AERONAUTICAL INFORMATION SERVICES-AERONAUTICAL
INFORMATION MANAGEMENT STUDY GROUP (AIS-AIMSG)

FIFTH MEETING

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Agenda Item 3: AIM information and data assembly, exchange, and promulgation
3.3 Integrated briefing

GUIDANCE MATERIAL ON INTEGRATED BRIEFING

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SUMMARY

The study note provides a proposal for amendment of the chapter 8 in AIS Manual to include provisions of harmonized briefing services.

1. INTRODUCTION

1.1 This study note provides a proposal for amendment of the chapter 8 in AIS Manual Doc 8126 to include provisions of harmonized briefing services. The amendment is built on proposals in AIS-AIMSG/1-SN/18, AIS-AIMSG/3-SN/19.

2. AMENDMENT PROPOSAL

2.1 Instead of adding a new chapter to the AIS Manual as proposed by the study notes mentioned above, the chapter 8 concerning pre-flight information have been expanded to include also harmonized briefing services. The amendment is attached in Attachment A. Except from editorial changes e.g. user, end-user, crew member is changed to flight crew member according to adopted vocabulary, following significant amendments are proposed:

a) a description of flight crew members need for briefing facility and services;

b) pre-flight action including objective for integrated briefing;

c) a description of AIS and MET services, and also through the chapter including the MET pre-flight service demand;

d) overview of levels of harmonized briefing;
the new term pre-flight information package is introduced to distinguish from PIB when meteorological flight documentation is included;

meteorological flight documentation and pre-flight information package have been included in the PIB section and also use of automated pre-flight information systems;

information about filtering – querying and retrieval of PIB and pre-flight information package is added;

PIB standard format is updated and a standard format for pre-flight information package is introduced both in text and graphical form, the figures have also been updated accordingly and fictitious location indicator are used;

the example of a separate format for navigation warnings bulletins has been deleted as well as the example of navigation warnings display.

A proposal to amendment to Annex 15 Chapter 8 is included in Appendix B, to align the text in 8.1.3 with the definition of pre-flight information bulletin in Chapter 2.

3. ACTION BY THE STUDY GROUP

3.1 The AIS-AIMSG is invited to:

1) review and discuss the draft amendment proposal; and

2) recommend the secretariat to amend the Annex 15 chapter 8 and AIS Manual chapter 8.
Chapter 8

PRE-FLIGHT AND POST-FLIGHT INFORMATION

8.1 PROVISION OF PRE-FLIGHT INFORMATION SERVICE

Requirement
[8.1.1, 8.2.1, 8.2.4 Annex 3 9.1]

8.1.1 According to Annex 15 the AIS shall use automated pre-flight information systems to make specifies that pre-flight information must be made available at each aerodrome or heliport normally used for international operations. This includes all aerodromes or heliports designated for regular use by international commercial air transport as listed in the relevant ICAO regional plans and any aerodromes or heliports serving as alternates to these regular aerodromes/heliports.

8.1.2 The following guidance material is primarily intended to assist when States in organizing their pre-flight information service, including those that are interested in providing a integrated, common point of access by flight crew members to aeronautical information, meteorological information and other additional information, as required. It should be noted that this pre-flight information service is required by all operators and particularly those who have made specific arrangements to obtain such information. However, also flight crew members who have specific arrangements may need pre-flight information service when the arrangements do not fully meet the requirements. The service should also be arranged so as to supplement existing arrangements where these do not fully meet the operators' requirements. In determining the extent of the service that will be provided, States should note that the following information is mainly related to the provision of such a service in a manual environment. For those States intending to provide pre-flight information services by automated means, the guidance contained in Chapter 9 of this manual should also be taken into consideration.

Note: - Flight crew members include: all civil aircraft operators, that is those engaged in commercial air transport (passenger, mail and cargo services), aerial work, air taxi operators, business aviation, private air transport, sporting and recreational aviation, etc.

