

CORUS five

Thematic Area 2: Airspace Organisation and Management + Aerodrome (and Vertiports) Operations

Andra Mohan (Austro Control) & Marta Sanchez (CRIDA)
CORUS five 2nd Workshop



Co-funded by
the European Union



Co-funded by
EUROCONTROL

Disclaimer

The following slides provide a non-exhaustive extract of discussions held during the CORUS five 2nd Workshop.  

They do not represent a prioritised selection nor an analysed outcome — only a summary of topics discussed during the event.



AOM

Marta Sánchez (CRIDA) & Andra Mohan (Austro Control)

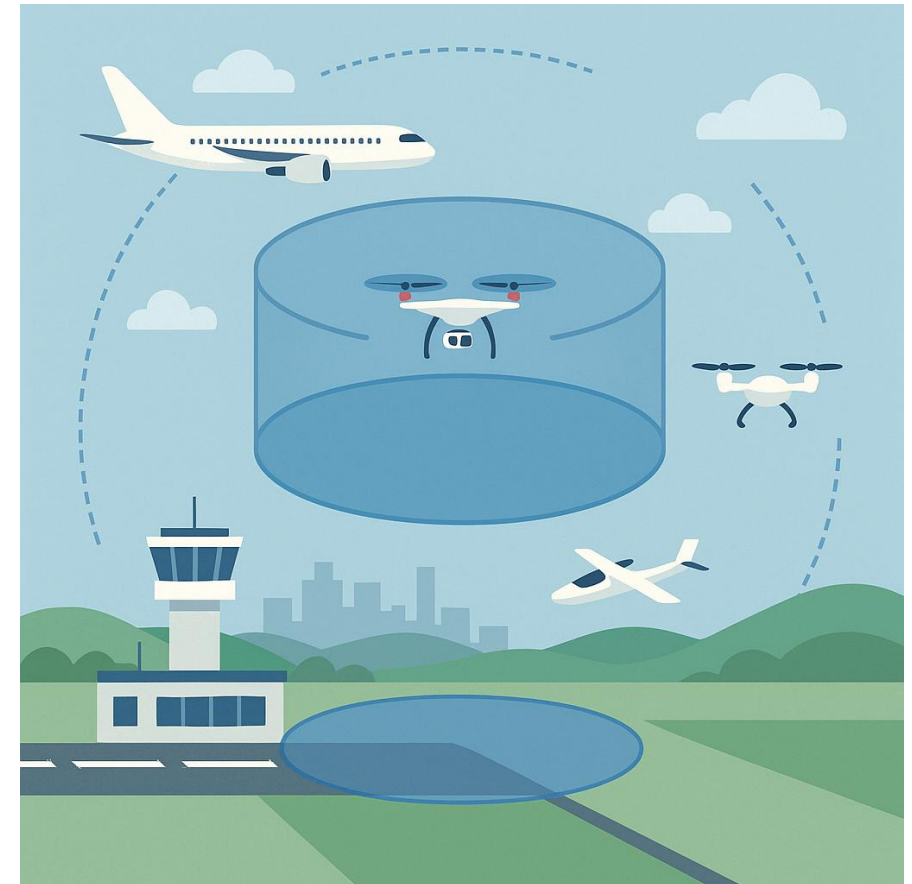
Short-term:

- Standard scenarios for geozones are helpful but flexibility must remain.
- Real examples show BVLOS operations already possible within CTRs via geozones.
- Digitalisation of info (NOTAMs, geozones) so UAS/ DOs can automatically digest restrictions.

AOM

CORUS five

Short-term



Medium-term



Medium-term:

- Mixed-performance traffic → automation needed to forecast conflicts & manage diverse contingencies.
 - Don't be constrained by cognitive restrictions.
- **Conformance monitoring** should be mandatory; fairness mechanisms against recurrent non-compliance.
- Integration? All aircraft eventually able to fly where they want, but conspicuity requirements for everybody everywhere are costly.
- Airspace “organized” by performance-based characteristics. This might not be medium term but...if we agree on this target for the long-term:
 - Vehicles/ DOs will need to share performance characteristics;
 - Drone manufacturers must start building now or reporting to those performance requirements.
 - Otherwise, **we have a decoupling of the timeline.**

AOM

Marta Sánchez (CRIDA) & Andra Mohan (Austro Control)

Long-term:

- “All airspace managed” GATMOC principle debated: some remote areas may remain unmanaged.
 - However, the proportion of managed airspace will increase.
- **Digital Flight Rules** to integrate drones/manned ops without creating a “U-space class”.
- Integration of systems need to be architected today to support long term.

