

Draft ANNEX V
to draft COMMISSION IMPLEMENTING REGULATION (EU) ... /...
amending Regulation (EU) 2017/373 as regards requirements for the management of
aeronautical data as well as the provision of aeronautical information services and air
traffic services

Annex VI to Regulation (EU) 2017/373 is amended as follows:

(1) point AIS.OR.100 is replaced by the following:

‘AIS.OR.100 Aeronautical information management

- (a) An aeronautical information services (AIS) provider shall establish information management resources and processes that are adequate to ensure the timely collection, processing, storing, integration, exchange and delivery of quality-assured aeronautical data and aeronautical information within the ATM system.
- (b) An AIS provider shall ensure that:
 - (1) its organisation, along with the design, contents, processing and distribution of aeronautical data and aeronautical information, takes into consideration human factors principles which facilitate their optimum utilisation;
 - (2) due consideration is given to the integrity of aeronautical data and information where human interaction is required, and mitigating measures are taken where risks are identified.’;

(2) point AIS.OR.105 is replaced by the following:

‘AIS.OR.105 Responsibilities of aeronautical information services (AIS) providers

- (a) An AIS provider shall:
 - (1) receive, manage and maintain aeronautical data and aeronautical information covering at least the areas specified in points (a) and (d) of Appendix 1 to Annex III;
 - (2) ensure the provision of aeronautical data and aeronautical information that are necessary for the safety, regularity and efficiency of air navigation.
- (b) An AIS provider shall receive, collate or assemble, edit, format, publish, store and distribute aeronautical data and aeronautical information, as aeronautical information products, concerning the entire territory of a Member State as well as those areas over the high seas in which the Member State is responsible for the provision of air traffic services.
- (c) An AIS provider shall ensure that aeronautical data and aeronautical information are available in a form suitable for the operational requirements of the air traffic management (ATM) community, including for:

- (1) personnel involved in flight operations, including flight crews, flight planning and flight simulators;
 - (2) ATS providers responsible for flight information service; and
 - (3) services responsible for pre-flight information.
- (d) An AIS provider shall provide 24-hour services for NOTAM origination and issuance in its area of responsibility and for pre-flight information needed in relation to route stages originating at the aerodrome/heliport in its area of responsibility.
- (e) Without prejudice to point (b), an AIS provider shall:
- (1) obtain aeronautical data and aeronautical information enabling it to provide pre-flight information service and meet the need for in-flight information:
 - (i) from the AIS providers of other States, and
 - (ii) from other sources that may be available;
 - (2) promptly make available to other AIS providers all available aeronautical data and aeronautical information required by them.
- (f) An AIS provider shall ensure that procedures are in place to assess and mitigate safety risks to aviation arising from data and information errors.
- (g) An AIS provider shall:
- (1) clearly indicate that aeronautical data and aeronautical information provided for and on behalf of another State are provided under the authority of that State, irrespective of the format in which they are provided;
 - (2) when distributing aeronautical data and aeronautical information obtained in accordance with point (e)(1)(i), clearly identify them as having the authority of the originating State.’;
- (3) point AIS.OR.200 is replaced by the following:

‘AIS.OR.200 General

An AIS provider shall ensure that:

- (a) aeronautical data and aeronautical information are provided in accordance with the requirements laid down in the aeronautical data catalogue, specified in Appendix 1 to Annex III;
- (b) data quality is maintained; and
- (c) automation is applied to enable the processing and exchange of digital aeronautical data and to ensure the quality, efficiency and cost-effectiveness of aeronautical information services.’;

(4) point AIS.OR.205 is replaced by the following:

‘AIS.OR.205 Formal arrangements

- (a) An AIS provider shall ensure that formal arrangements are established with:
- (1) all parties transmitting data to them; and
 - (2) other AIS providers, when exchanging aeronautical data and aeronautical information with them.
- (b) The AIS provider shall establish formal arrangements for the provision of relevant aeronautical data and information as follows:
- (1) for sections GEN 1, GEN 2, GEN 3, and GEN 4 of PART 1 — GENERAL (GEN) of the AIP, with the competent authority;
 - (2) for sections ENR 1 and ENR 5 of PART 2 — EN ROUTE (ENR) of the AIP, with the competent authority; for sections ENR 2, ENR 3 and ENR 4 of PART 2 — EN ROUTE (ENR) of the AIP, with the ATM/ANS organisation defined by the competent authority, except that for sections ENR 4.4 and ENR 4.5, with the competent authority;
 - (3) for section AD 1 of PART 3 — AERODROMES (AD) of the AIP, with the competent authority;
 - (4) for section AD 2 of PART 3 — AERODROMES (AD) of the AIP, with the aerodrome operator, except that:
 - (i) for section **** AD 2.11, with the meteorological services provider;
 - (ii) for sections **** AD 2.17, **** AD 2.18, **** AD 2.21 and **** AD 2.22, with the air traffic services provider, except that regarding apron management services in section **** AD 2.18 and LVPs in section **** AD 2.22, with the aerodrome operator;
 - (iii) for section **** AD 2.24 as follows:
 - (A) with the aerodrome operator for the ‘aerodrome/heliport chart — ICAO’, ‘aircraft parking/docking chart — ICAO’, ‘aerodrome ground movement chart — ICAO’, ‘aerodrome terrain and obstacle chart — ICAO (electronic)’, ‘aerodrome obstacle chart — ICAO Type A’, ‘aerodrome obstacle chart — ICAO Type B’, ‘precision approach terrain chart — ICAO’ and ‘bird concentration chart’;
 - (B) with the aerodrome operator or the air traffic services provider or the flight procedure design services provider, as determined by the competent authority, for the ‘instrument approach chart — ICAO’, ‘standard arrival chart — instrument (STAR) — ICAO’, ‘standard departure chart — instrument (SID) — ICAO’ and ‘visual approach chart — ICAO’;
 - (C) with the air traffic services provider or the flight procedure design services provider, as determined by the competent authority, for the ‘en-route chart — ICAO’, ‘area chart —

- ICAO’, and ‘ATC surveillance minimum altitude chart — ICAO’;
- (5) for section AD 3 of PART 3 — AERODROMES (AD) of the AIP, with the heliport operator, except that:
- (i) for section **** AD 3.11, with the meteorological services provider;
 - (ii) for sections **** AD 3.16, **** AD 3.17, **** AD 3.20 and **** AD 2.22, with the air traffic services provider;
 - (iii) for section **** AD 3.23 as follows:
 - (A) with the heliport operator for the ‘aerodrome/heliport chart — ICAO’, ‘aircraft parking/docking chart — ICAO’, ‘aerodrome ground movement chart — ICAO’ and ‘bird concentration chart’;
 - (B) with the heliport operator or the air traffic services provider or the flight procedure design services provider, as determined by the competent authority, for the ‘instrument approach chart — ICAO’, ‘standard arrival chart — instrument (STAR) — ICAO’, ‘standard departure chart — instrument (SID) — ICAO’, and ‘visual approach chart — ICAO’;
 - (C) with the air traffic services provider or the flight procedure design services provider, as determined by the competent authority, for the ‘en-route chart — ICAO’, ‘area chart — ICAO’ and ‘ATC surveillance minimum altitude chart — ICAO’;
- (6) with the aerodrome operator for:
- (i) the aerodrome mapping data;
 - (ii) terrain data for the areas specified in point (b) of point AIS.OR.355; and
- (7) with the organisation defined by the Member State for the provision of terrain data for Area 1.
- (c) The AIS provider shall be responsible for ensuring aeronautical data and information for the following:
- (1) sections GEN 0.1, GEN 0.2, GEN 0.3, GEN 0.4, GEN 0.5 and GEN 0.6 of PART 1 — GENERAL (GEN) of the AIP;
 - (2) section ENR 0.1 of PART 2 — EN ROUTE (ENR);
 - (3) section AD 0.1 of PART 3 — AERODROMES (AD);
 - (4) ‘Aeronautical chart — ICAO 1:500 000’, ‘World aeronautical chart — ICAO 1:1 000 000, Aeronautical navigation chart — ICAO small scale, Plotting chart — ICAO.’;

