

**INDIAN NAVY
AND
FLEXIBLE USE OF AIRSPACE**

**ICAO APAC CIVIL MILITARY COOPERATION REGIONAL
CONFERENCE**

SCOPE

REQUIREMENTS

CHALLENGES/ WAY AHEAD

CONCLUSION

SCOPE

Airspace

- Present Structure
- FUA Initiatives
- Transition
- Integration

REQUIREMENTS

- ## Civil Requirements

- Commerce driven.
- Cost effective/ Time Bound/Schedule
- Environment
- Increased Volume

REQUIREMENTS

- **Military requirements**
 - **Complexity of Manoeuvres**
 - **Not Scheduled**
 - **Critical and Mission Oriented**

AIRSPACE STRUCTURE

- **Finite Resource**
- **Present Structure**
 - **Civil – CTRs, CTAs, TMA etc**
 - **Military – Restricted Areas, Danger Areas**
 - **Joint User Airfields**

FLEXIBLE USE OF AIRSPACE

- Indian Navy has three joint user airfields
- Civil Aircraft operate on a 24 hour basis along with military aircraft
- Real Time utilization of airspace

FUA CO-OPERATION

- Reduction of Height over Danger Area from F400 to F280
- Denotification of VOD 172A and restructuring of VOD at Kochi
- Creation of new CDR on route N 563 over Goa Airspace
- Implementation of PBN Procedures at Goa
- Denotification of VOR 184 at Visakhapatnam
- Sharing of Surveillance data

FUA CO-OPERATION

- **Creation of 7 TRAs for RPA operations at Kochi**
- **Creation of 5 TSAs/ TRAs at Visakhapatnam**
- **Creation of ATZ at Kochi**
- **Creation of Dynamic Airspaces at Porbandar and Chennai**
- **Conduct of Workshops on FUA**
- **Installation of ADS – B at Campbell Bay in South Andamans**

TRANSITION

- **From ASM Level 1 to 3**
- **Setting up of AMCs**
- **Already Existing system in the Military**

INTEGRATION

- **Tactical**
 - **Plans received on D – 1**
 - **Addition and Alterations subject to requirements**
 - **Similar to AMCs in Civil**

INTEGRATION

- **Civil Flight Operations**
 - **Sectorisation of LFAs**
 - **Creation of Buffer Zones**
 - **Deconfliction of Traffic**
 - **Slots**
 - **Surveillance**

CHALLENGES/ WAY AHEAD

- **Compatibility of Systems**
- **Integration of Systems**
- **Each others Requirements**
- **Mutual Trust**
- **My Airspace**

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Questions ?