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# Key Points from CMAC/FUA Related Seminar/Workshop

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## Introduction

- *Assisting States in Civil/Military Cooperation (including Flexible Use Airspace) implementation is one of the strategic mandates of the ICAO APAC RSO*
- *RSO has conducted a series of Civil/Military Cooperation/FUA Seminar/Workshop and is initiating Civil/Military Cooperation /FUA related projects*
- *Some key points were discussed and these deliverables might be valuable for other States*



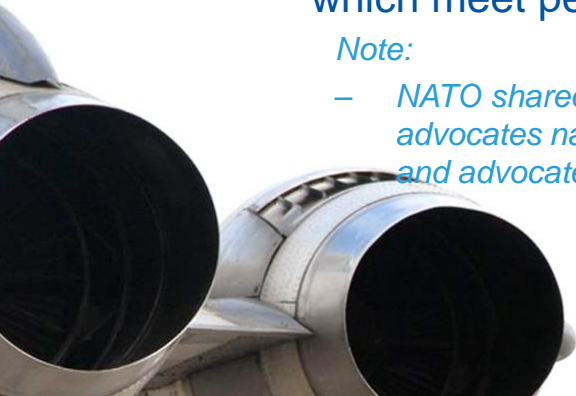


## Key Points for CMAAC/FUA implementation

- **Key Point 1:** Military were aware of the rapid evolution of technology, the global mandate implementation on Performance-based Navigation (PBN), and they are exempt from civil PBN requirements. Nevertheless, in order to **achieve more efficient utilization** of national airspace and **facilitate civil/military integration**, States can develop the particular specifications which meet performance level for military aircraft.

*Note:*

- *NATO shared its experiences and views on PBN implementation, for example, NATO advocates national development of particular specifications which meet performance level and advocates sufficient ground-based NAVAIDS maintained etc.*





## Key Points for CMAAC/FUA implementation

- **Key Point 2:** Common understanding and mutual trust are the fundamental requirements for successful civil/military coordination and flexible use of airspace, and efficient implementation begins with good relationship.

*Note:*

- States are encouraged to include their military agencies in their delegation to relevant ICAO meetings and activities.
- CAA need to engage in continuing discussions and dialogues with their military partners on airspace usage and optimization using appropriate CDM process.



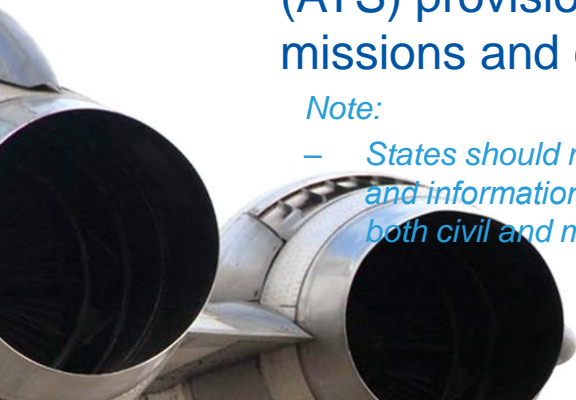


## Key Points for CMAC/FUA implementation

- **Key Point 3:** The necessary linkage and consistency should be established and maintained among Airspace Organisation and Management (AOM), Air Traffic Flow Management/Collaborative Decision Making (ATFM/CDM) process and Air Traffic Services (ATS) provision to ensure effective and efficient conducts of military missions and civil aviation operations

*Note:*

- *States should review its current ATM process to ensure proper coordination and sharing of data and information among States' Airspace Management units, ATFM units and ATS units, from both civil and military organizations*





## Key Points for CMAC/FUA implementation

- **Key Point 4:** Proper communication process, data sharing mechanism, decision-making framework and negotiation guideline are some of the fundamental requirements supporting civil/military coordination and flexible use airspace implementation.

