Operator Perspective: FRA Implementation

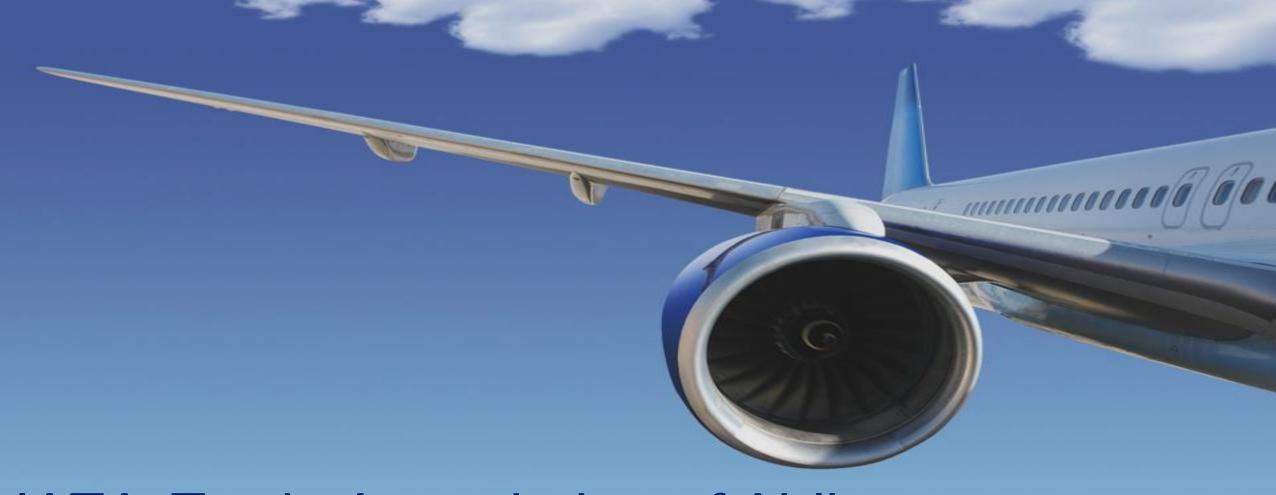
Prashant Sanglikar

Asst. Director – OSS (SFO)