8.1.3 The flight crew members need for a briefing facility and service can be summarised as follows:

a) enable a standard product to be produced as a minimum service;

b) provide the pre-flight information which is relevant to a flight, on request;

c) enable the flight crew member to obtain briefing that is structured to a specific need;

d) improve the mechanisms with which briefings are conducted and delivered;

e) reduce the amount of time taken to obtain a briefing;

f) provide easy access to information which includes updated information; and
g) provide this information or data at any time and location the flight crew member demands – the right information to the right person at the right time.

Regular consultation with the flight crew members could bring cognizance about their needs and plans.

8.1.4 The flight crew members’ requirement for a pre-flight planning process can be condensed by the question a flight crew member needs to get answered before performing a flight: “Is there any limitation in the system that prevents me from flying safely?” The challenge for any pre-flight information service whether automated or not, is to be able to support the flight crew member in answering this question to identify main ‘show stopper’ whilst avoiding information overload.

**Pre-flight action**

8.1.5 Before beginning a flight, the flight crew member should become familiar with all available information appropriate to the intended operation. In order to obtain the required pre-flight information, the flight crew member has to address different services (for example AIS, MET ARO) using various data and information sources (for example AIP, NOTAM, METAR, TAF, ATFM messages).

8.1.6 A number of data sources are involved in the pre-flight phase to ensure the safe operation of aircraft. Enhancements in the data transmission and collection, storage, retrieval and presentation have partly supported meeting the demands of the flight crew member for improved presentation and access to information. Harmonization of different services may improve the efficiency of the pre-flight information services to the flight crew members.

8.1.7 The objective of the integrated pre-flight information service is to assist in the development of briefing facilities to improve the accessibility during the pre-flight phase to all relevant aeronautical data, irrespective of their source, that are required for the planning and execution of a flight.

8.1.8 For the concept of integrated pre-flight information service to be successful, the delivery of these services must be brought together into a central facility. This does not, and should not, be taken to imply that the services must be combined. Integrated pre-flight information service will provide a portal that enables flight crew members to view the information provided by the individual services.

**Description of AIS and MET services**

8.1.9 The purpose of both the AIS and MET services is to ensure the flow of information necessary for the safety, regularity and efficiency of international aviation, as detailed in Annex 3 and 15.

8.1.10 The services provided by each state are the same, though the quantity of information being handled may vary. There are also variations between States in the nature and composition of AIS and MET authorities. Often they are wholly separated from each other, either as government departments or as privatised agencies; some are within the same body; and the structure may be centralized or there may be a network of offices, some of which may combine AIS, MET and ARO functions. Measures for harmonizing AIS and MET services relating to pre-flight planning must therefore be applicable to any of these heterogeneous circumstances.

8.1.11 AIS developments are progressed under ICAO Global and Regional Air Navigation Plans and sub-regional programme. The AIS data structure is based on each State’s Integrated Aeronautical Information Package (IAP).

8.1.12 MET developments are progressed by ICAO in close co-operation with the World Meteorological Organisation (WMO), with additional requirements being dealt with in the Regional Air Navigation Plans. The MET data structure is derived from the much wider requirements of meteorology as a
whole, i.e. not just those aspects of aviation interest. Each State’s MET information is described in Regional Air Navigation Plans and the data is structured according to format described in Annex 3.

8.1.13 Dissemination of AIS and MET pre-flight information products are offered to flight crew members in a great variety of service types, ranging from complete automatic information service, such as printed Pre-flight Information Bulletin (PIB) and satellite and weather radar images at major hub-airports, to verbal information over the public telephone network or mobile communication systems.

Responsibility for execution Organization and service

8.1.14 The State-administered or authorized AIS, or other agency appointed by the State, is responsible for the execution of the above requirements described in 8.1.1 – 8.1.4 and if interested, providing and integrated common point of access of pre-flight information services. Aerodrome/heliport AIS units established for this purpose should be organized and administered on the basis of When establishing and organizing AIS units for pre-flight information. Consider the amount and type of traffic normally expected to use the aerodrome/heliport and on the length and number of the air routes originating at the aerodrome/heliport. When establishing and organizing Aerodrome/heliport AIS units for pre-flight information. Such units should be staffed by qualified personnel with requisite knowledge, since for a complete and responsible briefing, can only be provided by staff possessing the requisite knowledge in this field. It may be necessary, however, to delegate such responsibility to an air traffic services (ATS) unit or other operational service at an aerodrome/heliport where minimal traffic requires personnel to perform more than one task.

