



# ACAC/ICAO CIVIL/MILITARY Workshop

(Algiers, Algeria, 26 - 28 March 2018)

## **AirSpace Management:**

Flexible Use of Airspace in Algiers FIR



## The civil/Military cooperation best practices



- Airspace management is ordered according to the principle of compatibility which is ensured by coordination or segregation;
- The airspace of the flight information region in Algeria is divided into:
  - classified airspace;
  - airspace with special status.
- Special-status airspace consists of all prohibited, restricted or dangerous zones created, for civil and / or military purposes, by the Minister of Civil Aviation.



## The civil/Military cooperation best practices



- The separation of aircraft operating in military air traffic from aircraft operating in general air traffic is the responsibility of military air traffic control units;
- All flights operating in general air traffic in the flight information region are communicated to the appropriate military air traffic control units;
- For the specific needs of military activities, temporary airspace reservations may be requested from the general air traffic units with coordinated notice in space and time so as not to constrain general air traffic.



### The Flexible Use of Airspace – FUA concept



### • CIR/330 OACI:

The FUA concept includes consideration of effective communication, cooperation and coordination necessary to ensure a safe, efficient and predictable use of airspace.

This aspect of the FUA is observed

### • CIR/330 OACI:

The establishment of joint civil/military coordination entities for airspace organization and management is essential to the realization of current and future CNS/ATM initiatives.

 This aspect of the FUA is observed at different levels : strategic, pre-tactical and tactical



## The Flexible Use of Airspace – FUA concept



### **CIR/330 OACI:**

In order to enable effective flexible use of airspace, some basic prerequisites should be observed by States :

The Flexible Use of Airspace Concept	Implementation state
1. establishment of a national, high-level civil/military coordination body;	Airspace Committee CEA
<ol> <li>development of a consistent, collaborative national airspace planning process taking into consideration the needs of all airspace users and national security, defence and law enforcement requirements;</li> </ol>	
<ol> <li>establishment of communication, negotiation and priority rules and procedures for civil/military coordination;</li> </ol>	these rules and procedures are described in the various letters of agreement LOA



### The Flexible Use of Airspace – FUA concept



### **CIR/330 OACI:**

In order to enable effective flexible use of airspace, some basic prerequisites should be observed by States :

The Flexible Use of Airspace Concept	Implementation state
<ol> <li>establishment and publication of procedures for activities which require airspace reservation or restriction. Airspace reservations or restrictions should be applied only for limited periods of time and based on actual use;</li> </ol>	implemented
5. development of framework agreements between civil and military authorities to facilitate coordination;	The CEA and its various specialized working groups
6. establishment of a system to periodically review airspace needs, organization and management;	The work of the CEA specialized working groups
7. predictive and timely access to restricted or reserved airspace whenever possible in order to maximize benefits and flexibility for all users.	Not implemented yet



## **FUA Principles**



### **CIR/330 OACI:**

An FUA concept should embrace the following principles:

П	FUA principles	Implementation state
1.	Coordination between civil and military authorities should be carried out at the strategic, pre-tactical and tactical levels	strategic: CEA pre-tactical: CEA specialized working groups tactical: DMC and AMC
2.	Consistency between ASM, air traffic flow management (ATFM) and ATS should be established and maintained at the three levels of ASM.	ATFM Not implemented yet
3.	Airspace reservations should be of a temporary nature, applied only for limited periods of time and based on actual use of airspace.	Nature : temporary periods : limited Use : Actual
4.	The FUA concept should, whenever possible, be applied across national borders and/or the boundaries of flight information regions (FIRs).	FUA applied in Algiers FIR



## Flexible and adaptable airspace structures and procedures



### **CIR/330 OACI:**

An FUA concept can be based on the potential offered by flexible and adaptable airspace structures and procedures that are especially suited to temporary allocation and utilization like conditional routes, temporary reserved area, temporary segregated airspace:

- Conditional routes: not yet implemented in Algiers FIR;
- Temporary reserved area: not yet implemented in Algiers FIR;
- Temporary segregated airspace: not yet implemented in Algiers FIR.



