

Program	Description
March 2010 to March 2015	VHF Com 8.33KHZ In the period between March 2010 to March 2015 , and considering the requirement for VHF assignments in support of operational improvements, the use of 8.33 kHz may be progressively expanded in the airspace below FL195 in Europe.
2015 - ongoing	Automatic Dependent Surveillance - Broadcast (ADS-B) ADS-B will be one tool used to facilitate transition from ground-based to non-ground-based navigation services. Phase 1 , which required that all aircraft operating on or at any point along two specified tracks within the NAT organized track system (OTS) between FL360 and FL390 during the OTS validity period be fitted with and using future air navigation systems (FANS) A/1 (or equivalent) controller-pilot data link communications (CPDLC) and automatic dependent surveillance - contract (ADS-C) equipment. Phase 1 began on Feb. 7, 2013.
Mar-15	VHF Com 8.33KHZ From March 2015 , the capability to support 8.33 kHz and 25 kHz channel spacing shall be the standard means of compliance for the aeronautical mobile radio communications service band, 117.975 – 137 MHz, in Europe.
Sept. 1 2015	Automatic Dependent Surveillance - Broadcast (ADS-B) Out Aircraft operating within the Colombo Terminal Control Area (TMA) at or above FL290 must be equipped with ADS-B Out beginning Sept. 1, 2015
Dec. 1, 2015	TCAS II version 7.1 Aircraft currently equipped with version 7.0 and having an individual certificate of airworthiness issued before March 1, 2012 must be equipped by Dec. 1, 2015.
2015	Minimum Navigation Performance Specification Airspace Discontinue use of the MNPS navigation specification. New approvals based on RNAV 10 (RNP 10) or RNP 4. Aircraft with MNPS approval allowed continued operation in the airspace. Minimum Navigation Performance Specification Airspace MNPS airspace will become PBN airspace.
Feb-16	Automatic Dependent Surveillance – Broadcast (ADS-B) All IFR aircraft operating within 500 nm of Perth must be ADS-B equipped.
8-Jun-16	

Automatic Dependent Surveillance - Broadcast (ADS-B) Regulation 1207/2011 requires ADS-B equipage on new aircraft to meet operational requirements starting in 2015. Aircraft with airworthiness certificates first issued after June. 8, 2016, will have to comply from the date of the certificate. **Aircraft with airworthiness certificates issued before June 8, 2016, will have until June 7, 2020, to comply.**

Feb. 2, 2017

Automatic Dependent Surveillance – Broadcast (ADS-B) All IFR aircraft will be required to be **ADS-B** equipped in order to operate anywhere within Australia.

Dec. 7, 2017

FANS 1/A, CPDLC, & ADS-C Beginning December 7, 2017, aircraft operating between FL350 and FL 390 (inclusive) in the ICAO NAT Region will be required to have **FANS 1/A, CPDLC & ADS-C** equipment. Phase 2 will be rolled out in three stages (2A, 2B and 2C), with 2B and 2C beginning on Dec. 7, 2017, and Jan. 30, 2020, respectively.

Phase 2A applies to all tracks within the NAT OTS, from FL350 to FL390. Aircraft must be equipped with **FANS A/1 (or equivalent) CPDLC and ADS-C data link systems** in order to operate on these tracks beginning Feb. 5. Aircraft operators should note there are some exceptions to the NAT region DLM airspace, including ATS surveillance airspace, the New York Oceanic Flight Information Region and airspace north of 80 degrees north. **Phase 2B will begin on Dec. 7, 2017, and apply to FL350 to FL390 through the ICAO NAT region. Phase 2C will begin on Jan. 30, 2020, and apply to FL290 and above throughout the ICAO NAT region.**

The NAT Systems Planning Group goals state that by 2018, 90 percent of aircraft operation in the NAT region airspace at FL290 and above should be equipped with **FANS A/1 (or equivalent) CPDLC and ADS-C** equipment, and that by 2020, 95 percent of aircraft operating in that airspace will be so equipped.

2017

RTCA SC-214 - NextGen Datalink FAA plans to mandate data communications in 2017.

Jan. 30, 2020

FANS 1/A, CPDLC, & ADS-C Beginning January 30, 2020, aircraft operating at FL290 and above in the ICAONAT Region will be required to have **FANS 1/A, CPDLC & ADS-C** equipment.

Feb. 5, 2020

VDL Mode 2 Communications Data Link All civil aircraft operating IFR above FL285 in the EuroControl area must be retrofitted to be able to support datalink. NOTE: **Aircraft delivered before 2014 with FANS-1 are exempted from this mandate.**

2020

Automatic Dependent Surveillance - Broadcast (ADS-B) Regulation 1207/2011 requires **ADS-B** equipage on new aircraft to meet operational requirements starting in 2015. Aircraft with airworthiness certificates first issued after Jan 8, 2015, will have to comply from the date of the certificate. **Aircraft with airworthiness certificates issued before Jan. 8, 2015, will have until 2020 to comply.**

Automatic Dependent Surveillance - Broadcast (ADS-B) **ADS-B** is being considered to meet operational requirements needed in the period 2020. FAA and Eurocontrol are cooperating for a common approach to implementation timescales.

Minimum Navigation Performance Specification Airspace All aircraft operating within the **PBN airspace** are required to have **RNAV 10 (RNP 10) or RNP 4** approval. No longer allowed to operate with a **MNPS** approval.

VHF Data Link (VDL) Eurocontrol has postponed the **VHF Data Link (VDL) Mode 2** Communications mandate in Europe until Feb. 5, 2020. **Beginning in 2020, all civil aircraft operating IFR above FL285 in the Eurocontrol area must be retrofitted to support VDL Mode 2 data. Aircraft delivered before 2014 with FANS A/1 installed are exempt from this mandate.**