Session 2.3: Technology in support of Civil/Military Cooperation

Civil/Military Workshop

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Mohamed Smaoui

ICAO, Deputy Regional Director, Cairo

Technology in support of Civil/Military Cooperation

For both Civil and Military operations

- ✓ Enhanced safety
- ✓ Better efficiency
- ✓ Bigger capacity

Improving global efficiency & safety through collaborative System Wide Information Management (SWIM)

Technology in support of Civil/Military Cooperation

- CDM and implementation of systems interconnection for information sharing & trajectory negotiation before departure to improve capacity & efficiency (FF-ICE/1)
- 4-D Trajectory Based Operations
- Civil/Military Interoperability (Regulations, standardization, data & Information sharing, Training, licensing, joint provision of services)

Civil/Military Interoperability Challenges

Evolutions in NAV, COM and tracking requirements

Different Systems

Aircraft equipage differences

Some specific military aircraft are unable to equip with new technologies (Mode-S, ADS-B, ADS-C, CPDLC) due to operational or tactical limitations

Security

Agreements on the level of security required for the Military system and the interfaces to the Civil system

Cyber

Determination of the cyber requirements in the current and future system designs

Civil/Military Interoperability Challenges

Emerging standards and exchange Models

AIXM, IWXXM, FIXM

Traffic Growth

Greater volume of civil traffic forecast in many regions.

User demands (New ways of operating)

Free Routing, Closer spacing (PBN), Communications (Datalink, SAT COM)

Civil/Military Interoperability Challenges

Cybersecurity

- Threats continue to change so rapidly
- Civil/Military interoperable Cybersecurity solutions
- New Civil/Military Cooperation secure services

Need for Cross-Domain Cyber-Security

Mission Trajectory
Flight Plan/ Flight Object
Civil-Military Air Picture
Recognized Air Situation
Airspace Allocation
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Military Security Domain

Unclassified/ Classified

Cross-Domain Cyber-Security

SWIM

Communication Infrastructure

Civil Security Domain

Not classified

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