According to the website of our good friends at RIN India’s Satellite Based Augmentation System has become the fourth such system to offer improved navigation.

On 30th December, the Indian Directorate General of Civil Aviation (DGCA) provisionally certified the country’s Satellite Based Augmentation System (SBAS) programme, the GPS Aided Geo Augmented Navigation (GAGAN) system, to the ‘Required Navigation Performance, 0.1 Nautical Mile’ (RNP0.1) service level. This will enable SBAS-capable aircraft to use GAGAN signals in space for en-route navigation and non-precision approaches – those without vertical guidance – in Indian air space.

GAGAN will bridge the gap between the EU’s EGNOS and Japan’s MSAS coverage areas, offering a huge area of seamless navigation to the aviation industry. The signals are also available to any other GPS users. The US WAAS, EGNOS, MSAS and GAGAN use identical signals-in-space.

GAGAN, jointly developed by the Indian Space Research Organisation (ISRO) and the Airports Authority of India (AAI) is also poised to receive Approach with Vertical Guidance (APV1/1.5) certification in the near future to offer precision runway approach services over the Indian land mass.

The GAGAN signal is broadcast through two geostationary earth orbit (GEO) satellites, GSAT-8 and GSAT-10, covering the whole Indian Flight Information Region (FIR) and beyond. An in-orbit spare GAGAN transponder will be carried on GSAT-15.

India’s Directorate General of Civil Aviation (DGCA) provisionally certified the ambitious Satellite Based Augmentation System (SBAS) programme of India, GPS Aided Geo Augmented Navigation (GAGAN) system, to RNP0.1 (Required Navigation Performance, 0.1 Nautical Mile) service level on 30th December, 2013.

Certification will enable aircraft fitted with SBAS equipment to use GAGAN signal in space for En-Route Navigation and Non-Precision Approaches without vertical guidance over Indian air space. India is the fourth country to offer safety of life, space-based satellite navigation services to the aviation sector.
Availability of the GAGAN Signal in space will bridge the gap between European Union’s EGNOS and Japan’s MSAS coverage areas, thereby offering seamless navigation to the aviation industry.

India’s GAGAN System, jointly developed by the Indian Space Research Organisation (ISRO) and Airports Authority of India (AAI), is a giant leap forward in the development of Global Navigation Satellite System (GNSS) services in India and will pave the way for more growth and enhancement in the days to come. The GAGAN System is poised to APV1/1.5 level of certification in the near future to offer precision approach services over the Indian land mass. The GAGAN signal is being broadcast through two Geostationary Earth Orbit (GEO) satellites, GSAT8 and GSAT10, covering whole Indian Flight Information Region (FIR) and beyond. An on-orbit spare GAGAN transponder will be flown on GSAT-15.