- (5) the following point AIS.OR.255 is added:

‘AIS.OR.255 Geographical coordinates

The AIS provider shall ensure that in the aeronautical products it provides, aeronautical geographical coordinates, indicating latitude and longitude, are expressed in terms of the WGS-84 geodetic reference datum.’;

- (6) point AIS.OR.300 is replaced by the following:

‘AIS.OR.300 General — Aeronautical information products

When providing aeronautical data and aeronautical information in multiple products and/or formats, an AIS provider shall perform consistency checks, in accordance with established processes and procedures, to ensure data and information consistency between those products and/or formats.’;

- (7) point AIS.OR.325 is replaced by the following:

‘AIS.OR.325 Aeronautical charts

- (a) An AIS provider shall ensure that each aeronautical chart it provides in accordance with points (b) and (c):
- (1) contains adequate and appropriate information, relevant to the function of the chart and the phase of flight it is intended to serve;
 - (2) is designed in accordance with human factors principles, and is easy to be used;
 - (3) presents aeronautical information, which is complete, accurate and unambiguous, in an appropriate manner;
 - (4) is properly oriented, sized, scaled and titled, and appropriate symbols and colours are used;
 - (5) complies with point ATM/ANS.OR.A.090, point AIS.OR.255 and with Appendix 1 to Annex III;
 - (6) is reviewed periodically, and revised whenever information that is essential to safe operation becomes outdated.
- (b) An AIS provider shall ensure that the following aeronautical charts are made available as part of the AIP, or are provided separately to recipients of the AIP:
- (1) ‘Aerodrome/Heliport Chart — ICAO’, at least for those aerodromes with a paved runway and heliports which are certified and are open to public use;
 - (2) ‘Aerodrome Ground Movement Chart — ICAO’ if due to congestion of information details necessary for the ground movement of aircraft along the taxiways to and from the aircraft stands may not be shown with sufficient clarity on the ‘Aerodrome/Heliport Chart — ICAO’;
 - (3) ‘Aircraft Parking/Docking Chart — ICAO’ if due to the complexity of the terminal facilities, detailed information to facilitate the ground movement of aircraft between the taxiways and the aircraft stands and the parking/docking

of aircraft may not be shown with sufficient clarity on the ‘Aerodrome/Heliport Chart — ICAO’ or the ‘Aerodrome Ground Movement Chart — ICAO’;

- (4) ‘Aerodrome Terrain and Obstacle Chart — ICAO (Electronic)’, at least for those certified aerodromes with a paved runway open to public use and where the aerodrome traffic density is medium or heavy;
- (5) ‘Aerodrome Obstacle Chart — ICAO Type A (operating limitations)’, at least for those certified aerodromes with a paved runway open to public use, except that such a chart may not be provided where:
 - (i) the ‘Aerodrome Terrain and Obstacle Chart — ICAO (Electronic)’ is provided, or
 - (ii) there are no obstacles in the take-off flight path areas, in which case a notification to this effect shall be published in the AIP;
- (6) ‘Aerodrome Obstacle Chart — ICAO Type B’, at least for those certified aerodromes with a paved runway open to public use, except that:
 - (i) such a chart may not be provided where the ‘Aerodrome Terrain and Obstacle Chart — ICAO (electronic)’ is provided,
 - (ii) the content of the ‘Aerodrome Obstacle Chart — ICAO Type B’ chart may be combined with the content of the ‘Aerodrome Obstacle Chart — ICAO Type A (operating limitations)’, and in this case the chart shall be called ‘Aerodrome Obstacle Chart — ICAO (Comprehensive)’;
- (7) ‘Precision Approach Terrain Chart — ICAO’, at least for those certified aerodromes with a paved runway open to public use, for:
 - (i) precision approach runways Category II and III;
 - (ii) other runways authorised for operations with operational credits with a DH less than 200 ft, or for EFVS-L operations,
 except that such a chart may not be provided where the necessary information is provided in the ‘Aerodrome Terrain and Obstacle Chart — ICAO (electronic)’;
- (8) ‘En-Route Chart — ICAO’, for all areas where flight information regions have been established;
- (9) ‘Area Chart — ICAO’, where the ATS routes or position reporting requirements are complex and may not be adequately shown on an ‘En-Route Chart — ICAO’;
- (10) ‘Standard Arrival Chart — Instrument (STAR) — ICAO’, wherever a standard arrival route — instrument has been established and may not be shown with sufficient clarity on the ‘Area Chart — ICAO’;
- (11) ‘Standard Departure Chart — Instrument (SID) — ICAO’, wherever a standard departure route — instrument has been established and may not be shown with sufficient clarity on the ‘Area Chart — ICAO’;

- (12) ‘ATC Surveillance Minimum Altitude Chart — ICAO’, where vectoring procedures are established and minimum vectoring altitudes may not be shown adequately on the ‘Area Chart — ICAO’, ‘Standard Departure Chart — Instrument (SID) — ICAO’ or ‘Standard Arrival Chart — Instrument (STAR) — ICAO’;
 - (13) ‘Instrument Approach Chart — ICAO’, at least for those aerodromes with a paved runway and heliports which are certified, are open to public use and where instrument approach procedures have been established;
 - (14) ‘Visual Approach Chart — ICAO’, at least for those aerodromes with a paved runway and heliports which are certified and are open to public use where:
 - (i) only limited navigation facilities are available; or
 - (ii) radio communication facilities are not available; or
 - (iii) no adequate aeronautical charts of the aerodrome or heliport and its surroundings of a 1:500 000 scale or greater are available; or
 - (iv) visual approach procedures have been established;
 - (15) ‘Bird Concentration Chart’, at least for those aerodromes with a paved runway and heliports which are certified and are open to public use, where there is bird concentration in the vicinity of the aerodrome or the heliport.
- (c) The AIS provider shall ensure that the following aeronautical charts are made available as aeronautical information products:
- (1) ‘Aeronautical Chart — ICAO 1:500 000’, except that such a chart may not be provided if the competent authority decides that the operational requirements are satisfied by the provision of:
 - (i) ‘World Aeronautical Chart — ICAO 1:1 000 000’; or
 - (ii) ‘Aeronautical Navigation Chart — ICAO small scale’;
 - (2) ‘Plotting Chart — ICAO’, to cover major air routes over oceanic areas and sparsely settled areas used by international civil aviation.’;
- (8) point AIS.OR.330 is replaced by the following:
- ‘AIS.OR.330 NOTAM**
- (a) An AIS provider shall:
 - (1) promptly issue a NOTAM whenever the information to be distributed is of a temporary nature and of short duration or when operationally significant permanent changes, or temporary changes of long duration, are made at short notice, except for extensive text and/or graphics; and
 - (2) issue, as a NOTAM, information on the establishment, condition or change of any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel involved with flight operations.