8.1.15 Pre-flight information service is performed as self-briefing or verbal briefing or a combination of both. At an aerodrome or heliport where the briefing officer may not be personally present:

- an automated pre-flight information system could be used to assure the provision of relevant data through self-briefing system supported by means of consultation; or

- at an aerodrome or heliport with minimal traffic, the responsibility of pre-flight information could be delegated to an air traffic services (ATS) unit or other operational service.

8.1.16 Currently, personnel at a briefing office are trained only in their particular specialisation. With an integrated pre-flight information service facility, it will be necessary to train staff to provide assistance in all disciplines. A single member of the personnel is expected to provide a complete integrated briefing. Although this introduces a greater need for training, it could provide for more flexible staffing arrangements.

8.1.17 A meteorological briefing consists of an oral commentary, either directly by a person at the departure aerodrome or heliport or by telephone or other suitable telecommunication means, or through self-briefing computer terminals. A consultation consists of a personal discussion, including questions and answers. The purpose is to supply the latest available information and expected meteorological conditions along the route to be flown, at the aerodrome or heliport of intended landing and at any necessary alternate aerodromes.

8.2 LOCATION

AIS unit

8.2.1 It is a benefit if Aerodrome/heliport AIS units should be situated close to other aerodrome/heliport flight services and to airline flight operations offices to facilitate pre-flight functions by flight crew members with maximum efficiency and without their being compelled to cover to avoid undue distances. Ideally, all such services, namely meteorological briefing, flight clearance and the collection of fees and
charges (if any) could be established in a group of soundproof offices located on the ground floor of the terminal building, preferably near the apron. Section 8.7 describes different levels of location and integration of facilities and services for pre-flight planning.

8.2.2 In order to reduce ground time, particularly for flights continuing without a change of flight crew members, the appropriate authority may make arrangements should be made for access to pre-flight information services without the necessity of customs clearance and/or other formalities. For the convenience of crews unfamiliar with the aerodrome/heliport, a diagram indicating the location of the aerodrome/heliport AIS unit should be placed at the apron entrance(s) to the terminal building, for the convenience of flight crew members unfamiliar with the aerodrome or heliport.

8.2.3 Where the aerodrome/heliport is the site of a flight information centre or area control centre, it may be advisable to locate the ATS unit and the AIS unit in close proximity (providing the principles outlined above are not compromised).

8.2.4 Meteorological offices serving aviation are normally located at aerodromes, in which case they are called aerodrome meteorological offices. However, not all international aerodromes have a meteorological office, and for such aerodromes the relevant air navigation plan will indicate the name and location of the meteorological office designated to supply meteorological information concerning the aerodrome to flight crew members.

8.3 LAYOUT

AIS unit

8.3.1 There is no ideal layout for an AIS unit that can be applied is generally applicable. The space available, the extent of the coverage zone and the demand for pre-flight information services (which reflects the type and volume of traffic using the aerodrome/heliport) will be the determining factors. However, some principles are considered to be generally applicable, namely:

a) to display briefing material relating to major facilities, ATS schemes and navigation warnings should also be displayed on maps and charts to the greatest extent possible;

b) to make elements of the IAIP Integrated Aeronautical Information Package should be readily available for examination with a minimum amount of contact with briefing personnel;

c) to make suitable space and work tables should be available for the study of documentary material, and for the plotting and planning of flight operations; and

d) to arrange the displays and other facilities in the briefing room should, as far as possible, be arranged in a logical sequence so that personnel flight crew members using the facilities may proceed with a minimum of time and effort. (This would be facilitated by a separate entrance and exit.)