## Work of CEA and its specialized working groups



#### The Civil/Military Cooperation best practices:

- Establishment of a military civilian commission to develop procedures for reservation of airspaces and itineraries;
- Study of the implementation of the ATFM service in Algiers FIR;
- Reconfiguration of Algiers FIR sectors;
- Creation of ATS routes between Algiers and Seville FIR;
- Creation of Restricted ATS domestic routes Connecting Military Aerodromes to the Domestic ATS routes Network;
- Creation and development of special status areas.



## Work of CEA and its specialized working groups



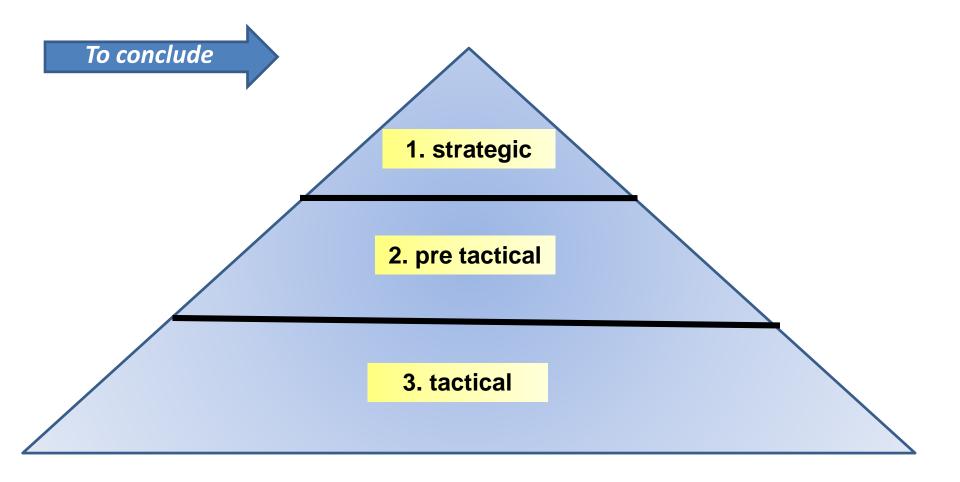
### The Civil/Military Cooperation best practices:

- Analysis of ATS incidents;
- Study of military needs under the Airspace Management Development Plan PDGEA;
- Re-routing of air traffic between Algiers and Tripoli FIRs;
- Use of the military radionavigation facility at Boufarik Air Force Base;
- Creation of new RNAV routes North / South of the FIR;
- Implementation of new ATS routes connecting the Alger FIR to the Tunis FIR.



### **CONCLUSION**

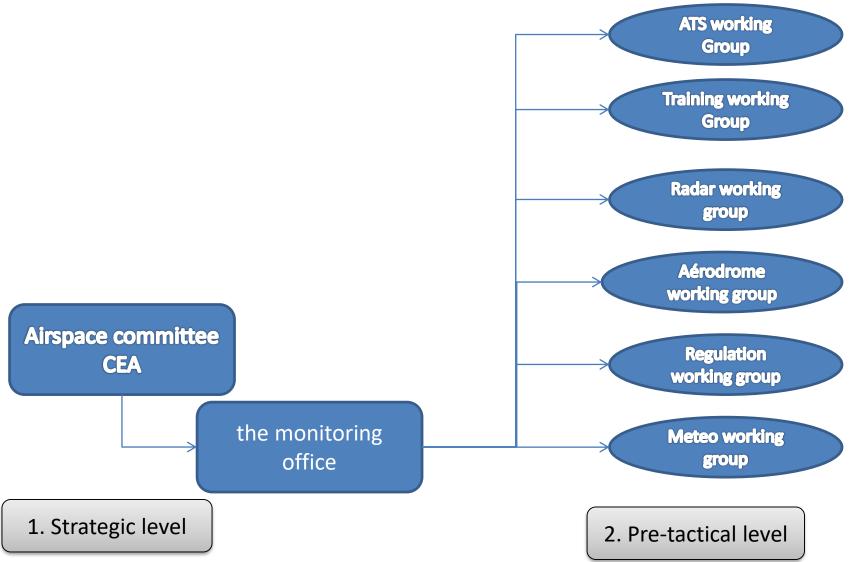






### **CONCLUSION**







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### 3. Tactical level



Air Space Managment - ASM : Civil/miltary coordination

## Thank you for your kind attention