- (b) Compliance with point AIS.OR.200 shall not inhibit the urgent distribution of aeronautical information necessary to ensure the safety of flight.’;
- (9) point AIS.OR.335 is replaced by the following:
‘AIS.OR.335 General — Digital data sets
- (a) An AIS provider shall ensure the provision of digital data in the form of the following data sets:
- (1) AIP data set;
 - (2) terrain data set;
 - (3) obstacle data sets;
 - (4) aerodrome mapping data sets; and
 - (5) instrument flight procedure data sets.
- (b) An AIS provider shall provide regularly a checklist of valid data sets.
- (c) An AIS provider shall ensure that a data set:
- (1) has been successfully tested for an adequate period of time prior to being made available;
 - (2) is made available to the users under the same conditions as the AIP.
- (d) An AIS provider shall ensure that a data set intended to replace an AIP section(s):
- (1) contains at least the same aeronautical data and information contained in the section(s) of the AIP to be replaced;
 - (4) allows for displaying on computer screen or other electronic devices and printing on paper, by any user consulting the corresponding AIP section(s) of the eAIP, in a manner that is intelligible by humans.
- (e) Where both a data set and the respective section(s) of the AIP are made available:
- (1) the AIS provider shall ensure the consistency of their aeronautical data and information in accordance with point AIS.OR.300;
 - (2) they shall have equal status.’;

- (10) point AIS.OR.345 is replaced by the following:

‘AIS.OR.345 AIP data set

An AIS provider shall ensure that the AIP data set provided contains the digital representation of aeronautical information of lasting character, including permanent information and long-duration temporary changes.’;

- (11) point AIS.OR.350 is replaced by the following:

‘AIS.OR.350 Terrain and obstacle data — General requirements

An AIS provider shall ensure that terrain and obstacle data sets are provided for the terrain and obstacle coverage areas.’;

(12) point AIS.OR.355 is replaced by the following:

‘AIS.OR.355 Terrain data sets

An AIS provider shall ensure that terrain data sets are provided:

- (a) for Area 1; and
- (b) at least for those certified aerodromes with a paved runway open to public use, to cover:
 - (1) Area 2a;
 - (2) the take-off flight path area;
 - (3) an area bounded by the lateral extent of the aerodrome obstacle limitation surfaces;
 - (4) Area 2 for terrain:
 - (i) within 10 km from the aerodrome reference point (ARP); and
 - (ii) beyond 10 km from the ARP until the TMA boundary or a 45 km radius (whichever is smaller), if the terrain penetrates the horizontal plane 120 m above the lowest runway elevation;
 - (5) Area 3; and
 - (6) Area 4 for all precision approach runways Category II or III and where detailed terrain information is required by operators to enable them to assess the effect of terrain on DH determination by use of radio altimeters, or runways authorised for operations with operational credits with RVR less than 550 m or a DH less than 200 ft.’;

(13) point AIS.OR.360 is replaced by the following:

‘AIS.OR.360 Obstacle data sets

An AIS provider shall ensure that obstacle data sets are provided:

- (a) for obstacles in Area 1 whose height is 60 m or higher above ground elevation;
- (b) at least for those certified aerodromes with a paved runway open to public use, for all obstacles within Area 2 that are assessed as being a hazard to air navigation; and
- (c) at least for those certified aerodromes with a paved runway open to public use, to cover:
 - (1) Area 2a for those obstacles that penetrate the relevant obstacle data collection surface;
 - (2) objects in the take-off flight path area, which project above a plane surface having a 1.2 % slope and having a common origin with the take-off flight path area;
 - (3) penetrations of the aerodrome obstacle limitation surfaces;

- (4) Areas 2b, 2c and 2d for obstacles that penetrate the relevant obstacle data collection surfaces;
 - (5) Area 3 for obstacles that penetrate the relevant obstacle data collection surface; and
 - (6) Area 4 for all precision approach runways Category II or III, or runways authorised for operations with operational credits with RVR less than 550 m or a DH less than 200 ft.
- (d) at least for those certified heliports open to public use.’;
- (14) point AIS.OR.365 is replaced by the following:
‘AIS.OR.365 Aerodrome mapping data sets
 An AIS provider shall ensure that aerodrome mapping data sets are provided in accordance with point AIS.TR.365, at least for those certified aerodromes with a paved runway open to public use, at which an advanced surface movement and control system (A-SMGCS) or digital NOTAM is implemented.’;
- (15) point AIS.OR.370 is replaced by the following:
‘AIS.OR.370 Instrument flight procedure data sets
 An AIS provider shall ensure that instrument flight procedure data sets are provided in accordance with point AIS.TR.370, at least for those aerodromes with a paved runway and heliports which are certified, open to public use and served by instrument flight procedures.’;
- (16) point AIS.OR.400 is replaced by the following:
‘AIS.OR.400 Distribution services
 An AIS provider shall:
- (a) distribute available aeronautical information products to those users that request them;
 - (b) make available the AIP, AIP amendments, AIP supplements, NOTAM and AIC by the most expeditious means;
 - (c) ensure that NOTAM are distributed through the aeronautical fixed service (AFS) whenever practicable;
 - (d) ensure that:
 - (1) where more than one international NOTAM office is designated within a State, appropriate coordination procedures are established, according to the defined extent of responsibility and the territory covered by each international NOTAM office;
 - (2) international exchange of NOTAM takes place only as mutually agreed between the international NOTAM offices and multinational NOTAM processing units concerned; and

- (e) arrange, as necessary, the issuance and receipt of NOTAM distributed by telecommunication to satisfy operational requirements;
 - (f) ensure that the digital data sets are made available through information services which shall provide, as a minimum, the possibility to:
 - (1) query and retrieve, the whole, or selected elements, of each of the digital data sets;
 - (2) subscribe to and receive notifications on data set updates.’;
- (17) the following point AIS.OR.410 is added:
- ‘AIS.OR.410 Post-flight information services**
- An AIS provider shall ensure that, for any aerodrome and heliport open to public use, arrangements are in place with other organisations to enable the AIS provider to receive and distribute information concerning:
- (a) the state and operation of air navigation facilities or services noted by flight crews; and
 - (b) the presence of wildlife hazards observed by flight crews.’;
- (18) point AIS.OR.600 is replaced by the following:
- ‘AIS.OR.600 Training and assessment requirements**
- (a) As part of its management system, the AIS provider shall:
 - (1) identify and document the competencies and the associated knowledge, skills and attitudes required for each function within its organisation relating to the provision of aeronautical data and aeronautical information;
 - (2) analyse, establish and document the training needs of its personnel and develop appropriate training material and training methodologies, as part of a training programme approved by the competent authority, to ensure their continued competence and that they are aware of the relevant regulatory framework, the applicable requirements and the operating procedures of the AIS provider.
 - (b) The training programme referred to in point (a) shall include initial, recurrent and continuation training. Continuation training shall include refresher and conversion training.
 - (c) The AIS provider shall ensure that, as part of its training programme, its personnel successfully complete initial training prior to being allowed to perform their duties unattended. The initial training shall include theoretical and practical training of adequate duration and assessment of the personnel following the delivery of the training.
 - (d) To continue performing their tasks unattended following the completion of the initial training, the AIS provider shall ensure that its personnel have successfully completed:
 - (i) recurrent training at specified intervals not exceeding 24 months from the completion of their initial training; if the recurrent training is undertaken

within the last 3 calendar months of the specified interval, the new interval shall be counted from the expiry date of the original interval;

- (ii) refresher or recurrent training, as determined by the AIS provider following an assessment of the personnel concerned, prior to performing their duties unattended when they have been absent from their duties for a period not less than 3 and not more than 24 consecutive months; in case of absence from duty beyond 24 consecutive months, such personnel shall undergo initial training;
- (iii) conversion training due to changes to their operating environment or assigned tasks, as necessary.