Wall displays

8.3.2 Wall displays may normally should consist of the following, although the extent of the coverage zone, the availability of suitable charts and the size of the available wall area may necessitate some deviation:

a) two sets of charts of the coverage zone at small scale (1:1 000 000 to 1:3 000 000) showing the
ATS system, aerodromes or heliports, radio navigation services and areas over which the flight of aircraft is dangerous, restricted or prohibited;

1) the ATS system, aerodromes/heliports and radio aids to navigation;

2) areas over which the flight of aircraft is dangerous, restricted or prohibited;

Note.— The areas contained in navigation warning PIB bulletins could be printed from or displayed on a graphical user interface using graphical computer tools, alternatively plotted on glass or transparent plastic sheeting and superimposed on this chart.

b) a 1:500 000 or larger scale chart of the State in which the aerodrome or heliport is located;

Note.— In larger States this may be limited to the flight information region (FIR) in which the aerodrome or heliport is located and adjacent FIR.

c) an outline chart of the coverage zone at small scale used in distributing briefing material. This chart should showing the FIRs and items that would be mentioned in a briefing bulletin;

d) a large scale chart or series of suitable charts of the aerodrome or heliport included in AIP traffic area showing controlled areas, approach aids, and holding, approach and departure procedures (the scale should be as large as practicable);

e) an Aerodrome Obstacle Chart;

f) a large scale chart (approximately 1:3 000) of the aerodrome or heliport movement area and approaches (in so far as necessary to include all lighting aids) showing the location of all technical services and the normal taxiing routes to be followed from apron to take-off positions; and

g) a large scale diagram of the terminal area showing location of various offices and facilities of interest to visiting flight crews.

Updating of charts

8.3.3 Due to the frequent changes in the ATS system, a practicable way to indicate the information about the current situation can best be indicated is by the use of coloured tapes, pins, markers, etc., superimposed on a chart. Such a presentation can be amended from day to day and is much more intelligible to flight crews members.

Meteorological offices

8.3.4 To assist the flight crew members with the preparation of a flight, and for use in a briefing or consultation, display any or all of the information listed in 8.5.6. A list with commonly used abbreviation in meteorological messages, an extract from Doc 8400 is given in Doc 8896 Appendix 8.

Meteorological information is supplied to flight crew members by one or more of following means:

a) Written or printed material, including specified charts and forms;

b) Data in digital form

c) Briefing, oral commentary on existing and or expected meteorological conditions;
d) Consultation, discussion with a meteorologist or another qualified person of existing and/or expected meteorological conditions relating to flight operations; a discussion includes answers to questions.

e) Display, or

f) In lieu of a) to e) above, by means of automated pre-flight information systems.

Bulletin trays and bulletin amendments

8.3.5 It will generally be found that the most convenient way of storing bulletins is to put them in trays. Each tray should be clearly marked with an indication of the type of bulletin (route, area, FIR, etc.). The tray should be deep enough to hold at least the number of bulletins anticipated to be required for a 24-hour period.

Access to basic documents

8.3.6 Store basic documents (such as up-to-date AIP, AIP Supplements, AIC and ICAO documents) should be stored in such a way as to facilitate access to those wishing to refer to them and whatever filing system a unit chooses to adopt for its reference library should be such that it is immediately identifiable to the intended user and thereby promote self-briefing.

1.1.1. The ability to view AIP components electronically is becoming increasingly available, especially as the use of Internet increases. This avoids the necessity to maintain and distribute paper copies. It also allows the flight crew member to perform electronic searches for the information of particular interest.

Sale of aeronautical charts

8.3.7 At each aerodrome/heliport An AIS unit arrangements could make arrangements be made, where practicable, to have appropriate for sale of aeronautical charts available for sale. The quantity maintained on hand should be kept to the minimum consistent with the potential demand in order to avoid, as much as possible, the effect of obsolescence. In order to avoid obsolete aeronautical charts, keep the quantity maintained on hand to the minimum consistent with the potential demand.

