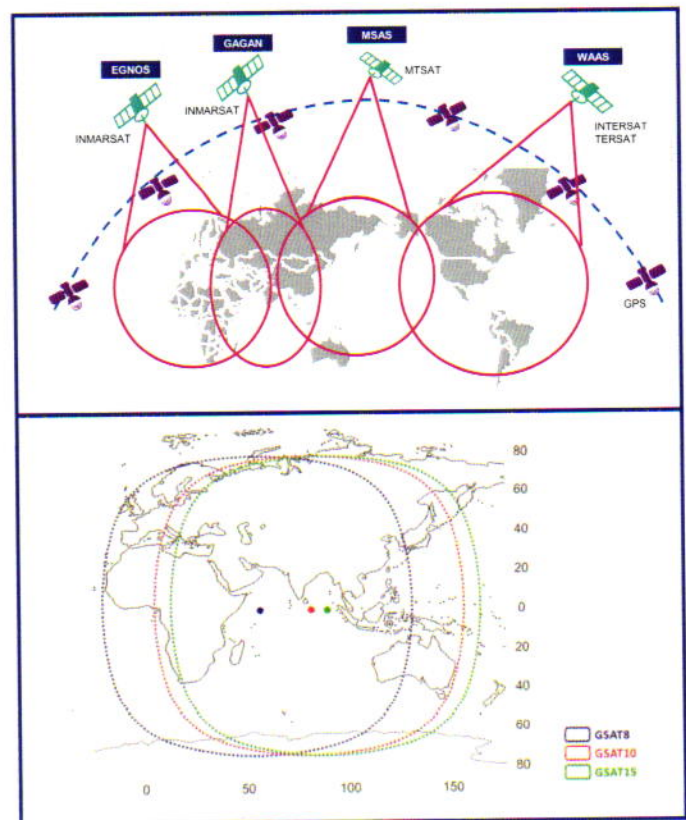
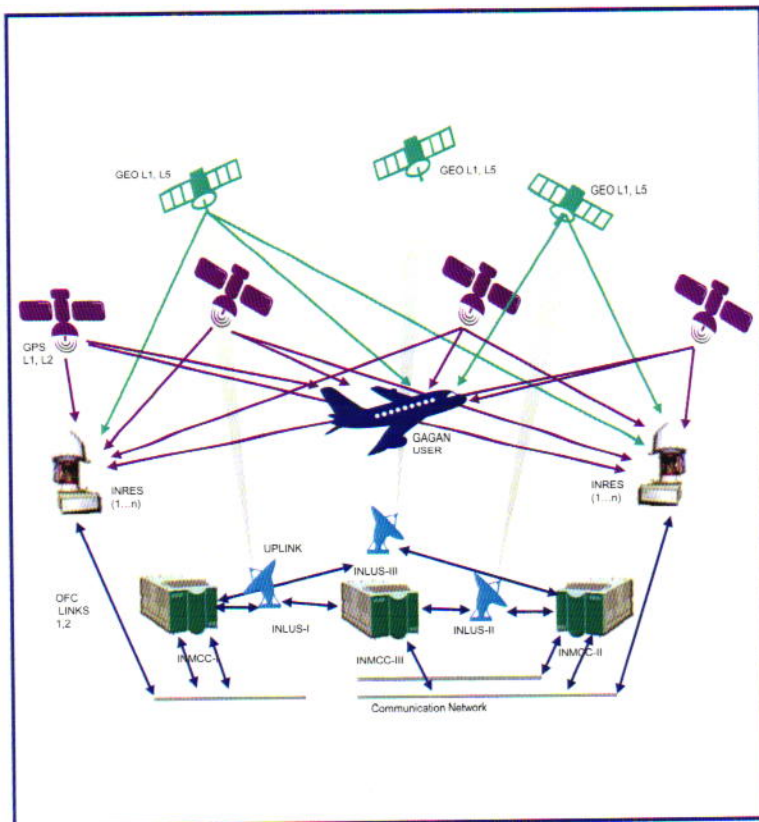
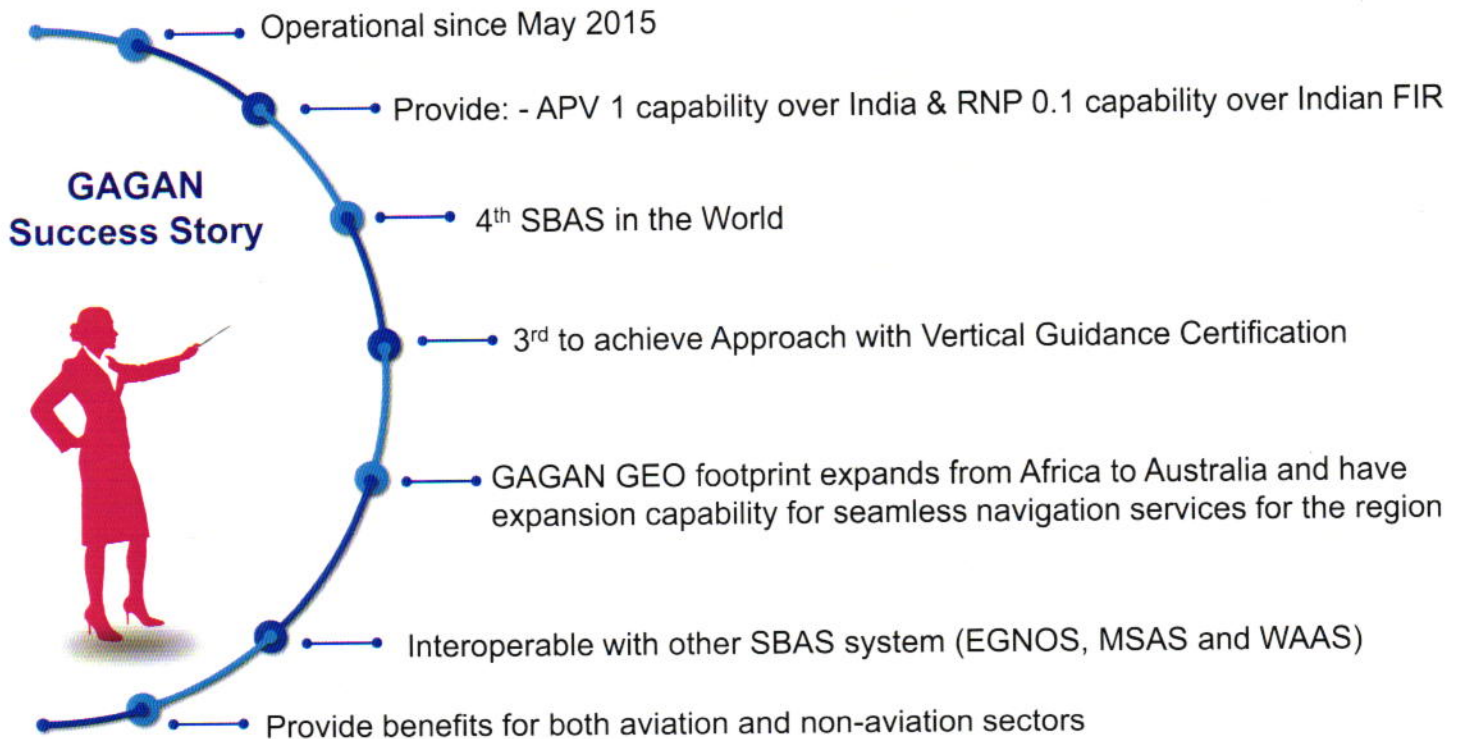




