

ANNEX VI

Draft Annex VI to draft Commission Regulation (EU) .../... amending Regulation (EU) 2017/373 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight and Regulation (EU) No 139/2014 laying down requirements and administrative procedures related to aerodromes

ANNEX XI — SPECIFIC REQUIREMENTS FOR PROVIDERS OF PROCEDURE DESIGN (Part-ASD) to Regulation (EU) 2017/373 is amended as follows:

1. Annex XI (Part-ASD) is replaced as follows:

‘ANNEX XI

SPECIFIC REQUIREMENTS FOR PROVIDERS OF FLIGHT PROCEDURE DESIGN SERVICES (Part-FPD)

SUBPART A — ADDITIONAL ORGANISATION REQUIREMENTS FOR PROVIDERS OF FLIGHT PROCEDURE DESIGN SERVICES (FPD.OR)

Section 1 — General requirements

FPD.OR.100 Flight procedure design (FPD) services

- (a) A flight procedure design services provider shall perform any or all of the following activities:
 - (1) design and documentation of flight procedures;
 - (2) validation of flight procedures.

In this context, the FPD provider shall use aeronautical data and aeronautical information that meet the requirements of accuracy, resolution, and integrity as specified in the aeronautical data catalogue in accordance with Appendix 1 to Annex III (Part-ATM/ANS.OR) to this Regulation.

- (b) If aeronautical data is not provided by an authoritative source or does not meet the applicable data quality requirements (DQRs), such aeronautical data may be originated by the FPD provider. In this context, such aeronautical data shall be validated by the FPD provider originating it.

FPD.OR.105 Management system

In addition to ATM/ANS.OR.B.005, the FPD provider shall establish and maintain a management system that includes control procedures for:

- (a) data acquisition;
- (b) flight procedure design in accordance with design criteria as set out in FPD.TR.100;
- (c) flight procedure design documentation;
- (d) stakeholders consultation;
- (e) ground validation and, when appropriate, flight validation of flight procedure;
- (f) identification of tools, including configuration management and tools qualification, as necessary; and
- (g) maintenance and periodic review of the flight procedure(s), as applicable.

FPD.OR.110 Record-keeping

In addition to ATM/ANS.OR.B.030, the FPD provider shall include in its record-keeping system the elements indicated in FPD.OR.105.

FPD.OR.115 Technical and operational competence and capability

- (a) In addition to ATM/ANS.OR.B.005(a)(6), the FPD provider shall ensure that its flight procedure designers:
 - (1) have successfully completed a training course that provides competency in flight procedure design;
 - (2) are suitably experienced to successfully apply the theoretical knowledge; and
 - (3) complete successfully continuation training.
- (b) When flight validation is performed, the FPD provider certified to provide flight validation shall ensure that it is undertaken by a competent pilot.
- (c) In addition to ATM/ANS.OR.B.030, the FPD provider shall maintain records of all the training completed by the employed flight procedure designers and make such records available on request:
 - (1) to the flight procedure designers concerned; and
 - (2) in agreement with the flight procedure designers, to the new employer when a flight procedure designer is employed by a new entity.

FPD.OR.120 Required interfaces

An FPD provider shall ensure the necessary formal arrangements with:

- (a) aeronautical data sources;
- (b) other service providers;
- (c) aerodrome operators; and
- (d) aircraft operators.

SUBPART B — TECHNICAL REQUIREMENTS FOR PROVIDERS OF FLIGHT PROCEDURE DESIGN SERVICES (FPD.TR)

Section 1 — General requirements

FPD.TR.100 Flight procedure design criteria

The flight procedures shall be designed using design criteria specified in Appendix 1 to this Annex so as to ensure safe aircraft operations. The design criteria shall permit the establishment of appropriate obstacle clearance for flight procedures, where required.

FPD.TR.105 Coordinates and aeronautical data

- (a) In addition to ATM/ANS.OR.A.090, geographical coordinates indicating latitude and longitude shall be determined and reported to the aeronautical information services provider(s) (AIS provider(s)) in terms of the World Geodetic System — 1984 (WGS-84) geodetic reference datum or equivalent. Those geographical coordinates that have been transformed into WGS-84 coordinates by mathematical means and whose accuracy of original field work does not meet the specifications of the aeronautical data catalogue laid down in Appendix 1 to Annex III (Part-ATM/ANS.OR) to this Regulation shall be identified.
- (b) The order of accuracy of the field work and the determinations and calculations derived therefrom shall be such that the resulting operational navigation data for the phases of flight are within the maximum deviations with respect to an appropriate reference frame, as specified in Appendix 1 to Annex III (Part-ATM/ANS.OR) to this Regulation.

2. New Appendix 1 to Annex XI (Part-FDP) is added as follows:

‘Appendix 1

**REQUIREMENTS FOR AIRSPACE STRUCTURES AND FLIGHT PROCEDURES
CONTAINED THEREIN**

SECTION I

**Specifications for flight information regions, control areas, control zones and flight
information zones**

(a) FLIGHT INFORMATION REGIONS

Flight information regions shall:

- (1) be delineated to cover the whole of the air route structure to be served by such regions; and
- (2) include all airspace within its horizontal limits, except when limited by an upper flight information region.