8.4 COVERAGE ZONE
[8.1.1, 8.1.2 Annex 3 2.3]

Geographic coverage

8.4.1 For each aerodrome/heliport AIS unit it is necessary to determine and periodically review the availability of aeronautical information for the geographic area and/or the air routes, for which aeronautical information is to be available must be determined and periodically reviewed as changes take place or are anticipated in the air traffic pattern.

8.4.2 The coverage zone must be sufficient to cater for at least the first route stage requirements of not only the national carriers of a State but also for those of the foreign airlines operating into or through its territory. This coverage must satisfy day-to-day requirements quickly and accurately while leaving sufficient margin to cater for new requirements without undue strain. Additionally, keep in mind the possibility of charter flights to locations away from the routine traffic pattern must be kept in mind.
8.4.2 A method to determine the coverage zone for which information/data must be held can be obtained by a survey of the flight crew members' requirements at each of the aerodromes and heliports, within a State, used for international air operations. An example of an information coverage zone form, which includes explanatory notes on the information/data required under column headings, is reproduced in Figure 8-16-2.

8.4.3 In general, the coverage zone should be limited to the FIR within which the aerodrome or heliport is located, the FIR(s) adjacent thereto and all air route stages (i.e. a route or portion of a route flown without an intermediate landing) originating at the aerodrome or heliport and extending beyond the FIR(s) mentioned.

8.4.4 To obtain pre-flight meteorological information a flight crew member must notify the aerodrome meteorological office providing briefing, consultation, display or provision of flight documentation in sufficient time to allow the office to prepare the information required and, as necessary, to obtain information for WAFCs and other meteorological offices. The notice could include details as follows:

a) aerodrome or heliport of departure and estimated time of departure;
b) destination and estimated time of arrival;
c) route to be flown and estimated times of arrival at, and departure from, any intermediate aerodrome(s) or heliport(s);
d) alternate aerodromes or heliports needed to complete the flight plan;
e) cruising level(s)
f) type of flight, whether under the visual or the instrument flight rules;
g) type of meteorological information requested, whether flight documentation, and or briefing or consultation; and
h) time(s) at which briefings, consultation and or flight documentation are required.

**Anticipation of traffic requirements**

8.4.6 The existing traffic pattern is easily determined from operators’ flight crew members, while useful indications of future trends may be gleaned from careful study of the reports of regional air navigation meetings, bilateral agreements and statements from operators’ flight crew members, with the aim to anticipate traffic requirements rather than be overtaken by them.

**Depth of information**

8.4.7 Having determined the geographical area of coverage, it is then necessary to take account of the depth of information required within that area. The immediately adjacent areas will be those most used by short-range traffic, whether it is commercial or private flying. For these areas it will be necessary to request the maximum amount of information relating to the State as a whole and in particular to every aerodrome or heliport available for use by international traffic. Quite frequently it may be necessary to request similar information in respect of aerodromes or heliports which, though not designated as airports of entry, may be used by charter or private aircraft which have cleared customs elsewhere. Thus, it is essential in determining the provision extent to which of pre-flight information services are to be provided, that States or authorized AIS should ascertain that the requirements for “first sector briefing” (point of departure to point
of first intended landing) are fully met.

Analysis

8.4.6 A careful analysis of the traffic emanating from each aerodrome or heliport is essential. This must be supplemented by including close liaison with the representatives of the operators using the aerodrome or heliport. By this means, any changes in the route plans of any operator will be known by the AIS unit and it will then be possible to organize the adjustment, supply or additional information called for by such changes. Where the traffic demand of a State is large enough to require AIS units at two or more aerodromes or heliports within a State's territory, design the information held at each unit should be designed to meet the needs of the traffic normally emanating from that aerodrome or heliport.

8.4.8 The use of long-range aircraft often dictates a need for information far beyond that which may normally be available and the AIS should therefore ensure that briefings cover the whole route segments. It is also necessary to analyse the need for information which go further than the first point of landing (i.e. final destination), and that required information/data are readily available.

