# One-stop support for ADS-B implementation

ADS-B Out DO-260B (Automatic Dependent Surveillance – Broadcast) will become mandatory in U.S. and European airspace by 2020. With ADS-B, aircraft broadcast their precise position and velocity via satellite navigation systems. This allows air traffic control to track the aircraft without using radar surveillance. Lufthansa Technik offers extensive hardware consulting and modification programs to fully support customers in implementing this new surveillance technology into their fleets.



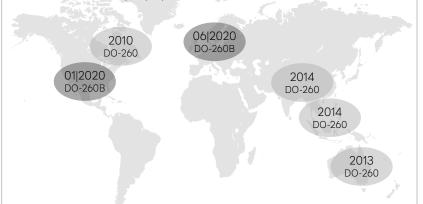
With air traffic constantly growing, important hub airports increasingly suffer from capacity bottlenecks and airspace itself is becoming more and more congested – with the potential for safety problems. In order to improve safety, the U.S. FAA and European EASA aviation authorities have introduced the new standard surveillance technology ADS-B (Automatic Dependent Surveillance – Broadcast). Fleet implementation will be mandatory by 2020.

## **Enabling improved safety**

ADS-B reduces vulnerability to errors, allows closer aircraft spacing in an IFR environment and automatically chooses the optimum flight level. Aircraft equipped with the ADS-B transponders get their positions from the GNSS constellation (GNSS - Global Navigation Satellite System, i.e. GPS, Galileo). Simultaneously, they broadcast their own positions and other data to any aircraft or ground station equipped to receive it. Unlike radar technology, ADS-B accuracy does not degrade with range, atmospheric conditions or target altitude.

## The ADS-B mandate

ADS-B Out is mandated by the FAA and the EASA for their respective airspace until 2020. Canada and Asia also have active ADS-B programs in effect and other countries are preparing for their ADS-B regulations. Additionally, ADS-B In mandates are already in preparation to be announced in the near future.





# **Customer advantages**

- Compliance with EASA and FAA regulations
- Provision of air traffic control in remote areas
- Closer aircraft spacing possible in IFR environment
- Diminishing vulnerability to human errors
- Enhanced use of optimal flight levels
- Improved capacity of congested airspace
- More direct routings through designated ADS-B airspaces

### Supported fleets

- A320 family
- 737NG
- 777
- 767
- MD-11
- ... others on request

#### Full implementation support

Lufthansa Technik provides its customers with a complete package enabling ADS-B Out DO-260B capability, including kits, material, approvals, and additional services such as installation or component services, e.g. pooling and repair. Lufthansa Technik is the first choice for full Part 145 installation services. We offer competitive prices due to our high-volume contracts with OEMs – currently ACSS, Honeywell, Rockwell Collins, CMC Esterline and Gables. ADS-B implementation by Lufthansa Technik is a cost-efficient, comprehensive solution for any fleet configuration. Highly flexible implementation support by Lufthansa Technik is available for every fleet size and mix.

## Implementation requirements

To implement ADS-B Out functionality in the aircraft, the ATC transponder needs to comply with RTCS DO-260B standards and the position source equipment (MMR or GPSSU) has to fulfill the accuracy requirements for ADS-B services required by the respective aviation authority. Furthermore, the means for ADS-B failure annunciation has to be implemented.

## Benefit from strong OEM partnerships

Based on its high-volume contracts with original equipment manufacturers (OEMs), Lufthansa Technik is able to provide its customers with highly competitive prices for single parts or upgrades from a single source.



9,000 aircraft worldwide need to be ADS-B-compliant by 2020. With Lufthansa Technik, you will be ready in time.

#### Contact

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