

Supporting
European
Aviation



UAM

Traffic and route management

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EUROCONTROL as a major support



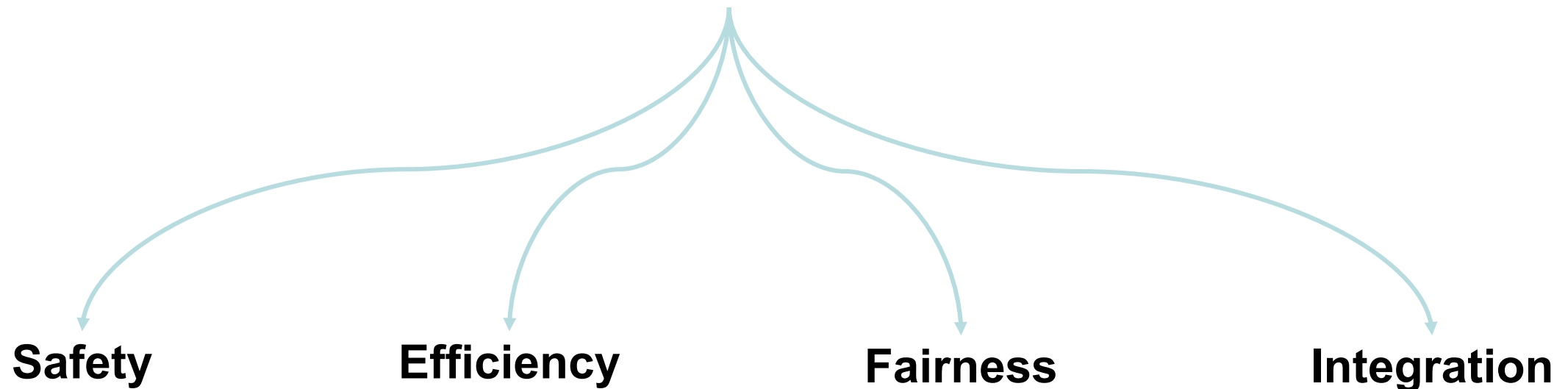
- Co-founder of **SESAR Joint Undertaking**
- Project leader of **CORUS-XUAM** (*Concept of Operations for euRopean U-space Services – eXtension for Urban Air Mobility*)
- Hosts the “**Centre d’Excellence Drones Ile de France (CEDIF)**” operations room, inaugurated on 1st December 2021, in partnership with Systematic and Thales
- Currently supports member states on the following airspace risk assessments



Sustainable 3D mobility for short distance



- Low altitude airspace is an available resource
- eVTOL as a complementary transportation mode for goods and passengers



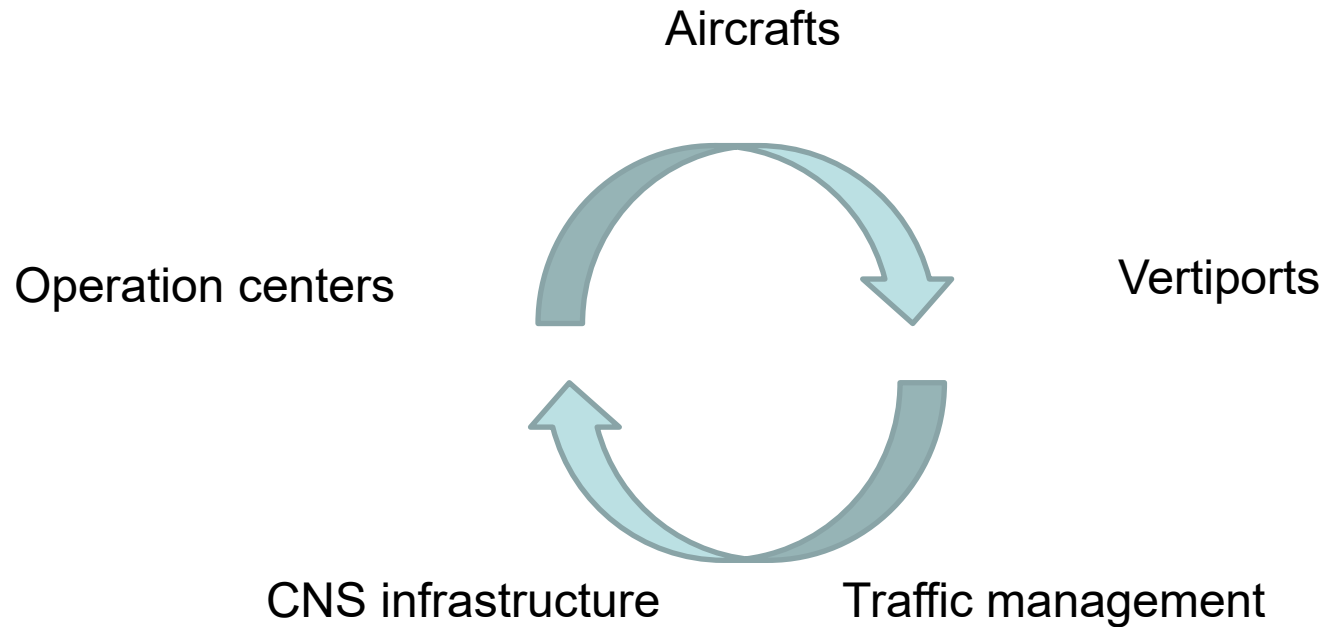
Airspace is not a no-man's land, UAM is not alone



