CORUS five

Thematic Area:
Conflict Management & Demand and Capacity Balancing

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CORUS five 2nd Workshop

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Some outputs…

Session	Number of pages	Time
1	51	1:45:05
2	53	1:16:30
3	44	1:27:00
4	38	1:21:05
5	39	1:18:27
6	59	1:38:08

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TOTAL	**284**	**8:46:15**

And the winner is…

SESSION 6

Conflict Management in U-space today

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Short-term

- **Strategic deconfliction is necessary**
  - It plays a vital role in reducing pre-flight complexity and ensuring baseline safety. However, it has clear limitations:
    - It does not account for unpredictable actors.
    - It can penalise operations with short planning horizons.
    - It limits capacity by requiring wide separation margins and rejecting overlapping.
- **FC-FS** approval **is** widely seen as **unfair** and not efficient, especially for short-notice operations. Does not reflect societal value or operational efficiency.
  - Some suggestions:
    - Priority of flights
    - Volume size restrictions
    - Approval logic should evolve toward **priority-based**, **performance-based**, or **market-based** models, possibly including negotiation.
- **T/O uncertainty**
  - Some UAS operators mentioned a time window of +/- 15min, although this is only applicable for the short term. They could fly with a reduced time window.

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- **Logic strategic vs tactical measures** when UAS is airborne and after tactical measure is out of conformance.
  - Yes, the U-plan has to be updated.
  - Lack of clarity on who updates the U-plan.
  - Of course, it should have priority when deconflicting it.
- ***Relevant action*** definition is vague and open to interpretation, which could lead to inconsistent or unsafe responses.
  - Operators may not have enough situational awareness or decision support to act.
  - ICAO Annex 2 rules (e.g., “turn right”) are not sufficient for UAS and may need to be adapted or replaced.
  - This term must be clarified in future regulatory updates. It should be supported by operators’ manuals, and eventually standardized through AMC or guidance material.
- **Network remote ID** may have delays or inaccuracies. We don’t have enough experience to rely on it.
  - Combine network remote ID with other sources (e.g., mobile 4G/5G networks).
  - Include the integrity metrics when displaying Network remote ID data.
- The use of **tracking** would be beneficial for conflict detection and safe tactical deconfliction.

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- **Collision avoidance** is currently out of scope in EU regulations, but:
  - It is **essential for safety**, especially in mixed environments with manned aircraft.
  - Visual methods (VLOS, FPV) are **not reliable enough**.

- Electronic conspicuity and detect-and-avoid systems are needed, but must be affordable and interoperable.

- Recommendation: Collision avoidance should be formally recognized in future regulations, with clear expectations for both UAS and manned aircraft.

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Conflict management in MTH

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Medium-term

- **Tactical Conflict Detection and Resolution is an essential service to increase capacity while maintaining safety.**
- Challenges:
  - Lack of standardization for tracking, intent sharing, and performance.
  - No defined process for flight plan updates during tactical maneuvers.
  - Need for interoperability between multiple USSPs and ATC systems.

- Tactical conflict detection should protect UAS against manned aircraft.
- 2 different approaches:
  - Allow overlapping of DT.
  - Reduce the DT.

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Conflict management in Future

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Long-term

- **We need new Flight rules**.

- New aircraft types (e.g., air taxis) need digital integration with ATC and low-level CNS solutions.
- Europe should lead the development of new flight rules or alternative means of compliance, possibly below 1000 ft, to support scalable, safe UAS operations.

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Demand and capacity balancing

- **DCB is mandated but lacks practical implementation guidance**:
  - Capacity is not defined clearly—should it be based on airspace design, real-time traffic, or risk models?
  - Collaboration between multiple USSPs is technically and legally complex.
  - There is **no business process** for flight plan updates or reallocation.

- Conclusion: DCB must be supported by standardized metrics, collaborative protocols, and dynamic reallocation mechanisms.

