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ATFM TF/3 Meeting

India



MID REGION HIGH LEVEL AIRSPACE CONCEPT



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- Implementation of AIDC/OLDI between all ACCs- In accordance with the MID Air Navigation Strategy AIDC/OLDI should be implemented between all adjacent ACCs.
- Consider the implementation of Bilateral, Sub-regional or regional ATFM services- ATFM can regulate traffic flows involving departure slots, smooth flows and manage rates of entry into airspace along traffic axes, manage arrival time at waypoints or Flight Information Region (FIR)/sector boundaries and re-route traffic to avoid saturated areas.
- ATFM and its applications should not be restricted to one State or FIR because of their far-reaching effects on the flow of traffic elsewhere.
- A MID Region ATFM service/system should be implemented to manage efficiently the traffic flows within and across the Region. Nevertheless, all initiatives to improve traffic flows should be exhausted before implementation of any ATFM measures in the MID Region.



Technology Enablers



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- AIDC/OLDI
- ATFM Data Exchange – Protocol mechanism-FIXM
- Implementation of AMHS and CRV
- Surveillance Data Sharing with adjacent States
- Accurate Weather Prediction and sharing of Information
- Sharing of ATS Automation processing of flight data





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India and MID EAST





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This satellite map shows the region from the Middle East to East Asia. A blue circle is positioned in the Arabian Sea, west of the Indian coast. Five red arrows point from this circle to Oman, the United Arab Emirates, the Persian Gulf, the Bay of Bengal, and Sri Lanka. Two blue arrows point from the circle to the Gulf of Aden and the Laccadive Sea. The map includes labels for countries such as Georgia, Azerbaijan, Turkmenistan, Uzbekistan, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, Iran, Iraq, Syria, Jordan, Saudi Arabia, Yemen, Eritrea, Djibouti, Ethiopia, Somalia, Kenya, India, Nepal, Bhutan, Bangladesh, Myanmar (Burma), Laos, Thailand, Vietnam, Cambodia, Malaysia, Singapore, China, North Korea, South Korea, Japan, Taiwan, Philippines, and Luzon. Bodies of water labeled include the Caspian Sea, Persian Gulf, Red Sea, Gulf of Aden, Arabian Sea, Bay of Bengal, Andaman Sea, Gulf of Thailand, South China Sea, Philippine Sea, Sea of Japan, Yellow Sea, East China Sea, and Celebes Sea.

Update on AIDC



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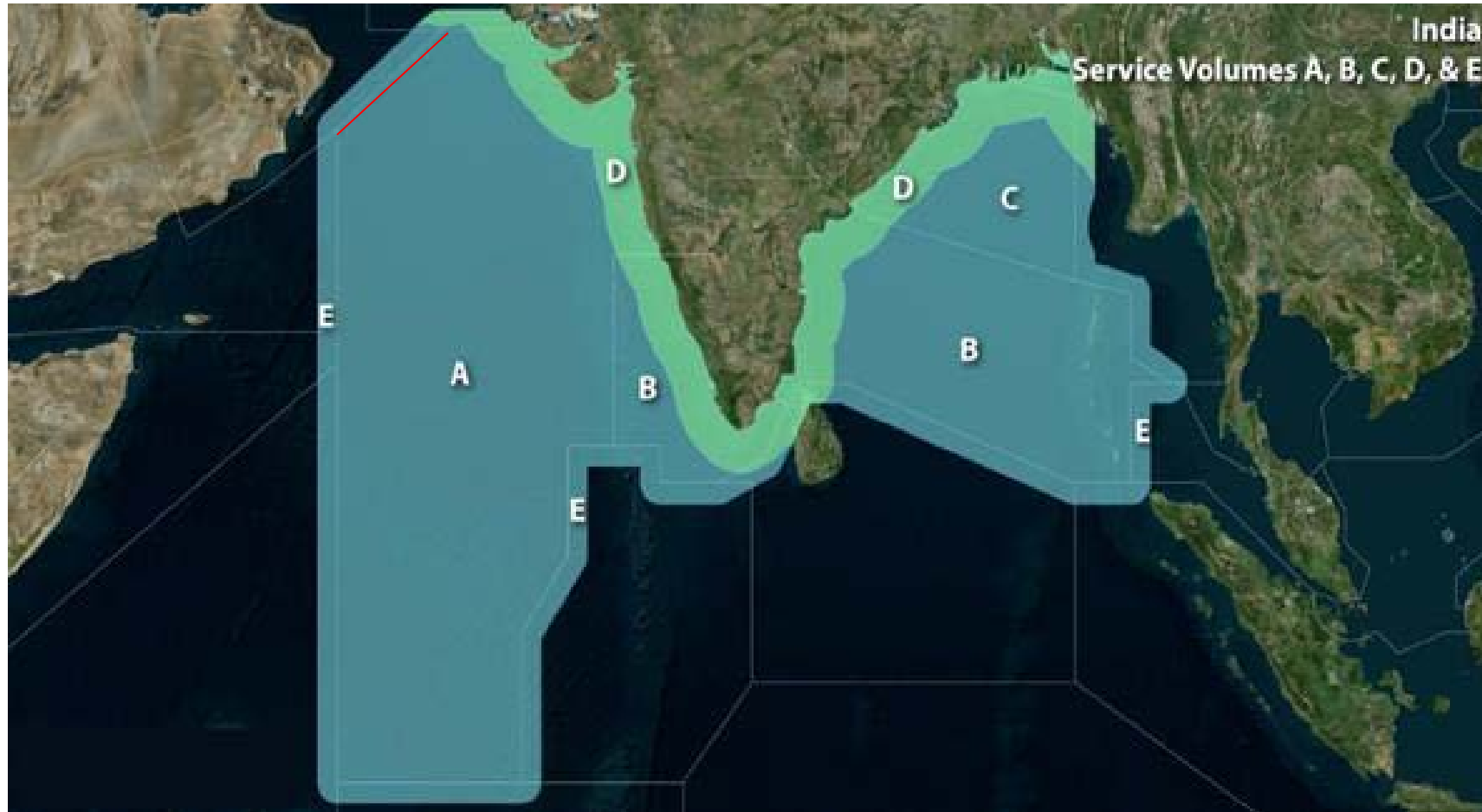
- Mumbai and Muscat
- Last trial carried out in September 2019
- Coordination teams formed
- Further trials needed for implementation