Recurrent, refresher and conversion training shall include an assessment of the personnel following the delivery of such training.

- (e) The AIS provider shall ensure that, as part of an assessment programme, its personnel are assessed at established intervals not exceeding 24 months from the completion of their initial training, in accordance with a methodology approved by the competent authority, to ensure that they maintain the required competencies, knowledge, skills and attitudes.
 - (f) The AIS provider shall evaluate and update the training programme and the assessment methodology to remain consistent with emerging requirements and address feedback received. The updated training programme and assessment methodology shall require the approval of competent authority.
 - (g) The AIS provider shall:
 - (1) nominate suitably experienced and specifically trained personnel as training instructors for the delivery of training to its personnel and assessors for the assessment of their competencies and behavioural skills, according to criteria documented in the training programme;
 - (2) ensure that suitable facilities, means and equipment are used for the delivery of the training and, where applicable, for carrying out the assessments.
 - (h) The AIS provider shall maintain records of all the training completed by such personnel, as well as their assessments, and make such records available:
 - (1) to the personnel concerned upon their request;
 - (2) upon request, and with the agreement of the personnel concerned, to the new employer when such personnel are employed by a new entity.’;
- (19) in point AIS.TR.200, point (c) is replaced by the following:
- ‘(c) The integrity of aeronautical data shall be maintained. Based on the integrity classification specified in the aeronautical data catalogue, procedures shall be put in place so that:
- (1) for routine data, corruption is avoided throughout the processing of the data;
 - (2) for essential data, corruption does not occur at any stage of the entire data processing life cycle and additional processes are included, as needed, to address potential risks in the overall processing of aeronautical data to ensure data integrity at that level;

- (3) for critical data, corruption does not occur at any stage of the entire data processing life cycle and additional data integrity assurance processes are included to fully mitigate risk of errors.’;

(20) point AIS.TR.235 is replaced by the following:

‘AIS.TR.235 Error reporting, error measurement and corrective actions

The AIS provider shall, through its error reporting, error measurement and corrective mechanisms, ensure that:

- (a) problems, errors, inconsistencies or anomalies identified during the origination, production, storage, handling and processing of aeronautical data and information, or those reported by users after publication, are recorded;
- (b) all problems, errors, inconsistencies or anomalies reported in relation to aeronautical data and information are analysed by the AIS provider, the responsible data originator is informed without delay, and the necessary corrective actions are implemented without delay;
- (c) all errors, inconsistencies or anomalies detected in aeronautical data are resolved, and if this is not possible mitigated, prior to its delivery; priority is given to the resolution of all errors, inconsistencies and anomalies detected in critical and essential aeronautical data;
- (d) affected users are warned of errors, inconsistencies or anomalies in the aeronautical data and aeronautical information that have been made available by the most effective means, taking into account the integrity level of the aeronautical data and aeronautical information;
- (e) error feedback is facilitated and actively encouraged;
- (f) any such problem, error, inconsistency or anomaly is additionally managed in accordance with point ATM/ANS.OR.A.065.’;

(21) in point AIS.TR.300, point (c) is replaced by the following:

- ‘(c) International Civil Aviation Organization (ICAO) abbreviations shall be used in aeronautical information products whenever they are appropriate and their use will facilitate the distribution of aeronautical data and aeronautical information.’;

(22) point AIS.TR.305 is replaced by the following:

‘AIS.TR.305 Aeronautical information publication (AIP)

- (a) The AIP, AIP amendments and AIP supplements shall be provided as an ‘electronic AIP’ (eAIP). The eAIP shall allow for displaying on a computer screen or other electronic devices, and printing on paper. In addition, the AIP, AIP amendments and AIP supplements may also be provided on paper.
- (b) The AIP shall include:
 - (1) a statement of the competent authority responsible for the air navigation facilities, services or procedures covered by the AIP;

- (2) the general conditions under which the services or facilities are available for use;
 - (3) a list of significant differences between the regulations and practices of the Member State and the related ICAO Standards and Recommended Practices and Procedures given in a form that would enable a user to differentiate readily between the requirements of the Member State and the related ICAO provisions;
 - (4) the choice made by a Member State in each significant case where an alternative course of action is provided for in the ICAO Standards and Recommended Practices and Procedures.
- (c) Except as provided in points (m) and (n), the AIP shall contain information related to, and arranged under, the subject headings listed in Appendix 1.
 - (d) The issuing Member State and the AIS provider shall be clearly indicated on the cover and in the table of contents.
 - (e) When two or more Member States jointly provide an AIP, they shall be clearly indicated in accordance with point (d).
 - (g) An AIP shall be organised in three parts (GEN, ENR and AD), sections and subsections, except when the AIP, or a volume of the AIP, is designed to facilitate operational use in flight, in which case the precise format and arrangement may be left to the discretion of the Member State provided that an adequate table of contents is included.
 - (h) Each AIP shall be dated.
 - (i) The date, consisting of the day, month (by name) and year, shall be the publication date and/or the effective date (AIRAC) of the information.
 - (j) When describing periods of activity, availability or operation, the applicable days and times shall be specified.
 - (k) Each AIP issued as a printed volume and each page of an AIP issued in a loose-leaf form shall be annotated to clearly indicate:
 - (1) the identity of the AIP;
 - (2) the territory covered and its subdivisions, when necessary;
 - (3) the identification of the issuing Member State and producing organisation (authority); and
 - (4) page numbers / chart titles.
 - (l) Any amendment to the printed volume of the AIP shall be made using replacement sheets.
 - (m) Notwithstanding point (c) and subject to the prior approval of the competent authority and compliance with points (c) and (d) of point AIS.OR.335, when the AIP data set is made available, the following sections of the AIP may be left blank and a reference to the data set availability shall be included in the AIP:

- (1) ENR 2.1 FIR, UIR, TMA and CTA;
 - (2) ENR 3.1 Conventional navigation routes;
 - (3) ENR 3.2 Area navigation routes;
 - (4) ENR 3.3 Other routes;
 - (5) ENR 3.4 En-route holding;
 - (6) ENR 4.1 Radio navigation aids — en-route;
 - (7) ENR 4.4 Name-code designators for significant points;
 - (8) ENR 4.5 Aeronautical ground lights — en-route;
 - (9) ENR 5.1 Prohibited, restricted and danger areas;
 - (10) ENR 5.2 Military exercise and training areas and air defence identification zone (ADIZ);
 - (11) ENR 5.3.1 Other activities of a dangerous nature;
 - (12) ENR 5.5 Aerial sporting and recreational activities;
 - (13) ****AD 2.17 Air traffic services airspace;
 - (14) ****AD 2.19 Radio navigation and landing aids;
 - (15) ****AD 3.16 Air traffic services airspace;
 - (16) ****AD 3.18 Radio navigation and landing aids.
- (n) Notwithstanding point (c) and subject to the prior approval of the competent authority and compliance with points (c) and (d) of point AIS.OR.335, when the obstacle data set is made available, the following sections of the AIP may be left blank and a reference to the data set availability shall be included in the AIP:
- (1) ENR 5.4 Air navigation obstacles;
 - (2) ****AD 2.10 Aerodrome obstacles;
 - (3) ****AD 3.10 Heliport obstacles.
- (o) Where, subject to the prior approval of the competent authority, both the AIP and the AIP data set and/or the obstacle data set are made available, compliance with points (c) and (e) of point AIS.OR.335 shall be demonstrated.’;
- (23) in point AIS.TR.310, point (b) is replaced by the following:
- ‘(b) Each AIP amendment shall be allocated a serial number, which shall be consecutive and based on the calendar year.’;
- (24) in point AIS.TR.310, point (h) is replaced by the following:
- ‘(h) Each AIP amendment page shall contain a publication date or, when applicable, an effective date. The cover sheet shall contain the publication date and, when applicable, an effective date.’;