8.5 DETAILED INFORMATION TO BE HELD FOR EACH COVERAGE ZONE

[3.1, 8.1.2, 8.2.4, Annex 3 9.1 to 9.3]

8.5.1 The aeronautical information documents to be available at an aerodrome/heliport AIS unit for pre-flight planning purposes are to be established on the basis of the unit's coverage zone as explained in 8.4. According to Annex 15 the documentation provided must include relevant elements of the IAIP (Integrated Aeronautical Information Package) and in case of integrated service, include also meteorological information and other additional elements, as required. However, when a complete library of aeronautical information is available at a central location and direct communications exist between it and the aerodrome/heliport AIS unit, such material can be limited to national publications and, where practicable, those of immediately adjacent States. The following, more detailed list is intended as a guide to the types of information, contained in the IAIP, which should be readily available for each coverage zone:

a) air routes;

b) regulations concerning entry into and transit of civil aircraft on international flights;

c) aerodromes/heliports available to international aviation;

d) air navigation aids and mobile communication facilities;

e) meteorological facilities;

f) rules of the air and ATS procedures;

g) controlled and restricted airspace;

h) hazards to air navigation;

i) search and rescue facilities;

j) survival information;

k) appropriate maps and charts;
1) A recapitulation of current NOTAM information of operational significance in the form of plain-language PIB, and other information of an urgent character not contained in NOTAM, on aerodrome or heliport conditions, including the serviceability and operational status of visual ground aids, non-visual aids, and the manoeuvring area;

m) Additional current information relating to the aerodrome of departure,

1) construction or maintenance work on or immediately adjacent to the manoeuvring area;

2) rough portions of any part of the manoeuvring area, whether marked or not, e.g. broken parts of the surface of runways and taxiways;

3) presence and depth of snow, ice or water on runways and taxiways, including their effect on surface friction;

4) snow drifted or piled on or adjacent to runways or taxiways;

5) parked aircraft or other objects on or immediately adjacent to taxiways;

6) presence of other temporary hazards;

7) presence of birds constituting a potential hazard to aircraft operations;

8) failure or irregular operation of part or all of the aerodrome or heliport lighting system including approach, threshold, runway, taxiway, obstacle and manoeuvring area lights and aerodrome/heliport power supply;

9) failure, irregular operation and changes in the operational status of ILS (including markers), MLS, Basic GNSS, SBAS, GBAS, SRE, PAR, DME, SSR, VOR, NDB, ADS-B, ADS-C, CPDLC, D-ATIS, D-VOLMET, radio navigation services, VHF aeromobile channels, RVR observing system, and secondary power supply; and

10) presence and operation of humanitarian relief missions, such as those undertaken under the auspices of the United Nations, together with any associated procedures and/or limitations applied thereto.

8.5.2 The recapitulation of current NOTAM and other information of urgent character must be made available to flight crews in the form of plain-language PIB.

8.5.3 All of the foregoing information should be contained in the various elements of the Integrated Aeronautical Information Package providing these documents are available for all States in the coverage zone. If such documentation the IAIP or part of it is not available, the AIS should take following steps are feasible to obtain adequate information, preferably through the aviation authority of the State concerned or, if necessary, from other sources, such as commercial airlines, airline service organizations and military services. Information from other sources must be verified, if possible, before distribution and if not verified, must, when distributed, be clearly identified as such.

8.5.4 NOTAM should be classified and filed systematically and in a manner that facilitates Use of automated aeronautical information system may support the classification and systematically filing of NOTAM for selection for publication of PIB.

8.5.5 The AIS unit may use the list of ICAO documents should be selected from the list in Chapter 3 as guidance to meet local requirements for reference material.

