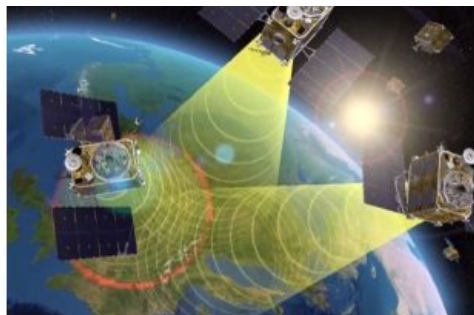


# European EGNOS Technology for South Korea



Technology developed as part of Europe's satellite navigation-augmenting EGNOS system has been sold to South Korea to serve its national equivalent system. Thales Alenia Space has signed a contract with South Korea's space agency, the Korea Aerospace Research Institute, to supply ground infrastructure for the Korea Augmentation Satellite System (KASS) on behalf of the South Korean Ministry of Land, Infrastructure and Transport.

The infrastructure is derived from that developed by Thales Alenia Space under contract to ESA and in its role as prime contractor for EGNOS, which has been operational since 2009 for general use and since 2011 for 'safety of life' applications, including aviation.

Designed by ESA and being exploited by Europe's Global Navigation Satellite System Agency, EGNOS improves the precision of US GPS signals over most European territory, while also providing continuous and reliable updates on the 'integrity' of these GPS signals.

## Ground monitoring stations

A network of 40 ground monitoring stations throughout Europe performs an independent measurement of GPS signals, so that corrections can be calculated and then passed to users immediately via a number of geostationary satellites. The result is that the EGNOS-augmented signals are guaranteed to meet the extremely high performance standards set out by the International Civil Aviation Organisation standard, adapted for Europe by Eurocontrol, the European Organisation for the Safety of Air Navigation.

Satellite Based Augmentation Systems (SBAS) such as EGNOS and the US Satellite Wide Area Augmentation System operate by ensuring the integrity and positioning accuracy of GPS, as well as, in the decade to come, the European Galileo, Russian Glonass and Chinese Beidou systems.

KASS is projected to be the ninth regional SBAS in service when it becomes operational at the end of the decade. The various systems are designed to be fully interoperable, ensuring air traffic safety as aircraft move between different zones, and jointly providing an almost worldwide service.