(25) point AIS.TR.315 is replaced by the following:

‘AIS.TR.315 AIP supplements

- (a) The AIP supplement shall be provided by means of distinctive yellow pages.
- (b) AIP supplement pages shall be kept in the AIP:
 - (1) as the first item in the AIP parts;
 - (2) for as long as all or some of their contents remain valid.
- (c) The most current update cycles applicable to AIP supplements shall be made publicly available.
- (d) Each AIP supplement shall be allocated a serial number which shall be consecutive and based on the calendar year.
- (e) Whenever an AIP supplement is issued as a replacement of a NOTAM, a reference to the series and number of the NOTAM shall be included.
- (f) A checklist of valid AIP supplements shall be issued at intervals of not more than one month, as part of the checklist of NOTAM and also with distribution as for the AIP supplements.
- (g) Each AIP supplement page shall have a publication date. Each AIRAC AIP supplement page shall have both a publication date and an effective date.’;

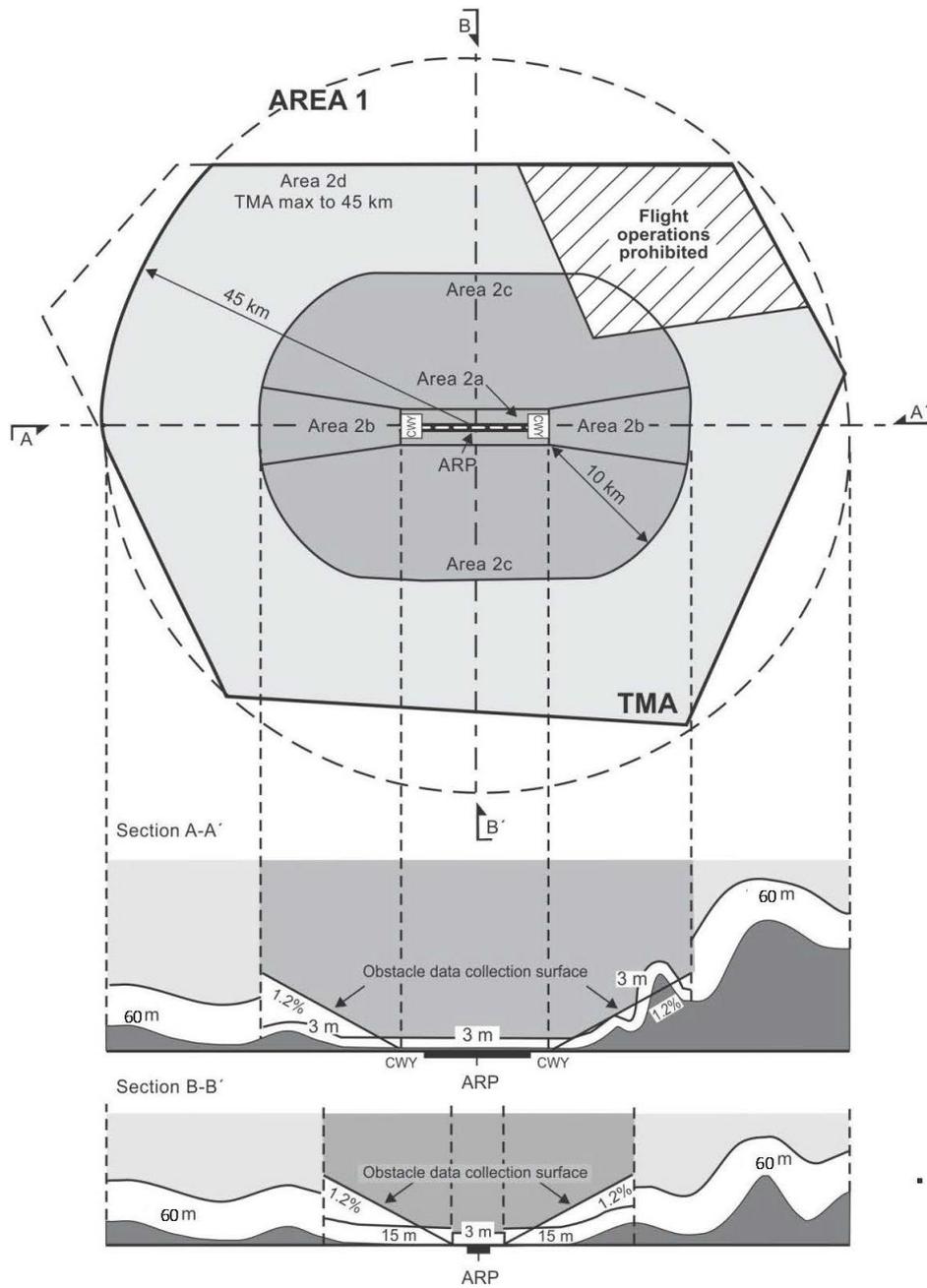
(26) in point AIS.TR.330, point (a) is replaced by the following:

- ‘(a) A NOTAM shall be issued when it is necessary to provide the following information:
 - (1) establishment of, closure of, or significant changes in the operation of aerodromes or heliports or runways;
 - (2) establishment of, withdrawal of, and significant changes in the operation of aeronautical services (aerodromes, AIS, ATS, CNS, MET, search and rescue (SAR), etc.);
 - (3) establishment of, withdrawal of, and significant changes in the operational capability of radio navigation and air–ground communication services; this includes: interruption or return to operation, change of frequencies, change in notified hours of service, change of identification, change of orientation (directional aids), change of location, power increase or decrease amounting to 50 % or more, change in broadcast schedules or contents, or irregularity or unreliability of operation of any radio navigation and air–ground communication services or limitations of relay stations including operational impact, affected service, frequency and area;
 - (4) unavailability of backup and secondary systems, having a direct operational impact;
 - (5) establishment of, withdrawal of, or significant changes to visual aids;

- (6) interruption of or return to operation of major components of aerodrome lighting systems;
- (7) establishment of, withdrawal of, or significant changes to procedures for air navigation services;
- (8) occurrence or correction of major defects or impediments in the manoeuvring area;
- (9) changes to and limitations on the availability of fuel, oil and oxygen;
- (10) major changes to SAR facilities and services available;
- (11) establishment of, withdrawal of, or return to operation of hazard beacons marking obstacles to air navigation;
- (12) changes in regulations applicable in the Member State(s) concerned that require immediate action from an operational perspective;
- (13) operational directives requiring immediate action or changes thereto;
- (14) presence of hazards not otherwise promulgated, which affect air navigation (including obstacles, military exercises and operations, intentional and unintentional radio frequency interference, rocket launches, displays, fireworks, sky lanterns, rocket debris, races and major parachuting events);
- (15) conflict zones which affect air navigation (to include information that is as specific as possible regarding the nature and extent of threats of that conflict and its consequences for civil aviation);
- (16) planned laser emissions, laser displays and search lights if pilots' night vision is likely to be impaired;
- (17) erection or removal of, or changes to, obstacles to air navigation in the take-off/climb, missed approach and approach areas, as well as on the runway strip;
- (18) establishment or discontinuance of, including activation or deactivation, as applicable, or changes to, the status of prohibited, restricted or danger areas;
- (19) establishment or discontinuance of areas or routes, or portions thereof, where the possibility of interception exists and where the maintenance of guard on the very high frequency (VHF) emergency frequency 121.500 MHz is required;
- (20) allocation, cancellation or change of location indicators;
- (21) changes to aerodrome/heliport rescue and firefighting (RFF) category;
- (22) presence of, removal of, or significant changes to, hazardous conditions due to snow, slush, ice, radioactive material, toxic chemicals, volcanic ash deposition or water on the movement area;