IATA Asia Pacific

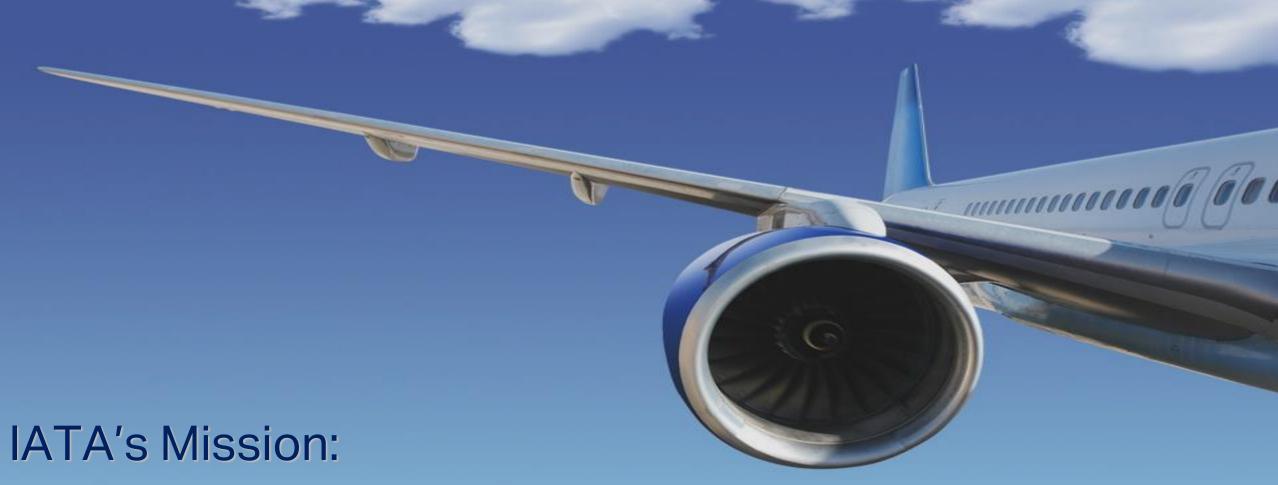
sanglikarp@iata.org





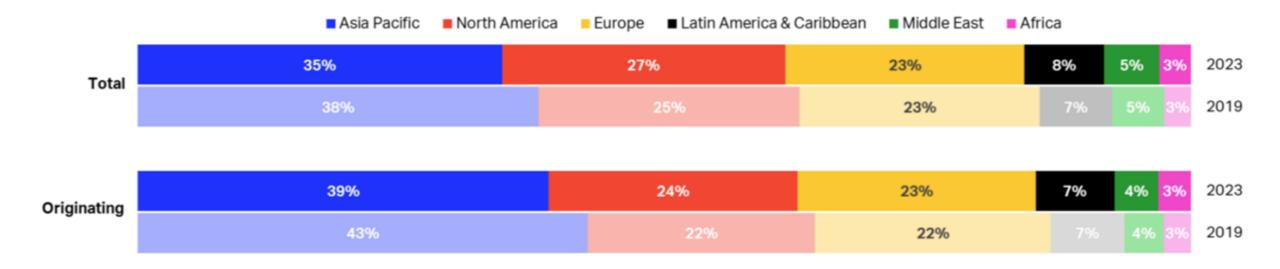
IATA: Trade Association of Airlines

- **7** 300 Member Airlines in over 120 countries
- Carrying 83% of the world's air traffic



- To represent, lead and serve the airline industry
- Represent airlines' interests to governments & international organisations
 - Assist the airlines in developing solutions to the issues affecting efficient operations

Regional Perspective: Asia Pacific



Source: IATA Sustainability and Economics, using data from DDS.



Operator Perspective: FRA Implementation



User Expectations:

"Imagine there's no airways, No fixed routes to fly No VOR or NDBs, above us only sky Imagine all the planes filing and flying way they like

Imagine there's no H24 SUA, it isn't hard to do No reason we can't fly wherever and how we want to Imagine all the airspace users living life in peace

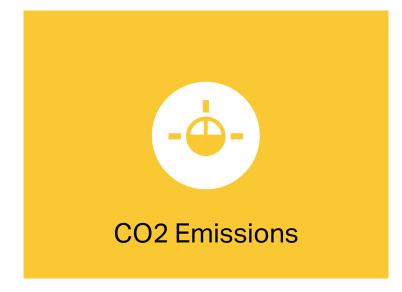
You may say I'm a dreamer but I'm not the only one! I hope someday you'll join us and the industry will work as one "



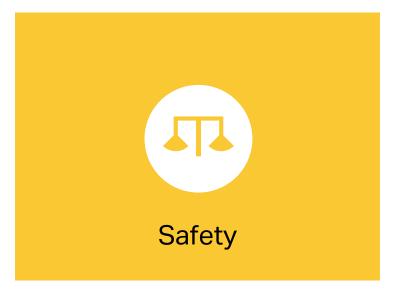
WHY FRA may going to be the Future of Air Traffic Management? Benefits

Airspace Capacity, Efficiency

- More availability of routes
- Higher traffic volumes flying OPT FLs
- Optimises Routes
- Delay reduction