- The airspace is a public and shared resource, some users are existing (commercial and general aviation), other are upcoming (drones)
- Operator are private and public (security and safety services)
- Urban environment is a sensitive area (noise, security, etc.) where the societal acceptance is key

**UAM will rise at scale only if properly integrated with other airspace users and accepted by citizens
=> segregation is an acceptable first step, but a dead-end if seen as an objective**

UAM is not only about eVTOL, it is an ecosystem



Addressing separately airborne and ground segments in aviation is a pain we are struggling with on a daily basis, let's learn from the past:

All the components of the UAM ecosystem need to be addressed together

UAM traffic management as an essential enabler

Fairness

Scheduling

De-conflicting

Emergency

Trust

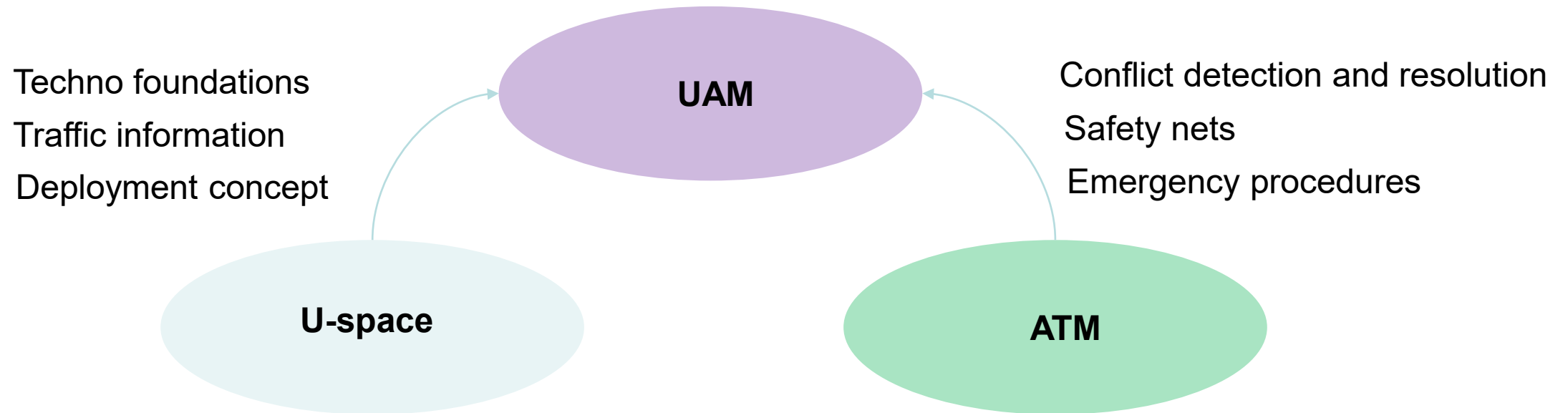
Data integrity

ATM/U-space interoperability

Equity

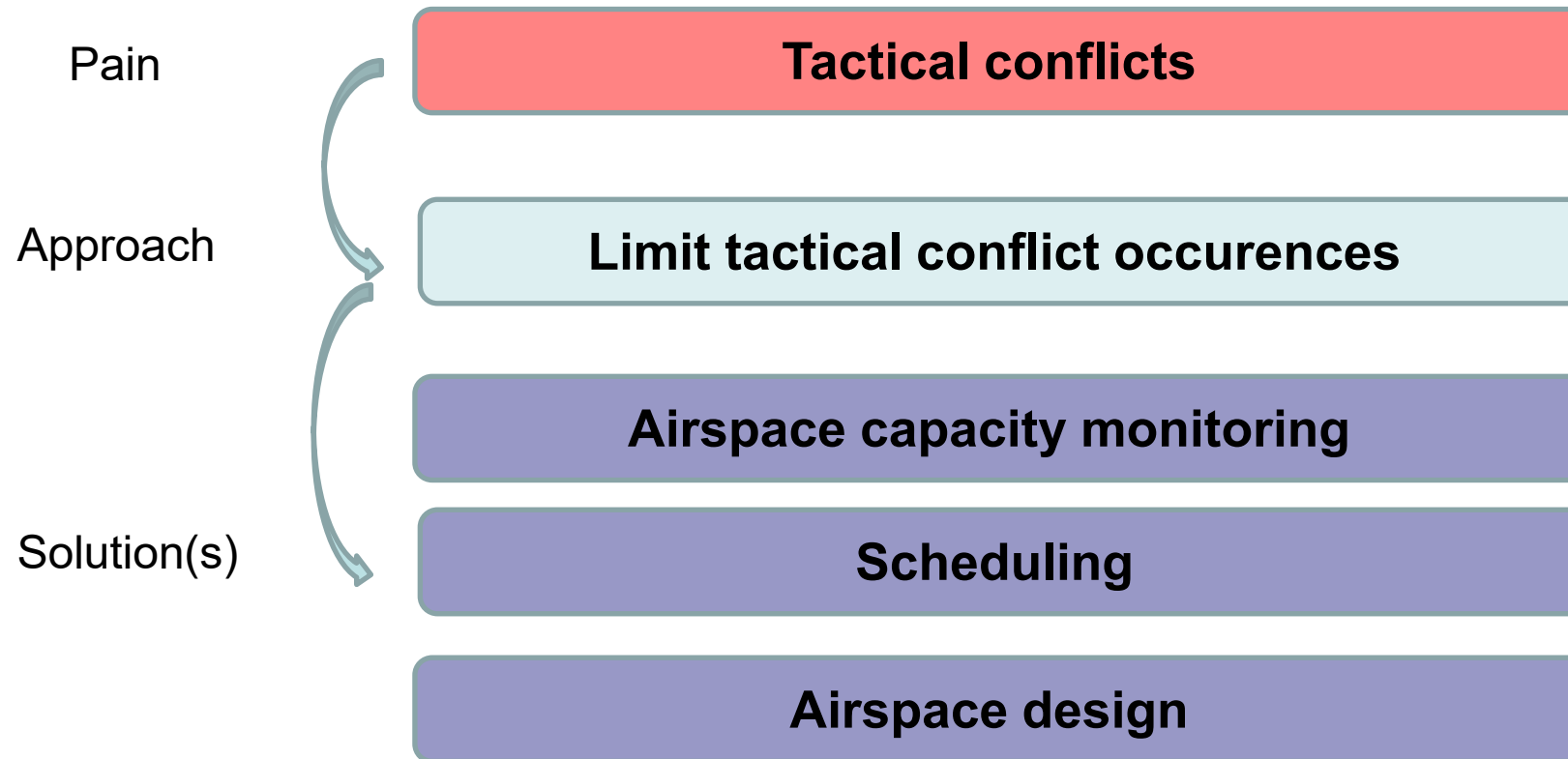
Cyber-security

UAM at the crossroads of ATM and U-space



- Gap to cover for UAM: Airborne/Ground real-time connectivity, Vehicle to Infrastructure integration (in particular eVTOL and Vertiports), integration to multi-modal transportation network

Conflicts Management



Cities can play a significant role in UAM traffic management

- Cities and local/regional bodies are used to manage large scale transport infrastructures
- They are capable to deploy long-term plans and build suitable contractual framework (in-house, subcontracted, public-private partnership, concession)
- They have the detailed understanding of their territory and the closest link with citizens

As UAM stakeholders, could we discuss with cities to propose them a larger role in this journey?

From UAM to Advanced Air Mobility for all

- UAM aircrafts can also provide added value services in isolated/remote area
- A potential complementary approach to accelerate deployment (lower risks) and gain societal acceptance
- Regional Air Mobility with eCTOL/eSTOL combined with eVTOL for shorter distance, a game changer

« Urban » in UAM reduces the scope of opportunities of eVTOLs and new added value services for our citizens, we should have a broader view

Conclusion

- UAM traffic management as an enabler by sharing the « pain » allocation between airborne and ground
- Fair and equitable access to the airspace as important as safety and efficiency
- Leverage ATM safety expertise and U-space techno background
- Inclusive ecosystem approach
- UAM traffic management
 - Relies on suitable airspace structure
 - Is highly automated
 - Is connected in real time to aircrafts
 - Is the trusted gateway between aircrafts and the CNS infrastructure
 - Makes interoperability with U-space and ATM as a « no-brainer » for UAM operators and manufacturers
 - Provides mechanisms of data sharing to support forces in maintaining the airspace security

Nothing unreachable if we work together and multiply coordinated experimentations
Eurocontrol with its expertise and assets will continue to support you