*Note:*

- *States need to develop and continue enhancing and reviewing their civil/military coordination process, data sharing mechanism, decision-making framework and negotiation guideline to support flexible use of airspace. The process, mechanism, framework and guideline may be structured into 3 sequential levels, including strategic, pre-tactical and tactical.*



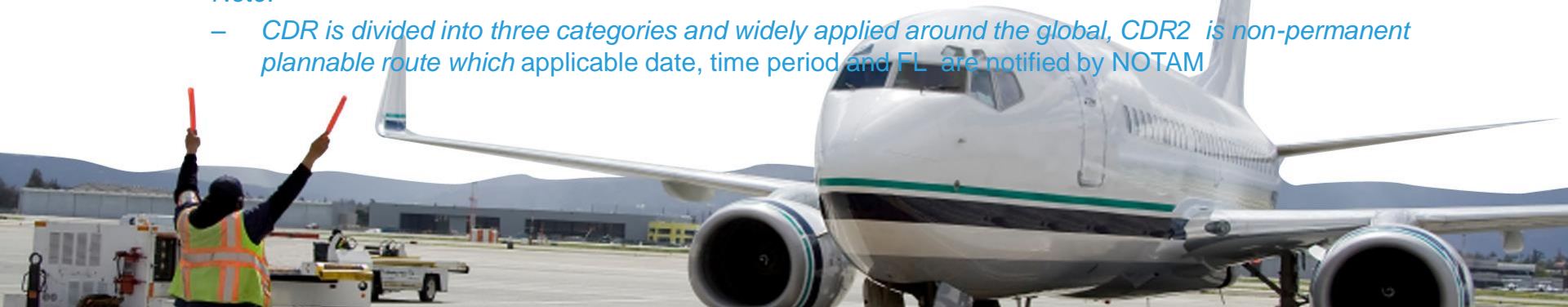


## Key Points for CMAC/FUA implementation

- **Key Point 5:** States may start Flexible Use of Airspace with Conditional Routes (CDRs) as a way to increase flight operation efficiency, and type CDR2 is recommended as the most efficient category from the beginning.

*Note:*

- *CDR is divided into three categories and widely applied around the global, CDR2 is non-permanent plannable route which applicable date, time period and FL are notified by NOTAM*





## CDR1

- Expected to be available for most of the time
- Plannable in the same way as all permanent routes
- In the event of short notice unavailability, re-routing around active TSA on ATC instructions

## CDR2

- Day to Day coordinated and allocated to respond to ATC capacity imbalance
- Plannable only in accordance with NOTAM
- Part of pre-defined routing scenario

## CDR3

- Usable on ATC instructions only
- Use as short notice routing

Foreseen availability

Flight Planning possibilities





## Key Points for CMAC/FUA implementation

- **Key Point 6:** Recognized the importance of the 7 prerequisites identified by ICAO for FUA implementation and highlighted the necessity for analysis the gap between emerging situation and ICAO's suggestions (prerequisites)

*Note:*

- The FUA Concept is widely accepted by both Civil and Military, but the concept itself is not enough, ICAO identified some prerequisites to assist State in facilitating FUA implementation.





- National, high-level civil/military coordination body
- Consistent collaborative national airspace planning process
- Communication, negotiation, and priority rules and procedures for Civil/Military Cooperation
- Publication of procedures for activities which require airspace reservation or restriction.
- Framework agreements between civil and military authorities
- System of periodically review airspace needs, organization and management
- Predictive and timely access to restricted or reserved airspace

