

# Civil/Military ATM Cooperation and Flexible Use of Airspace Webinar

Online 20th-21st Nov 2024

Sven Halle
ICAO EUR/NAT Office

This event is jointly organised with

















### **Different frameworks**



INTERNATIONAL CIVIL AVIATION ORGANIZATION



#### DOC 9554-AN/932

"Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations"

DOC 9433-AN/926

"Manual Concerning Interception of Civil Aircraft"



### **Institutional and regulatory framework**

Doc 10084 Civil Aircraft Operations over or near Conflict Z

Military Aircraft Operations Doc 10088 Manual on civ mil cooperation in ATM

**Civil/Military Interoperability** 

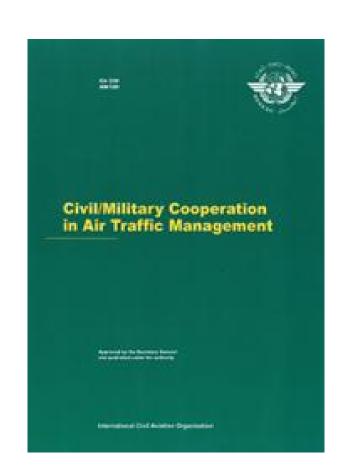
Traffic Management"



### ICAO Circular 330

based on the ICAO Doc 9554 (Manual concerning the safety measures relating to military activities potentially hazardous to civil aviation), Regional rollout starting in 2010

- Guidance on the ICAO institutional and regulatory framework
- Guidance on airspace organization and management
- Guidance on State aircraft operations
- Practical examples





# ICAO

### ICAO EUR Doc 032

# Interim Guidance Material on Civil Military Cooperation in Air Traffic Management

- Structure of this interim guidance material
- Chapter 1: About this guidance material: describes the purpose and scope of this Interim Guidance Material.
- Chapter 2: Flexible Use of Airspace: describes additional elements of FUA, especially on the application of FUA over the High Seas.
- Chapter 3: Operation of State aircraft under due regard: provides examples from different States and international organisations of the operation of State aircraft over the High Seas.
- Appendix A: EUROCONTROL European Route Network Improvement Plan, Airspace Management Handbook



EUR Doc 032

### INTERIM GUIDANCE MATERIAL ON CIVIL/MILITARY COOPERATION IN AIR TRAFFIC MANAGEMENT

Second Edition

December 2016

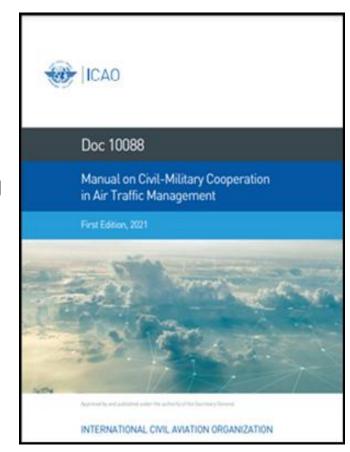
As approved by the European Air Navigation Planning Group/58 meeting

December 20

### **ICAO** Doc 10088

# (Manual on Civil-Military Cooperation in Air Traffic Management)

- released with Electronic Bulletin EB2021/08 in February 2021 as unedited version, in English only
- The focus of this manual is to provide guidance to States wishing to implement or improve civil-military cooperation in air traffic management, for safe and optimal use of the airspace by civil and military users.
- This manual also serves as reference for authorities and units responsible for establishing and implementing the processes and procedures that will facilitate civil-military collaboration, cooperation and coordination





## **Regional Implementation**

- Results from the Global ATM Forum should be communicated via a global campaign to support States in the implementation of provisions relating to civil/military cooperation and coordination
  - ICAO should serve as an international platform to facilitate and enhance Civil/Military Coordination as well as to provide the necessary follow up activities
- AN-Conf/12 Recommendation 4/5 Civil/military coordination & cooperation and sharing of airspace
- AN-Conf/13 Agenda Item 3.4 on Civil Military Cooperation with 2 Recommendations on civilmilitary collaboration and civil-military cooperation implementation
- ICAO Assembly Resolution A41-10, Appendix I
- AN-Conf/14 Recommendation 1.1/2 ANS Resilience