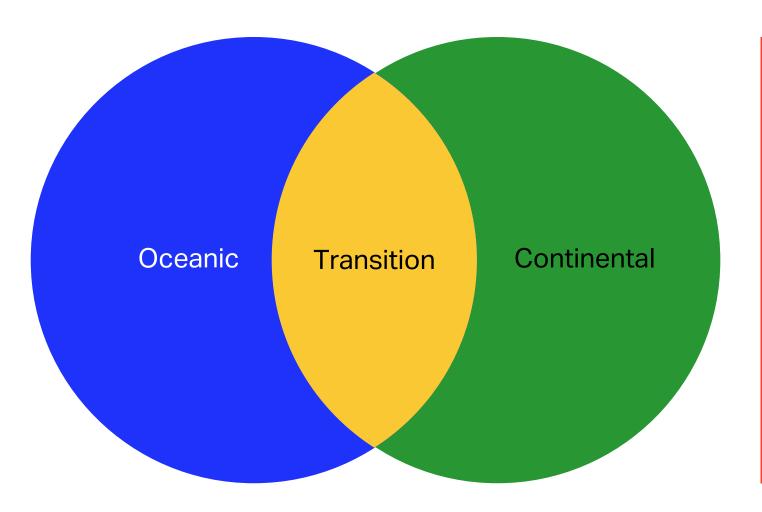
- Reduces flight distance, Flying time
- Reduces Fuel consumption means reduction in CO2 Emissions
- Reduces Operating costs for airlines



- Reduced complexity and errorprone manual intervention in the flight planning process
- Improved and predictable operations accounting for Adv Weather avoidance



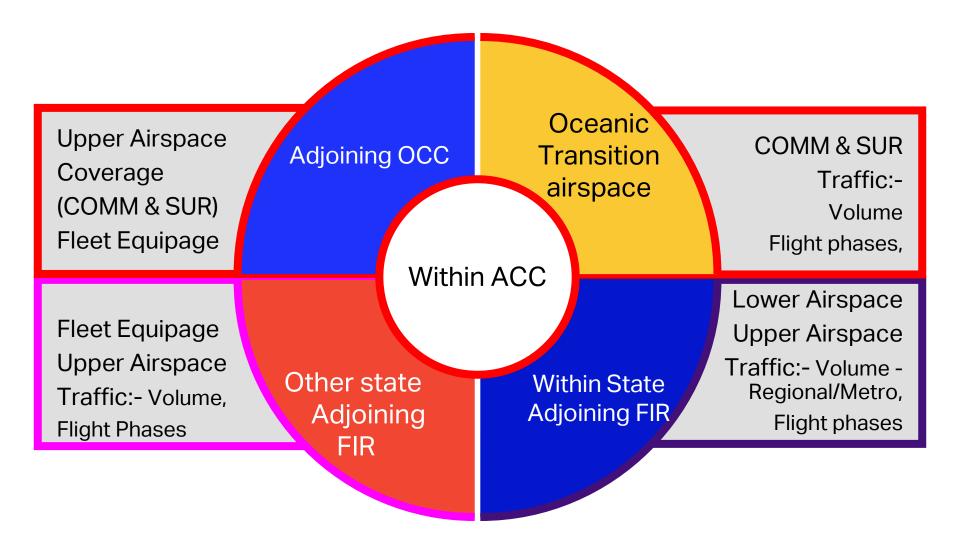
FRA Strategies: Airspace



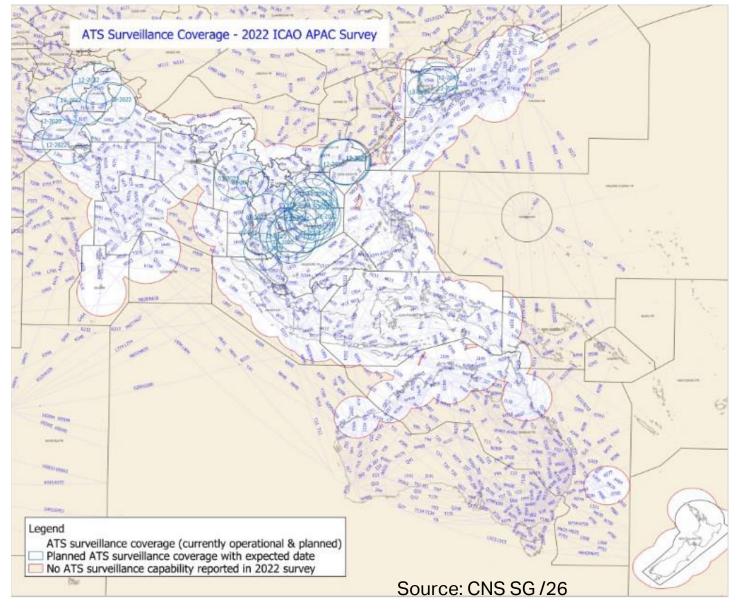
- ✓ SUR & COMM Coverage
- ✓ ATM Automation system
- ✓ Traffic Density and Patterns
 - ✓ Day of the week
 - ✓ Time of the day
- ✓ Aircraft Equipage
- ✓ Collaboration with adjacent FIR