- (23) outbreaks of epidemics necessitating changes in notified requirements for inoculations and quarantine measures;
 - (24) an operationally significant change in volcanic activity, the location, date and time of volcanic eruptions and/or the horizontal and vertical extent of a volcanic ash cloud, including direction of movement, flight levels and routes or portions of routes that could be affected;
 - (25) release into the atmosphere of radioactive materials or toxic chemicals following a nuclear or chemical incident, the location, date and time of the incident, the flight levels and routes, or portions thereof, that could be affected, as well as the direction of movement;
 - (26) establishment of operations of humanitarian relief missions, together with procedures and/or limitations that affect air navigation;
 - (27) implementation of short-term contingency measures in cases of disruption, or partial disruption, of ATS and related supporting services;
 - (28) specific loss of integrity of satellite-based navigation systems; and
 - (29) unavailability of a runway due to runway marking works or, if the equipment used for those works can be removed, a time lag required for making the runway available.’;
- (27) in point AIS.TR.330, points (10) and (11) of point (b) are replaced by the following:
- ‘(10) limitations to aerodrome facilities or general services, with no operational impact;
 - (11) regulations not affecting general aviation;’;
- (28) point AIS.TR.345 is replaced by the following:
- ‘AIS.TR.345 AIP data set**
- (a) The AIP data set shall include data about all applicable subjects, properties and sub-properties defined in point (a) and (d) of Appendix 1 to Annex III, to cover all sections of the AIP, except that it shall not include data included in other data sets, as defined in point AIS.OR.335.
 - (b) When a property or sub-property is not defined for a particular occurrence of the subjects referred to in point (a), the AIP data subset shall include an explicit indication: ‘not applicable’.’;
- (29) point AIS.TR.350 is deleted;
- (30) in point AIS.TR.360, the following point (–f) is inserted:
- ‘(–f) obstacle data for Area 1 shall be collected for obstacles whose height above ground elevation is 60 m or higher in accordance with the Area 1 numerical requirements;’;
- (31) in point AIS.TR.360, the figure ‘Obstacle data collection surfaces — Area 1 and Area 2’ is replaced by the following:

‘Obstacle data collection surfaces — Area 1 and Area 2



(32) in point AIS.TR.510, the following point (–c) is inserted:

‘(–c) Unless relevant information is promulgated in accordance with the process for the flexible use of airspace:

- (1) at least seven days’ advance notice shall be given, through NOTAM, of the activation of established danger, restricted or prohibited areas and of activities that require temporary airspace restrictions other than for emergency operations;

- (2) notice of any subsequent cancellation of the activities or any reduction of the hours of activity or the dimensions of the airspace in point (c)(1) shall be provided, through NOTAM, as soon as possible.’;

(33) Appendix 1 is amended as follows:

(a) PART 1 — GENERAL (GEN) is amended as follows:

(i) point GEN 1.5 is replaced by the following:

‘GEN 1.5 Aircraft instruments, equipment and flight documents

Brief description of aircraft instruments, equipment and flight documents, including:

1. instruments, equipment (including aircraft communication, navigation and surveillance equipment) and flight documents to be carried on aircraft; and
2. emergency locator transmitter (ELT), signalling devices and life-saving equipment, for flights over designated areas.’;

(ii) point GEN 1.6 is replaced by the following:

‘GEN 1.6 Summary of national regulations and international agreements/conventions

A list of titles and references and, where applicable, summaries of EU and national regulations affecting air navigation, together with a list of international agreements/conventions ratified by the Member State.’;

(iii) point GEN 1.7 is replaced by the following:

‘GEN 1.7 Differences from ICAO Standards, Recommended Practices and Procedures

A list of significant differences between EU regulations, national regulations and practices of the Member State and related ICAO provisions, including:

1. provision affected (Annex and edition number, paragraph); and
2. difference in full text.

All significant differences shall be listed under this subsection. All Annexes shall be listed in numerical order even if there is no difference to an ICAO Annex, in which case a NIL notification shall be provided. National differences or the degree of non-application of the regional supplementary procedures (SUPPs) shall be notified immediately following the Annex to which the supplementary procedure relates.’;

(iv) point GEN 2.1.3 is replaced by the following:

‘GEN 2.1.3 Horizontal reference system

Brief description of the horizontal (geodetic) reference system used, including:

1. name/designation of the reference system;
2. identification and parameters of the projection;
3. identification of the ellipsoid used;
4. identification of the datum used;
5. area(s) of application; and
6. an explanation, if applicable, of the asterisk used to identify those coordinates that do not meet the accuracy requirements.’;

(v) point GEN 2.1.4 is replaced by the following:

‘GEN 2.1.4 Vertical reference system

Brief description of the vertical reference system used, including:

1. name/designation of the reference system;
2. description of the geoid model used, including the parameters required for height transformation between the model used and EGM-96;
3. an explanation, if applicable, of the asterisk used to identify those elevations/geoid undulations that do not meet the accuracy requirements.’;

(vi) point GEN 2.2 is replaced by the following:

‘GEN 2.2 Abbreviations used in aeronautical information products

A list of alphabetically arranged abbreviations and their respective significations used by the Member State in its AIP and in the distribution of aeronautical data and aeronautical information with appropriate annotation for those national abbreviations that are different from those contained in ICAO Document 8400 ‘Procedures for Air Navigation Services — ICAO Abbreviations and Codes (PANS-ABC)’.’;

(vii) point GEN 3.1.1 is replaced by the following:

‘GEN 3.1.1 Responsible service

Description of the aeronautical information service (AIS) provided and its major components, including:

1. service/unit name;
2. postal address;
3. telephone number;
4. telefax number;

5. email address;
6. AFS address;
7. website address, if available;
8. a statement concerning the provisions on which the service is based and a reference to the AIP location where differences, if any, are listed; and
9. an indication if the service is not available for 24 hours a day and 7 days a week.’;

(viii) point GEN 3.2.1 is replaced by the following:

‘GEN 3.2.1 Responsible service(s)

Description of service(s) responsible for the production of aeronautical charts, including:

1. service name;
2. postal address;
3. telephone number;
4. telefax number;
5. email address;
6. AFS address;
7. website address, if available;
8. a statement concerning the provisions on which the service is based and a reference to the AIP location where differences from ICAO, if any, are listed; and
9. an indication if the service is not available for 24 hours a day and 7 days a week.’;

(ix) point GEN 3.3.2 is replaced by the following:

‘GEN 3.3.2 Area of responsibility

Brief description of the area of responsibility for which ATS are provided. If aerodrome/heliport ATS is provided remotely, indication of which aerodrome(s)/heliport(s) are provided with such ATS, description of any interdependencies regarding the provision of such services, including indication of aerodromes/heliports served by the same remote ATS centre.’;