# Flexible Use of Airspace

- European Air Navigation Planning Group (EANPG) TF for extension of FUA concept over High Seas in 2008
- Inclusion of FUA in EUR Air Navigation Plan (ICAO Doc 7754) Vol I and Vol II

#### Flexible Use of Airspace

2.7 States should implement civil/military cooperation and coordination mechanisms to enhance the application of the Flexible Use of Airspace concept, which will contribute to more direct routing with a commensurate saving in fuel and associated emissions. States should arrange for close liaison and coordination between civil ATS units and relevant military operational control and/or air defence units in order to ensure integration of civil and military air traffic or its segregation, if required. Such arrangements would also contribute to increasing airspace capacity and to improving the efficiency and flexibility of aircraft operations.

Reduced Vertical Separation Minimum (RVSM)/Regional Monitoring Agencies

2.8 The RMA EUR and RMA EURASIA are the two designated Regional Monitoring Agencies (RMA) within the ICAO EUR Region responsible for monitoring the height-keeping performance and approval status of aircraft operating at these levels, in order to ensure that the continued application of RVSM meets the agreed regional safety objectives as set out by the EANPG.

#### 3. SPECIFIC REGIONAL REQUIREMENTS

Regional airspace structure

3.1 In the ICAO EUR Region, additionally, the optimization of the air traffic flows is also performed through user preferred flight profiles (e.g. user preferred route (UPR), continuous climb operations (CCO), continuous descent operations (CDO)). Details on how the coordination of airspace structure improvements is organised in the ICAO EUR Region are provided in EUR ANP Volume II.

#### Civil/ military cooperation and coordination

3.2 In the EUR Region, civil/military cooperation and coordination mechanisms will also increase airspace capacity and improve the efficiency and flexibility of aircraft operations. Details on the flexible use of airspace concept in the ICAO EUR Region are provided in EUR ANP Volume II.

Air Traffic Flow Management (ATFM)

3.3 In the EUR Region, States have implemented ATFM cooperation and coordination mechanisms which have improved the overall performance of the ATM system while ensuring demand and capacity balance. Details on ATFM implementation in the ICAO EUR Region are provided in EUR ANP Volume II.

### Civil Military Coordination and Flexible Use of Airspace

3.12 States should implement civil/military cooperation and coordination mechanisms in accordance with ICAO Circular 330. States should also enhance the application of the Flexible Use of Airspace concept, which will increase airspace capacity and improve the efficiency and flexibility of aircraft operations. States should arrange for close liaison and coordination between civil ATS units and relevant military operational control and/or air defense units in order to ensure integration of civil and military air traffic or its segregation, if required. In the ICAO EUR Region, there are specific arrangements (e.g. based on *EUROCONTROL ERNIP Part 3 ASM Handbook*, etc.) that enable the implementation of the FUA concept. ICAO EUR Doc 032 has been developed as interim guidance material for the implementation of the FUA concept over the high seas and will be considered in the global revision process of ICAO provisions.

# ICAO

## **In Summary**

 Civil-Military cooperation is not a mission impossible, if there is a clear political will to engage in technical and operational discussions

Trust, the 3 Cs (coordination, collaboration, communication) and mutual respect/understanding of all user requirements ar key essential components

• Especially in civil-military cooperation, the implementation must be seen as scalable and based on the operational context ICAO has a special role as in the implementation support. As a UN organization we can engage (global, regional workshops or specific TFs) with aviation stakeholders to address the specific aspects of civil-military cooperation, raising the understanding, sharing best practices, publishing guidance, and in some cases implementing concrete measures to enhance the safety of flight operations for all civil and military operations



SAFE SKIES.
SUSTAINABLE
FUTURE.