FRA Strategies: Airspace







FRA Strategies:

ATM Automation and Coverage: SUR



with the state of DCPC VHF Coverage - 2022 ICAO APAC Survey PERMIT Legend DCPC VHF coverage (currently operational & planned) Planned DCPC VHF coverage with expected target date No DCPC VHF capability reported in 2022 survey Source: CNS SG /26

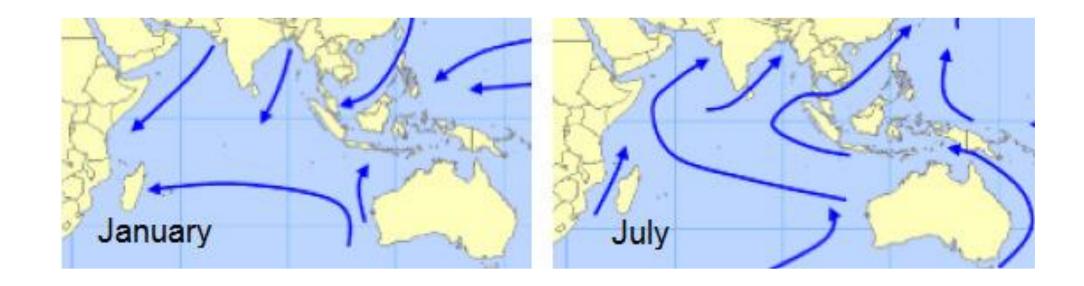
FRA Strategies:

Coverage: COM



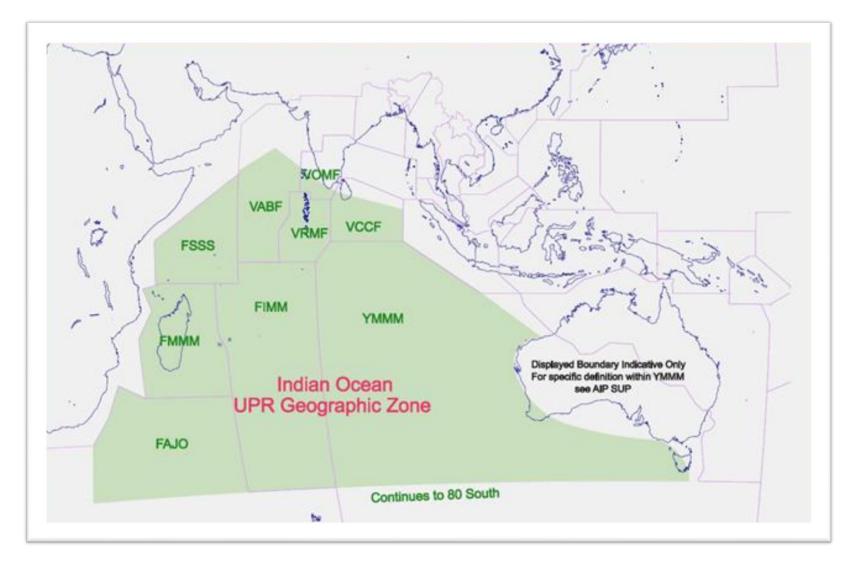
Case Study – South Asia

Upper wind patterns in Asia Pacific

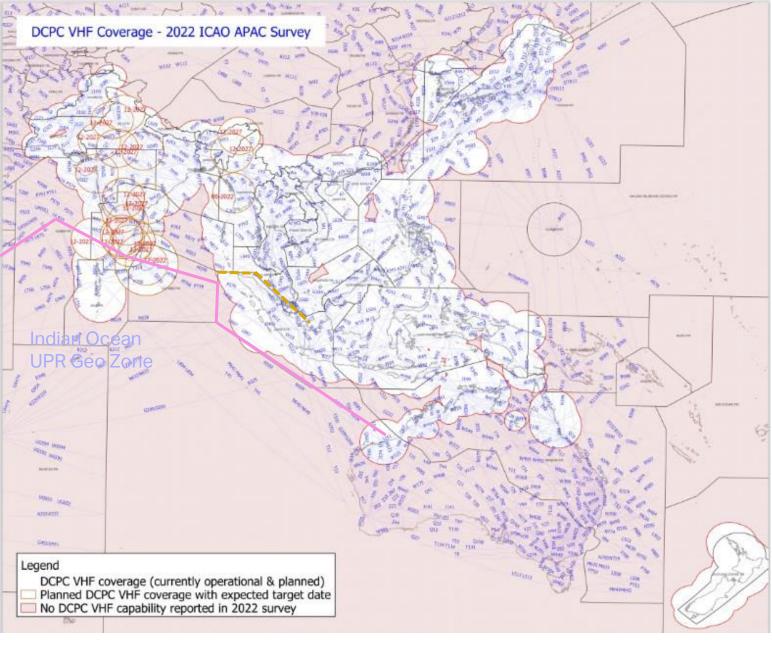




UPR Geo Zone: INSPIRE, Oct 2013







FRA Exploring Possibilities

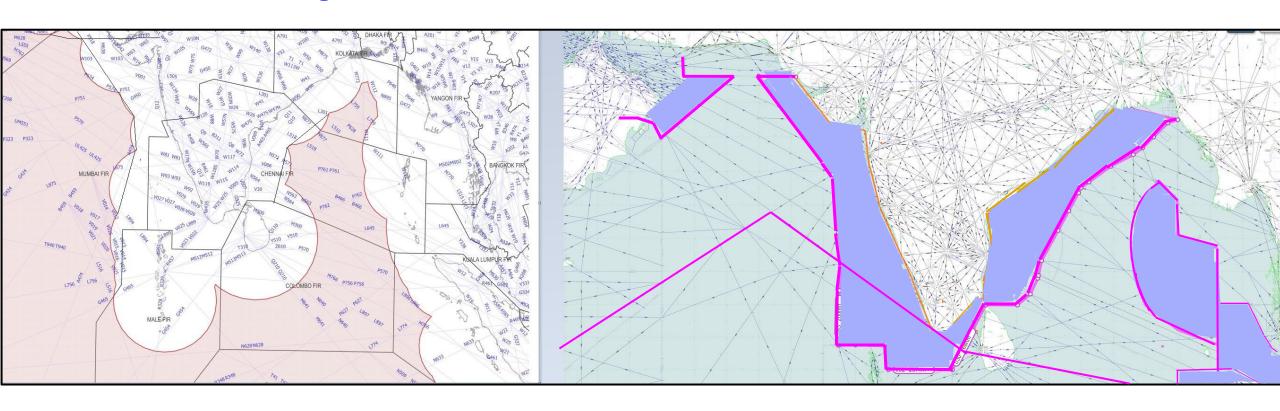
Example: Oceanic Transition Airspace

- ✓ Upgrading airspace class
- ✓ Allow Changing FL
- ✓ Allow Changing over to different airways
- ✓ Collaboration with neighboring FIR