(x) point GEN 3.5.6 is replaced by the following:

‘GEN 3.5.6 Aircraft reports

Requirements for the making and transmission of aircraft reports.’;

- (xi) point GEN 3.6.4 is replaced by the following:

‘GEN 3.6.4 SAR agreements

Brief description of the SAR agreements in force, including provisions for facilitating entry and departure of other States’ aircraft for search, rescue, salvage, repair or salvage in connection with lost or damaged aircraft, either with airborne notification only or after flight plan notification.’;

- (xii) the following point GEN 3.7 is added:

‘GEN 3.7 Information services

GEN 3.7.1 System-wide Information Management (SWIM) Registry(ies) / Information Service Overview(s)

When SWIM registries are used, the corresponding Uniform Resource Locator (URL) of each registry is provided. Otherwise, a list of the URLs where information service overviews can be found is provided.’;

- (b) Part 2 EN-ROUTE (ENR) is amended as follows:

- (i) point ENR 0.6 is replaced by the following:

‘ENR 0.1 Table of contents to Part 2

A list of sections and subsections contained in PART 2 — EN-ROUTE.’;

- (ii) point ENR 2.2 is replaced by the following:

‘ENR 2.2 Other regulated airspace

Detailed description of radio mandatory zones (RMZs) and transponder mandatory zones (TMZs), including:

1. name, geographical coordinates in degrees and minutes of the RMZ/TMZ lateral limits;
2. vertical limits in flight levels, or feet;
3. time of activity; and
4. remarks.

Where established, a detailed description of other types of regulated airspace and airspace classification. For ATS airspace, also identification of the unit providing the service.’;

- (iii) point ENR 5.2 is replaced by the following:

‘ENR 5.2 Military exercise and training areas, and air defence identification zone (ADIZ)

Description, supplemented by graphic portrayal, where appropriate, of established military training areas and military exercises taking place at

regular intervals, and established air defence identification zone (ADIZ), including:

1. name, geographical coordinates of the lateral limits in degrees, minutes and seconds, if inside, and in degrees and minutes, if outside control area/control zone boundaries;
2. upper and lower limits, and system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures; and
3. remarks, including time of activity and risk of interception in the event of penetration of ADIZ.’;

(iv) point ENR 5.3.2 is replaced by the following:

‘ENR 5.3.2 Other potential hazards

Description, supplemented by charts where appropriate, of other potential hazards that could affect flights (active volcanoes, nuclear power stations, etc.), including:

1. geographical coordinates in degrees and minutes of location of potential hazard;
2. vertical limits;
3. advisory measures;
4. authority or service provider responsible for the provision of information; and
5. remarks.’;

(c) Part 3 AERODROMES (AD) is amended as follows:

(i) point AD 0.6 is replaced by the following:

‘AD 0.1 Table of contents to Part 3

A list of sections and subsections contained in PART 3 — AERODROMES (AD).’;

(ii) point AD 1.5 is replaced by the following:

‘AD 1.5 Status of certification of aerodromes/heliports

A list of aerodromes/heliports in the Member State, indicating the status of certification, including:

1. aerodrome/heliport name and ICAO location indicator;
2. date and, if applicable, validity of certification;
3. remarks, if any.’;

(iii) point AD 2.2 is replaced by the following:

******* AD 2.2 Aerodrome geographical and administrative data**

Aerodrome geographical and administrative data shall be published, including:

1. aerodrome reference point (geographical coordinates in degrees, minutes and seconds) and its site;
2. direction and distance of aerodrome reference point from centre of the city or town that the aerodrome serves;
3. aerodrome elevation to the nearest metre or foot, reference temperature and mean low temperature;
4. where appropriate, geoid undulation at the aerodrome elevation position to the nearest metre or foot;
5. magnetic variation to the nearest degree, date of information and annual change;
6. name of aerodrome operator, address, telephone and telefax numbers, email address, AFS address and, if available, website address;
7. types of traffic permitted to use the aerodrome (IFR/VFR); and
8. remarks.’;

(iv) point AD 2.3 is replaced by the following:

******* AD 2.3 Operational hours**

Detailed description of the hours of operation of services at the aerodrome, including:

1. aerodrome operator;
2. customs and immigration;
3. health and sanitation;
4. AIS briefing office;
5. ATS reporting office (ARO);
6. MET briefing office;
7. ATS;
8. apron management service (AMS), if applicable;
9. fuelling;
10. handling;
11. security;
12. de-icing; and

13. remarks.';

(v) point AD 2.8 is replaced by the following:

******* AD 2.8 Aprons, taxiways and check locations/positions data**

Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:

1. designation, surface and strength (PCR, where appropriate) of aprons;
2. designation, aerodrome reference code letter, width, longitudinal slope, surface and strength (PCR, where appropriate) of taxiways;
3. location and elevation to the nearest metre or foot of altimeter checkpoints;
4. location of VOR checkpoints;
5. position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds;
6. remarks.

If check locations/positions are presented on an aerodrome chart, a note to that effect shall be provided under this subsection.';

(vi) point AD 2.9 is replaced by the following:

******* AD 2.9 Surface movement guidance and control system and markings**

Brief description of the surface movement guidance and control system and runway and taxiway markings, including:

1. use of aircraft stand identification signs, taxiway guide lines and visual docking / parking guidance system at aircraft stands;
2. runway and taxiway markings and lights;
3. stop bars and runway guard lights (if any);
4. other runway incursion prevention measures; and
5. remarks.';

(vii) point AD 2.10 is replaced by the following:

******* AD 2.10 Aerodrome obstacles**

Detailed description of obstacles, including:

1. obstacles in Area 2:
 - (a) obstacle identification or designation;
 - (b) type of obstacle;

- (c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;
 - (d) obstacle elevation and height to the nearest metre or foot;
 - (e) obstacle marking, and type and colour of obstacle lighting (if any);
 - (f) if appropriate, an indication that the list of obstacles is available as a digital data set, and a reference to point GEN 3.1.6; and
 - (g) 'NIL' indication, if appropriate;
2. the absence of an Area 2 data set for the aerodrome is to be clearly stated and obstacle data are to be provided for:
- (a) obstacles that penetrate the obstacle limitation surfaces;
 - (b) obstacles that penetrate the take-off flight path area obstacle identification surface;
 - (c) obstacles that penetrate the relevant obstacle data collection surfaces; and
 - (d) other obstacles assessed as being hazardous to air navigation;
3. indication that information on obstacles in Area 3 is not provided, or if provided:
- (a) obstacle identification or designation;
 - (b) type of obstacle;
 - (c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;
 - (d) obstacle elevation and height to the nearest tenth of a metre or tenth of a foot;
 - (e) obstacle marking, and type and colour of obstacle lighting (if any);
 - (f) if appropriate, an indication that the list of obstacles is available as a digital data set, and a reference to point GEN 3.1.6; and
 - (g) 'NIL' indication, if appropriate;
4. indication that information on obstacles in Area 4 is not provided, or if provided:
- (a) obstacle identification or designation;
 - (b) type of obstacle;
 - (c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

- (d) obstacle elevation and height to the nearest tenth of a metre or tenth of a foot;
- (e) obstacle marking, and type and colour of obstacle lighting (if any);
- (f) if appropriate, an indication that the list of obstacles is available as a digital data set, and a reference to point GEN 3.1.6; and
- (g) 'NIL' indication, if appropriate.';

(viii) point AD 2.12 is replaced by the following:

******* AD 2.12 Runway physical characteristics**

Detailed description of runway physical characteristics, for each runway, including:

1. designations and related aerodrome reference code number and code letter;
2. true bearings to one hundredth of a degree;
3. dimensions of runways to the nearest metre or foot;
4. strength of runway pavement (PCR and associated data, where appropriate); surface of each runway and associated stopways;
5. geographical coordinates in degrees, minutes, seconds and hundredths of seconds for each threshold and runway end and, where appropriate, geoid undulation of:
 - thresholds of a non-precision approach runway to the nearest metre or foot; and
 - thresholds of a precision approach runway to the nearest tenth of a metre or tenth of a foot;
6. elevations of:
 - thresholds of a non-precision approach runway to the nearest metre or foot; and
 - thresholds and the highest elevation of the touchdown zone of a precision approach runway to the nearest tenth of a metre or tenth of a foot;
7. slope of each runway and associated stopways;
8. dimensions of stopway (if any) to the nearest metre or foot;
9. dimensions of clearway (if any) to the nearest metre or foot;
10. dimensions of strips;
11. dimensions of runway end safety areas;

12. location (which runway end) and description of arresting system (if any);
 13. the existence of an obstacle-free zone; and
 14. remarks.’;
- (ix) point AD 2.15 is replaced by the following:
- ***** AD 2.15 Other lighting and secondary power supply**
- Description of other lighting and secondary power supply, including:
1. location, characteristics and hours of operation of aerodrome beacon/identification beacon (if any);
 2. location and lighting (if any) of anemometer / landing direction indicator; location of the signalling lamp;
 3. taxiway edge and taxiway centre line lights;
 4. secondary power supply including switchover time; and
 5. remarks.’;
- (x) point AD 2.18 is replaced by the following:
- ***** AD 2.18 Air traffic services and apron management services communication facilities**
- Detailed description of ATS communication facilities established at the aerodrome, including:
1. service designation;
 2. call sign;
 3. channel(s);
 4. SATVOICE number(s), if available;
 5. logon address, as appropriate;
 6. hours of operation; and
 7. remarks.
- If applicable, detailed description of AMS communication facilities established at the aerodrome, including:
1. service designation;
 2. call sign;
 3. channel(s);
 4. hours of operation; and
 5. remarks.’;

(xi) point AD 2.22 is replaced by the following:

******* AD 2.22 Flight procedures**

Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, and actions required by airspace users following an emergency/abnormal situation and possible contingency measures by the ATS provider in case of disruptions established on the basis of airspace organisation at the aerodrome. When established, detailed description of the LVP at the aerodrome, including:

1. runway(s) and associated equipment authorised for use when LVP are in effect, including for operations with operational credits with RVR less than 550 m, if applicable;
2. defined meteorological conditions under which initiation, use and termination of LVP would be made;
3. description of ground marking/lighting for use under LVP;
4. remarks.?’;

(xii) point AD 2.23 is replaced by the following:

******* AD 2.23 Additional information**

Additional information at the aerodrome, such as an indication of bird concentrations at the aerodrome, together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.?’;

(xiii) point AD 2.24 is replaced by the following:

******* AD 2.24 Aeronautical charts related to an aerodrome**

Aeronautical charts related to an aerodrome shall be included in the following order:

1. Aerodrome/Heliport Chart — ICAO;
2. Aircraft Parking/Docking Chart — ICAO;
3. Aerodrome Ground Movement Chart — ICAO;
4. Aerodrome Obstacle Chart — ICAO Type A (for each runway);
5. Aerodrome Obstacle Chart — ICAO Type B;
6. Aerodrome Terrain and Obstacle Chart — ICAO (Electronic);
7. Precision Approach Terrain Chart — ICAO;
8. Area Chart — ICAO (departure and transit routes);
9. Standard Departure Chart — Instrument — ICAO;
10. Area Chart — ICAO (arrival and transit routes);
11. Standard Arrival Chart — Instrument — ICAO;

12. ATC Surveillance Minimum Altitude Chart — ICAO;
13. Instrument Approach Chart — ICAO (for each runway and procedure type);
14. Visual Approach Chart — ICAO; and
15. bird concentrations in the vicinity of the aerodrome.

If some of the aeronautical charts are not produced, a statement to this effect shall be given in section GEN 3.2 ‘Aeronautical charts’.’;

(xiv) point AD 3.2 is replaced by the following:

******* AD 3.2 Helicopter geographical and administrative data**

The requirement is for helicopter geographical and administrative data, including:

1. helicopter reference point (geographical coordinates in degrees, minutes and seconds) and its site;
2. direction and distance of helicopter reference point from centre of the city or town that the helicopter serves;
3. helicopter elevation to the nearest metre or foot, reference temperature and mean low temperature;
4. where appropriate, geoid undulation at the helicopter elevation position to the nearest metre or foot;
5. magnetic variation to the nearest degree, date of information and annual change;
6. name of helicopter operator, address, telephone and telefax numbers, email address, AFS address and, if available, website address;
7. types of traffic permitted to use the helicopter (IFR/VFR); and
8. remarks.’;

(xv) point AD 3.15 is replaced by the following:

******* AD 3.15 Other lighting and secondary power supply**

Description of other lighting and secondary power supply, including:

1. location, characteristics and hours of operation of helicopter beacon;
2. location and lighting of wind direction indicator (WDI); location of the signalling lamp;
3. taxiway edge and taxiway centre line lights;
4. secondary power supply including switchover time; and
5. remarks.’;

(xvi) point AD 3.17 is replaced by the following:

******* AD 3.17 Air traffic services communication facilities**

Detailed description of ATS communication facilities established at the heliport, including:

1. service designation;
2. call sign;
3. channel(s);
4. SATVOICE number(s), if available;
5. logon address, as appropriate;
6. hours of operation; and
7. remarks.’;

(xvii) point AD 3.21 is replaced by the following:

******* AD 3.21 Flight procedures**

Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, and actions required by airspace users following an emergency/abnormal situation and possible contingency measures by the ATS provider in case of disruptions established on the basis of airspace organisation established at the heliport. When established, detailed description of the LVP at the heliport, including:

1. touchdown and lift-off (TLOF) area(s) and associated equipment authorised for use under LVP;
2. defined meteorological conditions under which initiation, use and termination of LVP would be made;
3. description of ground marking/lighting for use under LVP; and
4. remarks.’;

(34) Appendix 3 is amended as follows:

(a) in Section 1 (General) of the instructions for the completion of the SNOWTAM format, point (f) is replaced by the following:

‘(f) The abbreviated heading “TTAAiiii CCCC MMDDGGgg (BBB)” is included to facilitate the automatic processing of SNOWTAM messages in computer databanks. The explanation of these symbols is:

TT = data designator for SNOWTAM = SW;

AA = geographical designator for Member States, e.g. LF = FRANCE;

iiii = SNOWTAM serial number in a four-digit group;

CCCC = four-letter location indicator of the aerodrome to which the SNOWTAM refers;

MMDDGGgg = date/time of observation/measurement, whereby:

MM = month, e.g. January = 01, December = 12;

DD = day of the month;

GGgg = time in hours (GG) and minutes (gg) UTC;

(BBB) = optional group for:

Correction, in the case of an error, to a SNOWTAM message previously disseminated with the same serial number = COR. *Brackets in (BBB) shall be used to indicate that this group is optional. When reporting on more than one runway and individual dates/times of observation/assessment are indicated by repeated Item B, the latest date/time of observation/assessment shall be inserted in the abbreviated heading (MMDDGGgg).’.*