TERMS OF REFERENCE

Special Committee (SC) 206
Aeronautical Information and Meteorological Data Link Services
(Revision 25)

SC LEADERSHIP:

Position	Name	Affiliation	Telephone	E-mail	Change
Co-Chairman	Timothy Rahmes	The Boeing Company	425-220-0628	timothy.f.rahmes@boeing.com	
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BACKGROUND:

A key objective of the future International Civil Aviation Organization (ICAO) Air Traffic Management (ATM) concept and Next Generation Air Transportation System (NextGen) performance-based capabilities is to establish the aircraft as a participant in collaborative decision making (CDM); and, in some cases, establish airspace regions for autonomous operations where the aircraft is primarily responsible for safe separation from other traffic, weather and designated/restricted airspace. Timely availability of high-quality and reliable Aeronautical Information Services (AIS) and Meteorological (MET) Information Services are necessary to support the transition and implementation of these advanced global ATM concepts envisioned by ICAO, NextGen, and Single European Sky ATM Research (SESAR).

PRODUCT DELIVERABLES:

Product	Description	FRAC Completion Due Date*	RAC or FRAC	Projected Publication Date**	Change
DO-XXX / ED-XXX	Technical Standard for Automated Atmospheric Turbulence Derivation Techniques	September 2026	FRAC	December 2026	
Internal Report, IR-XXX	Recommendation(s) Regarding Possible Standards to Support Aircraft-Based Meteorological Observation Dependent Applications	March 2026	RAC	June 2026	Changed dates
DO-358C	Minimum Operational Performance Standards (MOPS) for Flight Information Services Broadcast (FIS-B) with Universal Access Transceiver (UAT)	September 2026	FRAC	December 2026	Changed dates
DO-XXX / ED-XXX	Minimum Operational Performance Standards (MOPS) for Emergency Diversion Service (EDS)	December 2027	FRAC	March 2028	

*Note: Final Review and Comment (FRAC) Completion Due Date refers to the date that the committee plenary approves the document after completing the FRAC Process. SCs should submit the final document at least 45 days before the PMC meeting where it will be considered for approval.

**Note: Projected Publication Date refers to the date that the item will be approved by the PMC and officially published by RTCA.

SCOPE:

1. A Technical Standard will be created that: a) identifies requirements for automated atmospheric turbulence derivation techniques that provide output in Eddy Dissipation Rate (EDR), and b) describes a methodology for data validation that ensures an acceptable level of operational comparability.

2. The Internal Report will provide recommendation(s) to the PMC regarding possible standards development work associated with aircraft-based meteorological observations

and supported existing and emerging applications, including those for wake turbulence proximity, air traffic management and control, and weather forecasting purposes.

The study team shall consider the performance of applications and systems providing aircraft-based meteorological observations and any requirements for supported applications.

SC-206 will recommend to the PMC what standards development work may be needed to support such applications.

SC-206 will coordinate with other aviation and weather community stakeholders as necessary to determine the best path forward.

3. Modify DO-358B MOPS for FIS-B UAT to include:
    - Update current FIS-B products with higher resolution and update rates:
        - In-flight Icing – Current Icing Products and Forecast Icing Products
        - Turbulence – Turbulence Nowcast
    - Re-activate Special Use Airspace (SUA) Product (Product ID #13)
    - Uplink Unmanned Aircraft Systems-only Temporary Flight Restrictions as a separate Product ID
    - Improve FIS-B outage descriptions
    - Provide Military Operating Area Status

    Correct any errors or deficiencies in DO-358B reported to SC-206 or found by SC-206 during the course of the DO-358B update.

    Review and modify DO-358B to match SBS FIS-B system changes since release of DO-358B, if necessary.

    Evaluate and consider the following products additions and enhancements during the development of DO-358C:
    - Digital-Automatic Terminal Information Service
    - Add cloud bases to Cloud Tops
    - Military Training Area and Routes

4. Minimum Operational Performance Standards (MOPS) for Emergency Diversion Service (EDS) will provide a minimum set of aeronautical information/meteorological information necessary to assist in an emergency situation in which the safety of the aircraft or of persons onboard or on the ground is endangered. These may include such emergencies as rapid decompression, severe medical emergencies, mechanical failures, etc. An emergency situation may result in it being impossible to continue the flight to the destination as planned. The EDS MOPS will also specify recommendations, dependencies, and limitations. The EDS MOPS is not intended to cover every plausible emergency scenario. The scoping of an EDS MOPS will clearly identify the applicable emergency scenarios.

ENVISIONED USE OF DELIVERABLE(S):

The turbulence Technical Standard will be used by aircraft and avionics manufacturers, electronic flight bag (EFB) application and service providers, algorithm developers, as well as manufacturers of

other devices and components therein.

The PMC will consider the Internal Report recommendation(s) regarding possible standards to support aircraft-based meteorological observation (ABO) dependent applications for possible further action(s).

The DO-358C MOPS will be used by manufacturers to ensure compatibility with the FAA's FIS-B products delivered over UAT.

The EDS MOPS will be used by designers, data link service providers, installers, regulators, users and manufacturers to ensure compatibility with RTCA DO-364A for an Emergency Diversion Service. The document will provide the message format and content description of pertinent information exchanged between aircraft, air traffic control and emergency facilities for display and use by end-users. This document will also provide the performance and test requirements for the data link functions, operational concept and information that will be invoked for operational use. The intent of such a MOPS will detail the service to supplement existing emergency methodologies to improve operations. The document will serve as the minimum operational performance standard needed for the EDS concepts identified in:

- DO-308 Operational Service and Environment Description (OSED) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services,
- DO-324 Safety and Performance Requirements (SPR) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services,
- DO-339 Aircraft Derived Meteorological Data via Data Link for Wake Vortex, Air Traffic Management, and Weather Applications Operational Services and Environmental Definition (OSED),
- DO-340 Concept of Use (ConUse) for Aeronautical Information Services (AIS) & Meteorological (MET) Data Link Services, and
- DO-364A Minimum Aviation System Performance Standards (MASPS) for Aeronautical Information/Meteorological Data Link Services.