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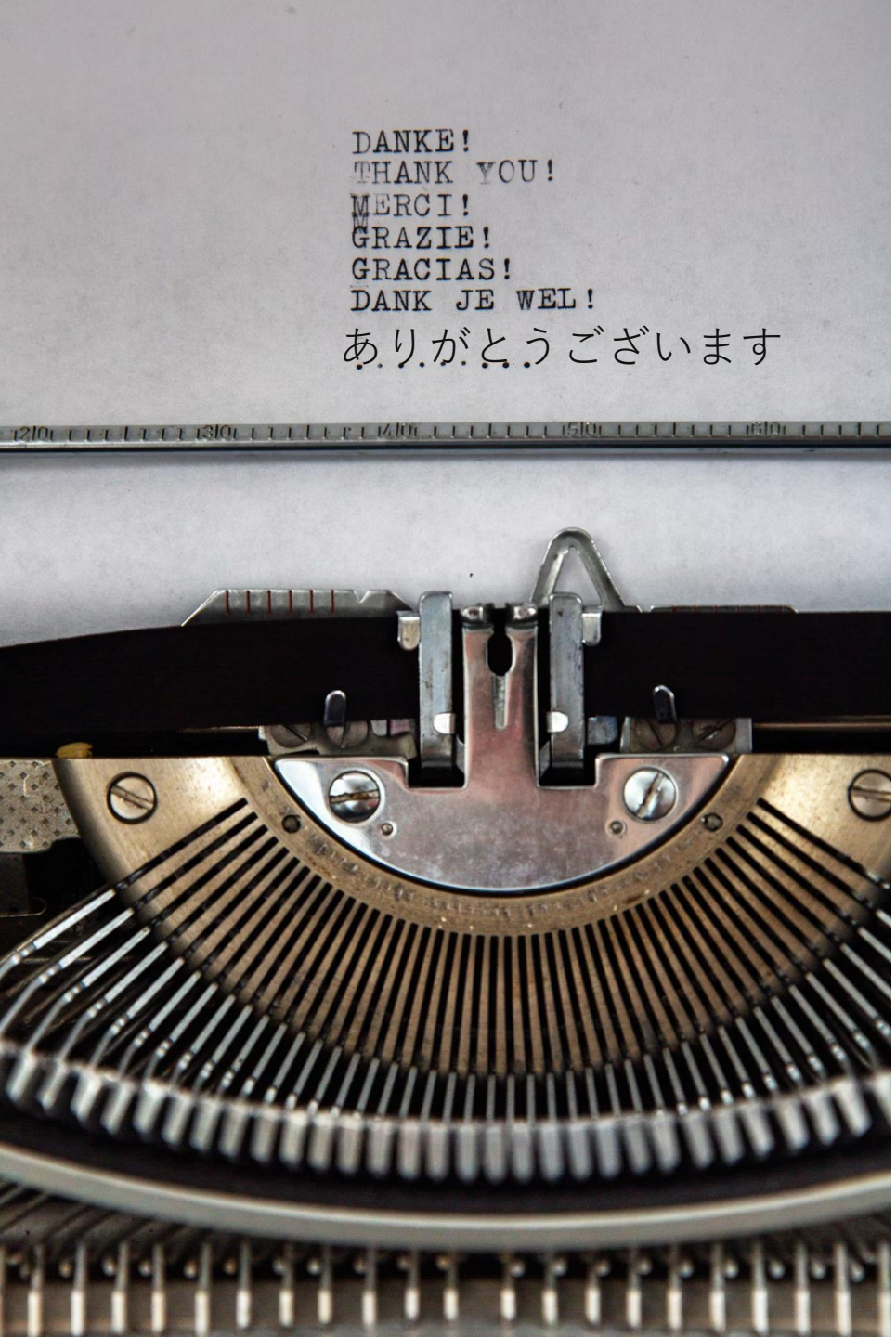

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