# GPS Aided GEO Augmented Navigation (GAGAN) Indian Satellite Based Augmentation System

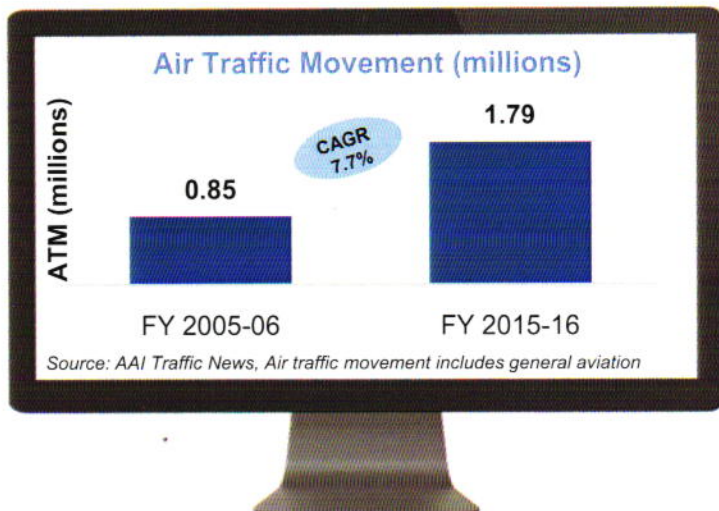




## Benefits in Indian Aviation Sector

- Significant **cost savings** due to withdrawal of ground navigational aids
- Provides **improved efficiency** – direct routes, increased fuel saving
- Ensures **reduced workload** of flight crew and Air Traffic Controllers
- Optimum air-space utilization** – Improved capacity through reduced airspace separation
- Enhances safety** – higher accuracy, global coverage
- Compatible** with non-aviation receivers
- Provide **ease of search and rescue operations**
- Reduced **noise pollution** footprint

**GAGAN will improve air traffic movements that has grown two-fold over the last 10 years**



By adopting GAGAN for aviation, flight delays, diversions, and cancellations will be minimized, while reducing controlled flight into terrain incidents by 75 percent

National Civil Aviation Policy 2016 prescribes "New aircraft being registered in India from 1st Jan 2019 will mandatorily have to be GAGAN enabled"

## Enhances regional connectivity

GAGAN system will **enhance regional connectivity** in an economic way –

- Through increased accessibility to smaller airports, especially during adverse weather conditions
- Changing all VFR (Visual Flight Rules) airport to IFR (Instrumental Flight Rules) airport (without putting any equipment)

The Regional Connectivity Scheme of the government of India envisions to bring affordable flying to masses. GAGAN will play a crucial role in reducing cost and ensuring safety for increased air traffic

## GAGAN Geo-Footprint

Airports Authority of India is taking initiative to support countries in the South Asian, South East Asian region to leverage the GAGAN system for providing seamless navigation signal accuracy in the larger region neighboring India up to 1500 nautical miles.

## Benefits to Non-Aviation sector

GAGAN signal can be used by a wide range of civilian and non-aviation users

