





# Civil-Military coordination in Tunisia

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#### **OUTLINE PRESENTATION**

- 1- Introduction
- 2- An overview of our airspace structure
- **3-Compliance with ICAO provisions**
- 4-Concrete example of coordination.



#### 1- INTRODUCTION

The Lack of Civil/military coordination of airspace management is partly responsible for an inefficient airspace use and limited use of aircraft capabilities.



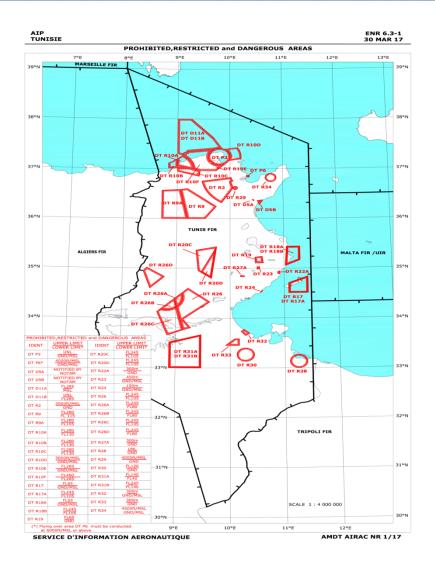
THE MAJOR BENEFIT OF AN **EFFECTIVE CIVIL/MILITARY** COORDINATION OF AIRSPACE MANAGEMENT IS TO PROVIDE THE ATM SYSTEM WITH THE POTENTIAL TO INCREASE CAPACITY.



# 2- OVERVIEW OF OUR AIRSPACE STRUCTURE



#### 2- OVERVIEW OF OUR AIRSPACE STRUCTURE





# 2-OVERVIEW OF OUR AIRSPACE STRUCTURE (Cont...)





# 2-OVERVIEW OF OUR AIRSPACE STRUCTURE (Cont...)

#### 39 Restricted Area are implemented in Tunisia Airspace

Prohibited Area	02	
Dangerous Area	Announced by NOTAM 02	Permanent 02
Restricted Area	33	



# 3- COMPLIANCE WITH ICAO PROVISIONS



#### 3- COMPLIANCE WITH ICAO PROVISIONS

### Civil Air Traffic Services are provided by Office de l'Aviation Civile et des aéroports (OACA- The Tunisian ANSP)

Military Air Traffic Services and civil air traffic Services are separated and coordinated.



Air traffic services authorities is established and maintained close cooperation with military authorities responsible for activities that may affect flights of civil aircraft:

- ➤ A letter of agreement is signed between OACA and military units related to coordination procedures between different ATC units and military units.
- > All flight plans and other data concerning flights of civil aircraft are exchanged between air traffic services units and appropriate military units.
- **▶** Military coordination unit located in Tunis ACC.



# Special procedures is established in order to ensure that:

- Air traffic services units are notified if a military unit observes that an aircraft which is, or might be, a civil aircraft is approaching, or has entered, any area in which interception might become necessary;
- ➤ All possible efforts are made to confirm the identity of the aircraft and to provide it with the navigational guidance necessary to avoid the need for interception.



Eurocontrol has developed the concept of the Flexible use of Airspace FUA:

This concept allows the maximum shared use of airspace through enhanced civil/military co-ordination.

The application of the FUA Concept ensures that any airspace segregation is temporary and based on real use for a specified time period.

**Definition source: Eurocontrol** 





# The coordination between Tunisian civil aviation and military aviation foresees three levels of ATM coordination:

Level one (strategic level)

Level two (pre-tactical level)

Level three (tactical or real time)



#### Level one (strategic level)

Performed by CCEN (commission consultative d'approbation des études de la navigation aérienne) This permanent high level strategic commitee is in charge of :

- > Re-assessment of current prohibited, restricted and dangerous area and route structures;
- > organising dialogue between regulator, military, provider and airspace users;
- > Evaluation of national Airspace Requirements.





#### Level one (strategic level)

All Airspace and Route implementation Request which may require permanent airspace segregation is Collected by DGAC (CAA) who organise an internal negotiation involving all stakeholders(CAA, military ,ANSP, Users)

The take decisions will be documented and a NOTAM will be submitted by AIS.



#### Level two (pre-tactical level)

All Airspace reservation which may require temporary airspace segregation is collected and analysed by (OACA). After coordination between ATC units and military a NOTAM is submitted by AIS according to the provisions of the Annex 15.

A temporary civil/military committee is established for coordination some military activities that need airspace reservation.



#### Level three (tactical or real time)

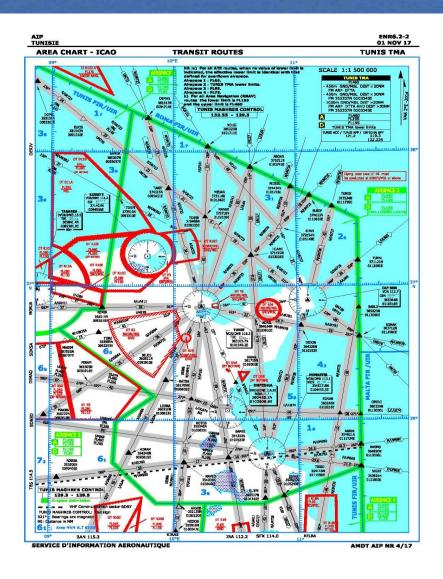
- Real-time knowledge and representation of an area (activation and release)
- An appropriate Military Unit is located in Tuns ACC in order to foster an effictive coordination
- Real-time coordination in favor of GAT and OAT (direct contact by phone between ACC controllers and military controllers)
- The most restricted, dangerous and temporary areas may be used by civil aircraft after prior coordination between civil and military controllers.