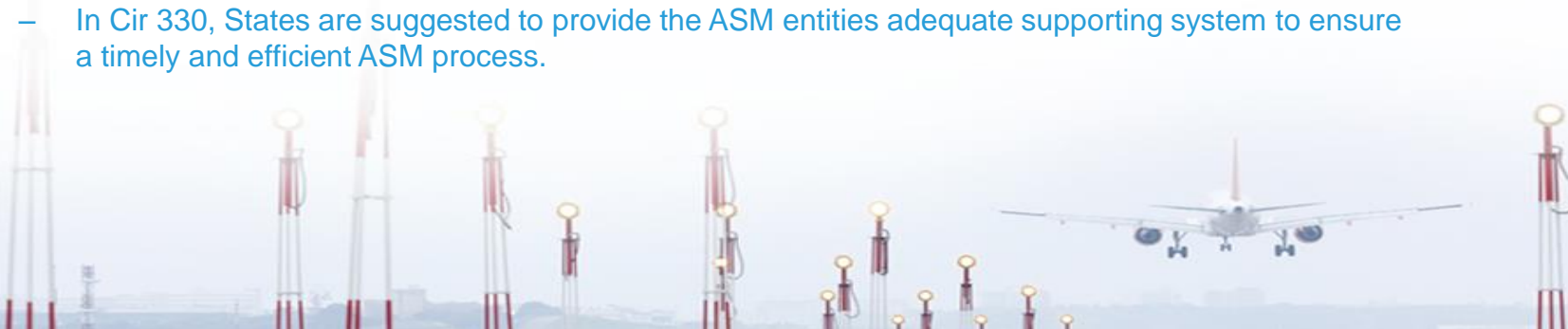


## Key Points for CMAAC/FUA implementation

- **Key Point 7:** AOM supporting system helps to improve airspace management process by providing mutual visibility on civil and military requirements, increasing mutual understanding and enabling a more efficient CDM process, and it will especially benefit Pre-tactical and Tactical airspace management where deployed.

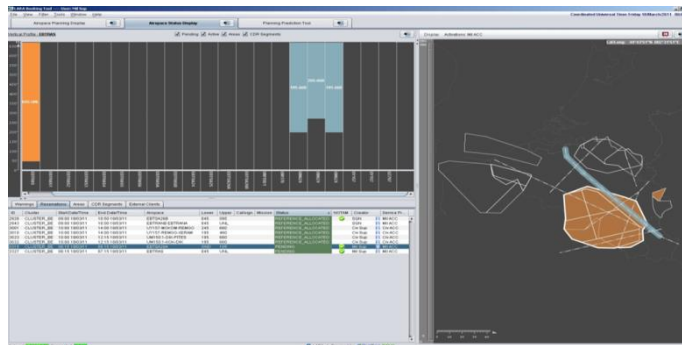
*Note:*

- In Cir 330, States are suggested to provide the ASM entities adequate supporting system to ensure a timely and efficient ASM process.

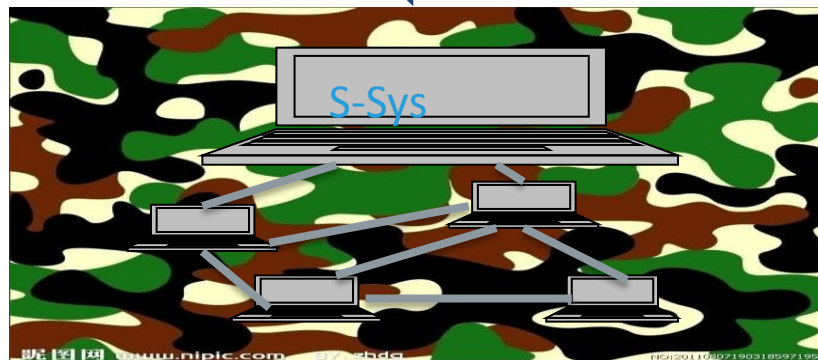
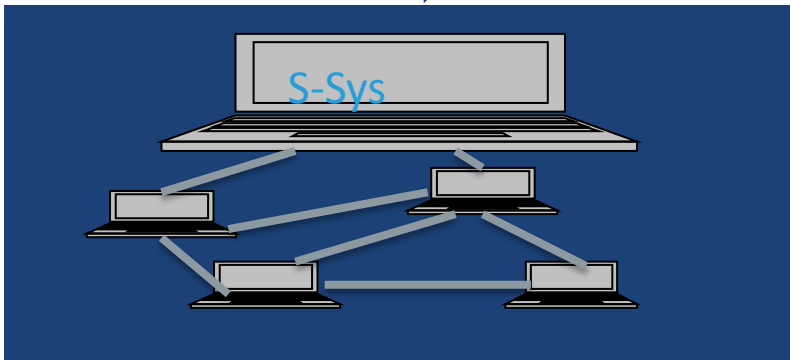




Mutual Visibility  
Mutual Understanding  
Efficient CDM Process



C/M Requirements  
Common Situation  
Airspace Allocation





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