SPECIFIC GUIDANCE:

SC-206 will work collaboratively to meet the deliverables set forth in this TOR. SC-206 will coordinate with other RTCA special committees and other entities developing standards related to data link technologies, as appropriate.

- *EUROCAE Coordination* – Developing the "Technical Standard for Automated Atmospheric Turbulence Derivation Techniques", developing the "Recommendation(s) Regarding Possible Standards to Support Aircraft-Based Meteorological Observation Dependent Applications", updating DO-358B, and developing the Minimum Operational Performance Standards (MOPS) for Emergency Diversion Service (EDS) will be performed jointly with EUROCAE WG-76.

- Identify and coordinate with the appropriate Airports, Air Navigation Service Providers (ANSP) and Emergency facilities groups as required to define information content requirements for participation in design, use and deployment of EDS.

- *Additional Coordination* – SC-206 will coordinate its activities with the following:
    - RTCA SC-186, SC-209, SC-214, SC-227, and SC-230

- NextGen – Programs such as Improved Surface Observations, Time-Based Flow Management, Improved Multiple Runway Operations, On-Demand NAS, and Common Services.
- SESAR – SESAR Joint Undertaking
- Airlines for America (A4A)
- SAE/ARINC AEEC
- ICAO Meteorology Panel, Communications Panel, Information Management Panel, and Surveillance Panel
- World Meteorological Organization
- EUROCONTROL

- *Initial Documentation*

Industry & Non-RTCA Documents	**Intended Use**
ARP 5621 Standards for Electronic Display of Aeronautical Information (Charts)	Background and guidance
ICAO Global Operational Data Link Document (GOLD)	Background and guidance
EUROCONTROL Communications Operating Concept and Requirements for the Future Radio System (COCR Version. 2.0)	Background and guidance
ICAO Doc. 9694 Manual of Air Traffic Services Data-Link Applications	Background and guidance

RTCA/EUROCAE Documents	**Intended Use**
RTCA Minimum Operational Performance Standards (MOPS) Drafting Guide	Policy guidance on drafting contents of a MOPS
RTCA DO-181F/EUROCAE ED-73F Minimum Operational Performance Standards for Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/Mode S) Airborne Equipment	Background and guidance
RTCA DO-252A Minimum Interoperability Standards (MIS) for Automated Meteorological Transmission (AUTOMET)	Background and guidance
RTCA DO-260C/EUROCAE ED-102B Minimum Operational Performance Standards for 1090 MHz Extended Squitter Automatic Dependent Surveillance – Broadcast (ADS-B) and Traffic Information Services – Broadcast (TIS-B)	Background and guidance
RTCA DO-264 Guidelines for Approval of the Provision and Use of Air Traffic Services Supported by Data Communications	Guidance on preparation of RTCA DO-308/EUROCAE ED-151 OSED and RTCA DO-324/EUROCAE ED-175 SPR documents

RTCA/EUROCAE Documents	Intended Use
RTCA DO-267A Minimum Aviation Safety Performance Standards (MASPS) for Flight Information Services – Broadcast (FIS/B) Data Link	Background and guidance
RTCA DO-282C Minimum Operational Performance Standards for Universal Access Transceiver (UAT) Automatic Dependent Surveillance – Broadcast	Background and guidance
RTCA DO-308/EUROCAE ED-151 Operational Service and Environment Description (OSED) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services	Basis for developing RTCA DO-340 (ConUse) and RTCA DO-349 (AIS and MET Services Delivery Architecture Recommendations)
RTCA DO-324/EUROCAE ED-175 Safety and Performance Requirements (SPR) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services	Basis for developing RTCA DO-340 (ConUse) and RTCA DO-349 (AIS and MET Services Delivery Architecture Recommendations) *Note: RTCA DO-364 (AIS / MET Data Link Services MASPS) superseded this document*
RTCA DO-339 Aircraft Derived Meteorological Data via Data Link for Wake Vortex, Air Traffic Management, and Weather Applications Operational Services and Environmental Definition	Background and guidance
RTCA DO-340 Concept of Use (ConUse) for Aeronautical Information Services (AIS) & Meteorological (MET) Data Link Services	Background and guidance
RTCA DO-358B Minimum Operational Performance Standards (MOPS) for Flight Information Services Broadcast (FIS-B) with Universal Access Transceiver (UAT)	Basis for RTCA DO-358C
RTCA DO-364A/EUROCAE ED-335 Minimum Aviation System Performance Standards (MASPS) for Aeronautical Information/Meteorological Data Link Services	Basis for developing RTCA Report and Minimum Operational Performance Standards (MOPS) for Emergency Diversion Service (EDS)
RTCA DO-369 Guidance for the Usage of Data Linked Forecast and Current Wind Information in Air Traffic Management (ATM) Operations	Background and guidance
RTCA DO-370 Guidelines for In Situ Eddy Dissipation Rate (EDR) Algorithm Performance	Background and guidance

TERMINATION:

When the scope of this Terms of Reference is complete, the committee will recommend to the

PMC that the committee Sunset, go into Active Monitoring Mode, or spend a period of time in Hiatus. Any change/extension in the committee's work program requires prior PMC approval.