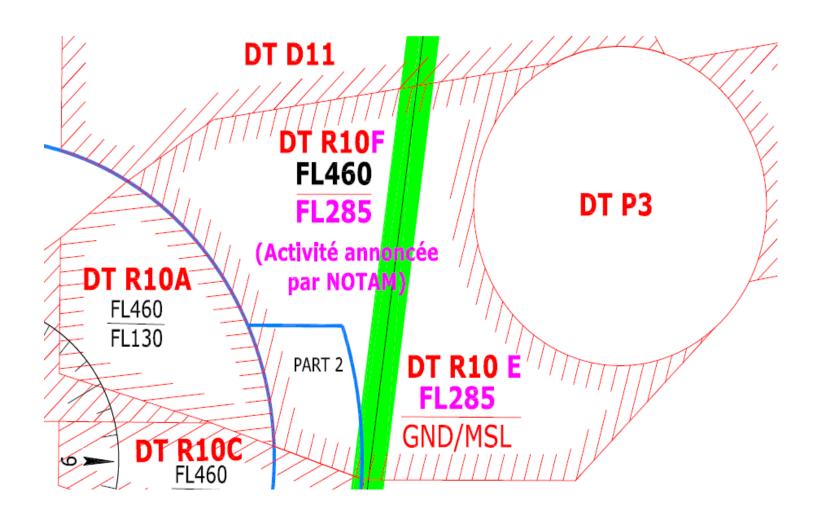
### 4- CONCRETE EXAMPLE



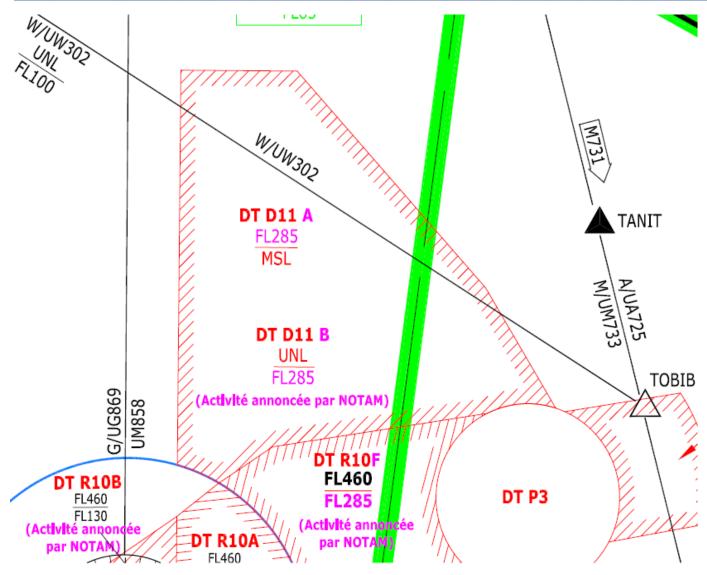
## 4- CONCRETE EXAMPLE







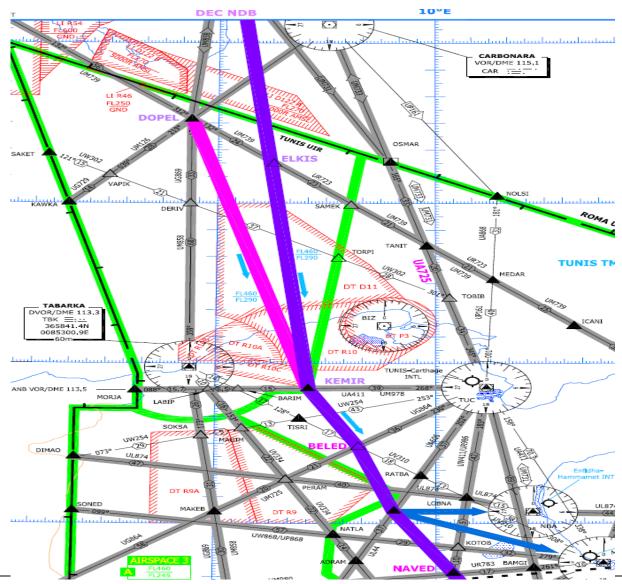






IDENTIFICATION	VERTICAL LIMITS	REMARKS
DT R10E	FL460 FL285 GND/MSL	Permanent H24
DT R10F	FL460 FL285	24H Activity notified by NOTAM
DTD11A	HL FL285 MSL	Permanent except week end
DTD11B	Illimité FL285	24H Activity notified by NOTAM









#### Benefits of this new structure

More airspace for ATCOs above FL285 and that allows:

- Direct route (Save fuel, Less CO2 emission, short-cut)
- Lateral separation between northbound and southbound traffic (enhancement of safety)



# THANKS YOU FOR YOUR INTENTION