



# Automatic Dependent Surveillance – Broadcast (ADS-B)

## AAI Implementation Strategy

By  
V.Somasundaram  
Executive Director [ATM]



Airports Authority of India

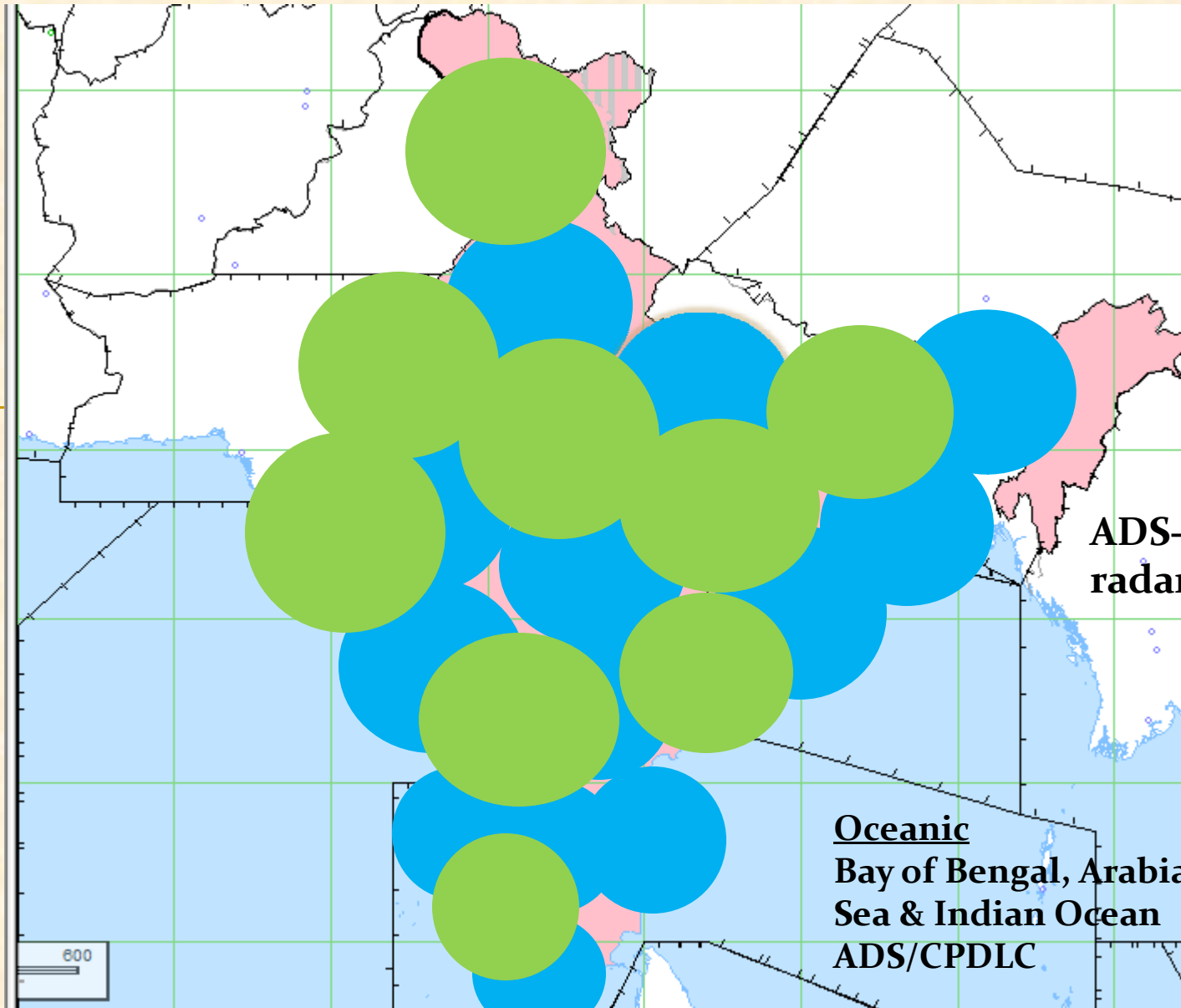
# Indian strategy

---

- ❖ AAI has developed an ambitious plans for augmentation of ANS infrastructure.
- ❖ ICAO Asia Pacific Regional strategy, implementation guidelines and mandate for ADS-B ,
- ❖ ADS-B implementation to supplement radar coverage and achieve 100% surveillance coverage over the entire continental airspace and adjacent oceanic airspace as far as practicable.



# Surveillance Coverage – Radar, ADS-C & ADS-B



## Continental

### Radar

● Current : 13

● Planned : 9

ADS-B to supplement radars and fill the gaps

Oceanic  
Bay of Bengal, Arabian  
Sea & Indian Ocean  
ADS/CPDLC

600

# Indian strategy....

## ❖ Near term (ADS-B OUT )

- Supplementing existing radar cover through ADS-B
- Enabling surveillance cover to remote areas
- Enhanced ground surveillance at airports
- Back-up to existing radars and radar replacement plans
- Surveillance cover at Cross border areas to improve Safety and efficiency
- Seamless surveillance cover throughout the National airspace, application of uniform separation standard, enhanced Safety & airspace capacity

## ❖ Future(ADS-B IN)



# APAC - ADS-B equipage mandate

❖ APANPIRG-19 has adopted a Conclusion (19/37 ) that States intending to implement ADS-B based surveillance service, to

▪ ***publish their equipage mandates** as soon as possible, with a target publication date of **no later than 2010** so that operators can plan ahead their forward purchasing and retrofit; and*

▪ ***choose a date after mid 2012 on which the ADS-B out equipage mandate will become effective** in airspace served by ADS-B ground stations with sufficient transition period to enable fleet equipage.*



# APAC ADS-B Imp guidance

❖ APANPIRG-19 has further adopted a Conclusion (19/35) that states to use the following guidelines for the development of ADS-B Implementation Plan

- *minimize capital and operating costs of ADS-B data facilities;*
- *give priority to provide coverage over major traffic flows;*
- *provide ADS-B coverage in areas within 150 NM from FIR boundaries;*
- *suitable sites with power, shelter, access routes and data communication links shall be preferred; and*
- *overlapping of ADS-B coverage is preferred.*



# Way Forward...

---

- ❖ Issue ADS-B equipage mandate ( 1090 ES)
- ❖ Plan and Implement ADS-B Ground infrastructure deployment in a time bound manner aligned with equipage mandate
- ❖ Issue of relevant Regulatory guidelines, procedures and training (ATC & Tech Personnel)



---

# Thanks



Airports Authority of India