



The European Organisation for Civil Aviation Equipment
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Change 1 -to- EUROCAE ED-122

SAFETY AND PERFORMANCE STANDARD FOR AIR TRAFFIC DATALINK SERVICES IN OCEANIC AND REMOTE AIRSPACE (OCEANIC SPR STANDARD)

Change 1 to ED-122
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Change 1 to ED-122/DO-306 Safety and Performance Standard for Air traffic datalink Services in Oceanic and remote airspace (Oceanic SPR Standard) only contains sections and tables of ED-122/DO-306 that are affected by the Change. While DO-306 is technically equivalent to ED-122 and Table and Figures references are the same, however, the pagination and format pagination will be different.

This change is to provide unambiguous CPDLC Messages definition that will be used by FANS 1/A Datalink systems in support of In Trail Procedures operations. It includes changes resulting from work on Advanced ATS Datalink services definition.

Summary of changes

Change 1 to ED-122/DO-306 is summarized as follows:

Description of change	Affected pages, tables and figures
1. Addition of an Operational Requirement to introduce the optional use of CPDLC to support ITP procedures.	DO-306 : Page 25, Table 2 – 2 ED-122 : Page 23, Table 2 – 2
2. Introduction of “ITP using ADS-B” ATS function.	DO-306 : Page 4 §1.2.1, Page 27 §3, Page 26 Table 3-1, Page 30 Table 3-2, Page 31 §3.1.2, Page 39 Creation of §3.6 ED-122 : Page 3 §1.2.1, Page 25 §3, Page 28 Table 3-1, Page 28 Table 3-2, Page 28 §3.1.2, Page 34 Creation of §3.6
3. Clarification of OSA and OPA in support of “ITP using ADS-B” ATS function.	DO-306 : Page 71 §5.1.1, Page 105 §5.2.2 ED-122 : Page 58 §5.1.1, Page 89 §5.2.2
4. uM169x message element (previously unused) was created as a new standardized Free Text message element for inclusion in ITP clearance.	
a. Standardized free text (Uplink)	DO-306: Annex A Page 169 – 173, Table A – 3 ED-122: Annex A Page 136 – 139, Table A – 3
5. dM67aa message element (previously unused) was replaced with a new standardized Free Text message element for inclusion in ITP request.	
a. Standardized free text (Downlink)	DO-306 : Annex A page 175 – 178, Table A – 4 ED-122 : Annex A page 140 – 142, Table A – 4
6. Use of Standardized free text for ITP request was clarified.	
a. Use of standardized downlink free text messages	DO-306 : Annex A page 183, Table A – 6 ED-122 : Annex A page 147, Table A – 6
7. Use of standardized free text for ITP clearance was added.	
a. Use of standardized uplink free text messages	DO-306 : Annex A page 181, Table A – 5 ED-122 : Annex A page 145, Table A – 5

1.2.1

ATS functions supported by data link services

The ATS functions supported by data link services are:

- a) Route conformance monitoring (RCM);
- b) Separation assurance (SA);
 - 30 NM lateral, 30 NM longitudinal, and 50 NM longitudinal separation minima (require data link services);
 - Lateral separation equal to or greater than 50 NM and time-based longitudinal separation minima (can use data link services);
- c) Reroute (RR);
- d) Weather deviations (WD); and
- e) In Trail Procedures using ADS-B (ITP).

NOTE 1: *The data link services support these ATS functions through communication and surveillance capabilities. For example, the CRD and IER data link services use the CPDLC application to provide a DCPC. The PR data link service uses the ADS-C application to provide automatic position reporting.*

NOTE 2: *This standard only considers the application of a 30 NM lateral separation minimum in combination with a distance-based longitudinal separation minimum that requires automatic periodic position reporting using ADS-C.*

NOTE 3: *This standard only considers the application of a 50 NM longitudinal separation minimum that requires the use of data link services. The procedural (non-ADS-C) 50NM longitudinal separation minimum, provided in ICAO Doc 4444, [paragraph 5.4.2.6.3.1](#), and related communication and performance requirements are not considered in this standard.*

**TABLE 2-2: OPERATIONAL REQUIREMENTS FOR COMMUNICATIONS AND SURVEILLANCE
(CONTINUED)**

Ref:	Airspace Requirement	Relationship to data link service/application
OR-14	ITP requests and clearances shall be communicated using direct controller pilot communications. CPDLC is the preferred means of communication. The ITP requests and clearances shall be communicated via: a) a CPDLC message exchange ; or b) voice.	Normal means of communication for ITP transaction CRD CPDLC request/clearance IER CPDLC report request/response. <i>Note: CRD and IER may be used to clear the execution and detect the end of the ITP maneuver. Separation assurance during the ITP maneuver does not rely on ATS Datalink services but on ADS-B ITP equipment.</i>

3. Description of ATS functions

This section provides a description of the ATS functions that are supported by the data link services defined in this standard. The ATS functions are:

- a) Route conformance monitoring (RCM);
- b) Separation assurance (SA) for 50 NM longitudinal, 30 NM lateral, 30 NM longitudinal separation--where data link services are required, and for lateral separation greater than or equal to 50 NM and time-based longitudinal separation--where data link services can be used;
- c) Reroute (RR); and
- d) Weather deviations (WD),
- e) In Trail Procedures using ADS-B (ITP).

It also provides a description of provision and use and flight planning, which are related ATS functions, but data link services supporting these ATS functions are not considered in this document.