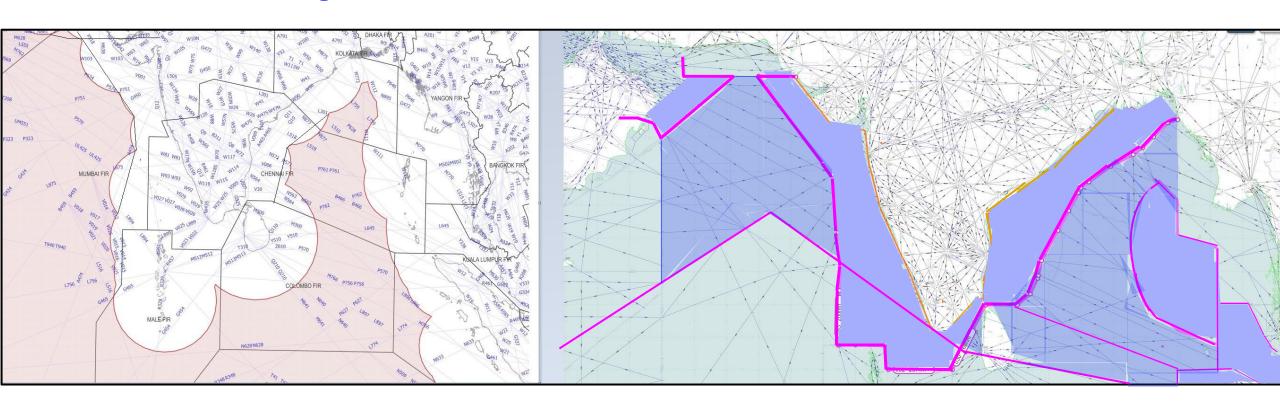
14 29 August 2023

FRA Exploring Possibilities Case Study – BoB-AS-IO: Oceanic Transition



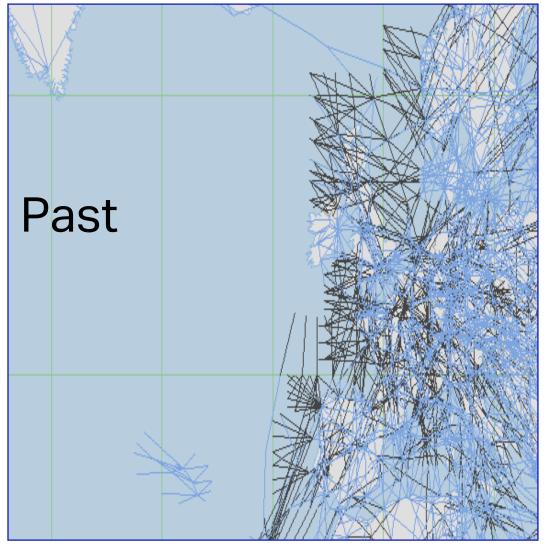


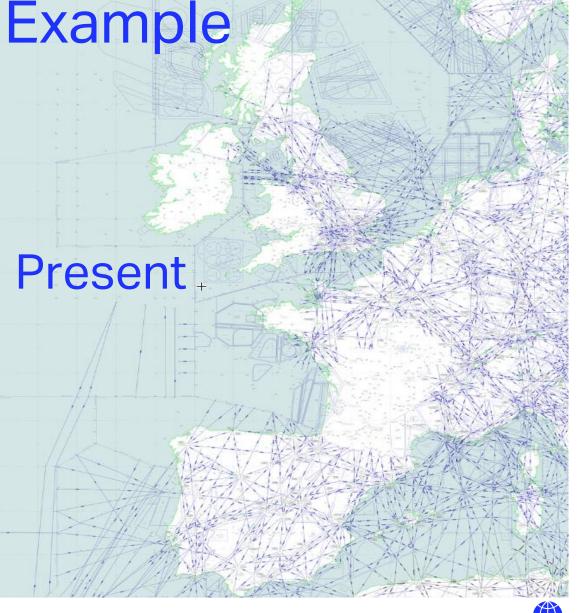
FRA Exploring Further Possibilities Case Study – BOB-AS-IO: Oceanic





FRA Transformation Example







Operator Perspective: FRA Implementation

Summary

- Much can be done today
- Consider FRA Strategies
- Explore possibilities
 - What can be done
 - All the time or Some of the time
 - All the airspace or some of the airspace
 - All the FLs or some of the FLs
- Any saving is a benefit
- The savings are accumulative!

