAV will retain control of the PPP



2018 World ATM Congress



Roadmap for the future steps



2018 World ATM Congress





Conclusions

- **U-Space** is a **key** element to answer the **challenges** related to Drones
- **ANSPs** need to keep a **governing role** in the UTM/U-Space, as they are **responsible for providing safe and fair access to the airspace** to all type of users **also addressing security and privacy issues**
- **Institutions, States and Stakeholders have to cooperate to:**
 - **respond to** market and social **demand**
 - timely **support** full exploitation of **drones potentials and benefits**
 - ensure **safe and secure integration** of drones in the airspace
 - identify a **financially sustainable framework**
- ENAV, in cooperation with its CAA, has started the development and deployment of UTM in Italy **fully in line with the U-space concept**
- ENAV will **further develop opportunities** through a PPP



2018 World ATM Congress