(b) CONTROL AREAS

- (1) Control areas shall be delineated so as to encompass sufficient airspace to contain the flight paths of those instrument flight rules (IFR) flights or portions thereof to which the applicable parts of the air traffic control (ATC) service are provided, taking into account the capabilities of the navigation aids normally used in that area.
- (2) A lower limit of a control area shall be established at a height above the ground or water of not less than 200 m (700 ft).
- (3) An upper limit of a control area shall be established when either:
 - (i) ATC service will not be provided above such upper limit; or
 - (ii) the control area is situated below an upper control area, in which case, the upper limit shall coincide with the lower limit of the upper control area.

(c) CONTROL ZONES

- (1) The horizontal limits of a control zone shall encompass at least those portions of the airspace, which are not within control areas, that contains the paths of IFR flights arriving at and departing from aerodromes to be used under instrument meteorological conditions (IMC).
- (2) If located within the horizontal limits of a control area, the control zone shall extend upwards from the surface of the earth to at least the lower limit of the control area.

(d) FLIGHT INFORMATION ZONES

- (1) The horizontal limits of a flight information zone shall encompass at least those portions of the airspace, which are neither within control areas nor within control zone, that contains the paths of IFR and/or VFR flights arriving at and departing from aerodromes.

- (2) If located within the horizontal limits of a control area, the flight information zone shall extend upwards from the surface of the earth to at least the lower limit of the control area.

SECTION II

Identification of navigation specifications and of ATS routes other than standard departure and arrival routes

- (a) When ATS routes are established, a protected airspace along each ATS route and a safe spacing between adjacent ATS routes shall be provided.
- (b) ATS routes shall be identified through designators.
- (c) When identifying navigation specifications and ATS routes other than standard departure and arrival routes, the designation system used shall:
 - (1) permit the identification of any ATS route in a simple and unique manner;
 - (2) avoid redundancy;
 - (3) be usable by both ground and airborne automation systems;
 - (4) permit utmost brevity in operational use; and
 - (5) provide for a sufficient possibility of extension to cater for any future requirements without the need for fundamental changes;
- (d) Basic ATS route designators shall be assigned in accordance with the following principles:
 - (1) the same basic designator shall be assigned to a main trunk route throughout its entire length, irrespective of terminal control areas, States or regions traversed;
 - (2) where two or more trunk routes have a common segment, the segment in question shall be assigned each of the designators of the routes concerned, except where this would introduce difficulties in the provision of air traffic services (ATS), in which case, by common agreement, one designator only shall be assigned; and
 - (3) a basic designator assigned to one route shall not be assigned to any other route.

SECTION III

Identification of standard departure and standard arrival routes and associated procedures

- (a) When identifying standard departure and standard arrival routes and associated procedures, it shall be ensured that:
 - (1) the system of designators shall permit the identification of each route in a simple and unambiguous manner;
 - (2) each route shall be identified by a plain language designator and a corresponding coded designator; and

- (3) in voice communications, the designators shall be easily recognisable as relating to a standard departure or standard arrival route and shall not create any difficulties in pronunciation for pilots and ATS personnel.
- (b) When composing designators for standard departure and standard arrival routes and associated procedures, the following shall be used:
 - (1) a plain language designator;
 - (2) a basic indicator;
 - (3) a validity indicator that shall be a number from 1 to 9;
 - (4) a route indicator that shall be one letter of the alphabet; the letters 'I' and 'O' shall not be used; and
 - (5) a coded designator of a standard departure or standard arrival route, instrument or visual.
- (c) Assignment of designators
 - (1) Each route shall be assigned a separate designator.
 - (2) To distinguish between two or more routes that relate to the same significant point (and are therefore assigned the same basic indicator), a separate route indicator as described in (b)(4) shall be assigned to each route.
- (d) Assignment of validity indicators
 - (1) A validity indicator shall be assigned to each route to identify the route that is currently in effect.
 - (2) The first validity indicator to be assigned shall be the number '1'.
 - (3) Whenever a route is amended, a new validity indicator, which consists of the next higher number, shall be assigned. The number '9' shall be followed by the number '1'.

SECTION IV

Establishment and identification of significant points

- (a) Significant points shall be established for the purpose of defining an ATS route or flight procedure and/or in relation to the ATS requirements for information on the progress of aircraft in flight.
- (b) Significant points shall be identified by designators.

SECTION V

Minimum flight altitudes

Minimum flight altitudes shall be determined for each ATS route and control area and shall be provided for promulgation. These minimum flight altitudes shall provide a minimum obstacle clearance within the areas concerned.

SECTION VI

Identification and delineation of prohibited, restricted and danger areas

When prohibited areas, restricted areas or danger areas are established, upon initial establishment, they shall be given an identification, and full details shall be provided for promulgation.'.