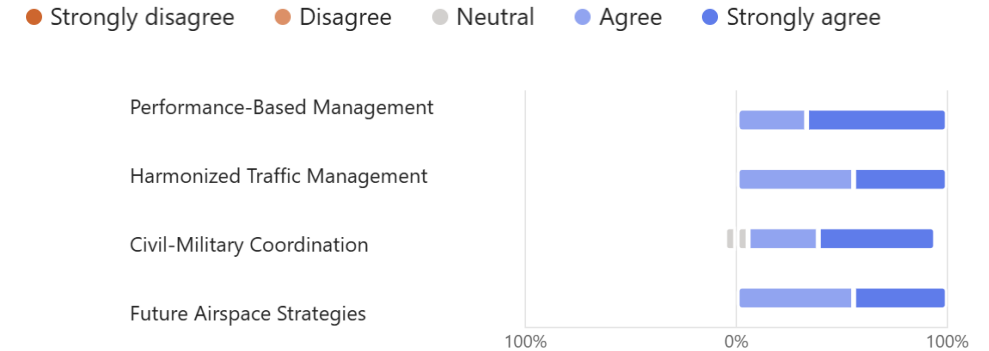
AOM

Long-term

CORUS five



What is your level of agreement with these principles for AOM in long-term?



Aerodromes/ Vertiports

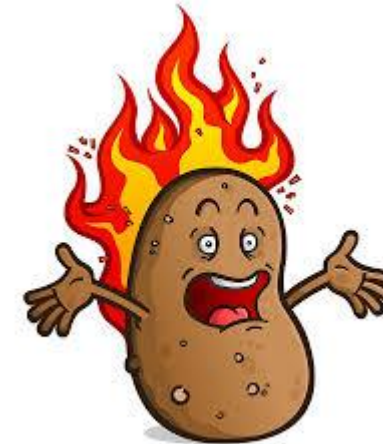
Andra Mohan (Austro Control) & Marta Sánchez (CRIDA)

Aerodrome/
Vertiports Operations

CORUS five

Short-term

- Define Vertiport as a range of concepts to allow light Vertiports concepts to standardize air to ground interface.
 - Concepts emerging: light/ non-controlled/ dynamic vertiports, drone-in-a-box.
- Droneport operations are already close to airports.
 - **Micro-vertiport** term proposed by ISO 5015-2:2022.
- Hot potato: Who is responsible for detecting the uncooperative drones at or around airports?
 - Once spotted, there are procedures to act.



Aerodromes/ Vertiports

Andra Mohan (Austro Control) & Marta Sánchez (CRIDA)

Aerodrome/
Vertiports Operations

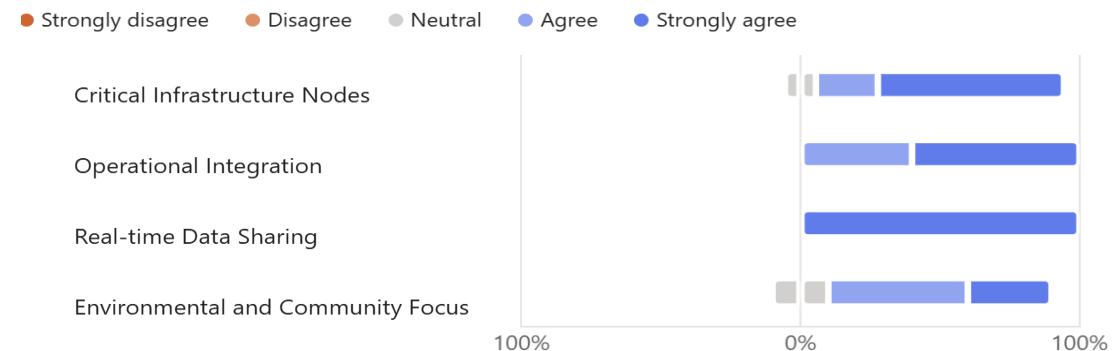
CORUS five

Medium-term

- Real-time data sharing is key; include drone/ U-space representatives in A-CDM meetings to build awareness.
- **Vertiport Traffic Zones (VTZ)** envisaged as part of ICAO classes, not a new category.
- Open governance issue: who manages vertiport data (slots, sequencing) when outside U-space?
- eVTOLs need reliable ground/ slot info to approach safely → **flow management automation** needed.
 - And most vertiports equally do not require the presence of humans for their routine operations



What is your level of agreement with these principles for Aerodrome Operations in medium-term?



Aerodromes/ Vertiports

Andra Mohan (Austro Control) & Marta Sánchez (CRIDA)

- Most vertiport operations automated, with **human oversight by exception**.
- Discussion on “human in the loop” when automated systems fail.
 - Human takeover needed in off-nominal or unforeseen cases.
 - Shift from “human in the loop” to “human on the loop”.
 - Systems must include fail-safe modes and fallback procedures.

Aerodrome/
Vertiports Operations

CORUS five

Long-term



DANKE!
THANK YOU!
MERCİ!
GRAZIE!
GRACIAS!
DANK JE WEL!

ありがとうございます

Thematic Area 2: Airspace Organisation and Management + Aerodrome (and Vertiports) Operations