Plans for Implementation of Space Based ADS-B



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Space Based ADS-B data is available for testing at Chennai and Mumbai.

Plan for integrating the ADS-B data with Automation



ADS-B Mandate



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- ADS-B mandate for Indian continental airspace has been issued to be effective from 01st January, 2020.
- As per the mandate, all aircraft flying on PBN routes in Indian continental airspace
and
- On identified international and domestic routes, at or above FL290 are required to be equipped with ADS-B.



Update on PBCS



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- DGCA India issued Ops Circular 01 in March 2018
- APAC FANS Interoperability Team (FIT/Asia) May 2019 Update
- *Doc 9869- PBCS Manual 3rd Edition, 2020-2021*
 - I. Improve guidance on PBCS framework (operational authorization, CSP compliance and PBCS monitoring, etc.)*
 - II. Improve safety requirements related to the existing RCP/RSP specifications*
 - III. Include new RCP specification*





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Developing a Regional ATFM Framework



Need for Harmonization



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- ATFM information Exchange
- Terminology
- Training
- Publication timings
- Declaration of Capacity

APAC ATFM
Framework



Need for Champion States



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- Airport CDM-→ National CDM-→ Regional ATFM
- Multi-State adaptation of common procedures , exchange of information/data, commitment to adhere to agreements
- Need Champion States to kick off the process
- Different Levels of engagement based on State's needs and requirement of supporting the needs of adjacent States.



Milestone Approach- Lessons learnt



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- Assess Airport Capacity – Normal/ Emergency/ Other modes
- Assess Airspace Capacity – Normal/ Peak/ Overflow
- Prepare ADP
- Sharing of ADP
- Post Ops – Assess ADP with actual data
- Minimal ATFM interventions – Mostly by Strategic interventions
- Engage Stakeholders and Regulators at each step



Need for ATFM TF to include ACDM



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- ACDM helps in creating a CDM approach
- ACDM builds data integration capabilities
- ACDM refines Airport Capacity
- ACDM introduces the concept of Ground Delay
- ACDM helps in accurate Flight Planning / intent prediction
 - build a more accurate demand prediction
- ACDM helps in more rapid recovery from contingencies





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Proposals for ATFM TF/3



Proposed inclusions in ATFM Framework



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- ATFM communications- Within/ Across States
- ATFM data exchange protocols
- ATFM to ATM automation systems message exchange
- ADP exchanges
- ACDM implementation
- ACDM- ATFM integration



Proposal for Airspace Capacity



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- Improve airspace capacity in Arabian Sea
 - Create a new Arabian Sea Traffic Flow Review Group – Joint effort of ICAO APAC , MID Region and ESAF – If agreed India will propose the same in the tenth meeting of SAIOACG in March 2020.
 - Enhance the Coordination Role of informal groups ASIOACG / INSPIRE/ BOBASIO / SCM between concerned States