8.5.6 The AIS unit may for reference purposes maintain aeronautical Aeronautical charts,
selected from the following list to meet local requirements, should be maintained for reference purposes (Charts for wall displays are treated under 8.3.2):

- World Aeronautical Charts ICAO 1:1 000 000 or aeronautical charts of similar scale for areas where ICAO charts are not available;
- available chart series of a scale larger than 1:1 000 000, e.g. 1:500 000 and 1:250 000 scale;
- small scale Planning Chart(s), preferably covering the entire coverage zone on one or two sheets;
- one or more series of 1:2 000 000 or smaller scale Plotting Charts;
- any available charts for use with electronic aids to navigation;
- Approach and Aerodrome/ or Heliport Charts for all aerodromes/heliports normally used for international operations; and
- En-route Charts.

Note.— Charts referred to in f) and g) are normally contained in Aeronautical Information Publications.

8.5.6 In order to meet the needs for an integrated pre-flight information facility and service, access to the following information should also be readily available for each coverage zone:

— Meteorological information

- forecast of upper wind and upper-air temperature,
- forecast of upper air humidity, geopotential altitude and flight levels, flight level and temperature of tropopause, direction speed and flight level of maximum wind;
- SIGWX phenomena, SIGWXL, SIGWXM, SIGWXH;
- METAR or SPECI;
- TAF or amended TAF;
- forecast for take-off;
- SIGMET and special air reports (ARS) that is not already used in preparation of SIGMET;
- volcanic ash and tropical cyclone advisories information;
- GAMET and or area forecast for low-level flights in chart form;
- AIRMET;
- aerodrome warnings for the local aerodrome;
- meteorological satellite images; and
- ground-based weather radar information.

Note. – Forecast of upper-air humidity and geopotential altitude of flight levels are used only in
8.6 BRIEFING

Facilitation of self-briefing

8.1.4.6.1 The main objective of an aerodrome/heliport AIS unit pre-flight information services is to make available to pilots flight crew members the aeronautical information required for a flight. Often, a pilot flight crew member may not have sufficient time to spend in the AIS unit and it is therefore important that information be presented in a manner that will facilitate self-briefing. This

8.1.4.6.2 Self-briefing This will provide a time-saving method for the pilot flight crew members to obtain required information. Self-briefing refers to the ability for a flight crew member to make use automated pre-flight information system oneself, entering the required information and obtaining pre-flight information bulletin (PIB) and other elements of Integrated Aeronautical Information Package (IAIP). If the pre-flight service is integrated it will also include meteorological information and other additional elements, as required. Self-briefing is not indicating the location of the pre-flight information; a flight crew member may for example use the facilities in a major or local aerodrome, or use the Internet. In order to provide this type of service, the main factors to be considered are:

- a) the layout of the briefing room;
- b) the format of the pre-flight information bulletins (PIB or "bulletins");
- c) the wall displays; and
- d) the access to basic information.

These factors are dealt with in detail in this chapter.

8.1.4.6.3 In addition to providing a self-briefing service, make verbal briefings, when required, should also be available during the operational hours of the aerodrome/heliport.

8.6 Verbal briefing

8.6.4 Adjust as appropriate the verbal Verbal briefing should be adjusted to the pilot's flight crew members requirements depending upon familiarity with the route. A checklist may be used by the briefing officer may use a checklist to ensure that the briefing is as comprehensive and complete as necessary; the completeness of a briefing should and not be solely dependent upon the unaided memory of the briefing officer. The items to be included in such a checklist will vary according to the local situation. An example of list of items upon which the checklist may be based is given in Figure 8-28-3. If there is any reason to doubt published information, e.g. on aerodromes/heliports or aerodrome/heliport facilities, the briefing officer should not hesitate to telephone the appropriate authority for the latest information.

8.6.5 To facilitate SAR action, the briefing officer must ensure that the exact location of the intended landing places of the flight which is being briefed is known, particularly in the case of light aircraft not equipped with a two-way radio.
8.6.6 When it is impracticable to obtain information for the complete flight-planned route, or when the provision by or through another unit is more expeditious for information concerning part of the route to be provided by or through another unit, the briefing officer must ensure make certain that the pilot knows where to obtain information for the next route segment.

8.6.7 It may be necessary, in exceptional cases, to supplement the normal bulletins and verbal briefing with additional written material specially prepared for a pilot flight crew member totally unfamiliar with the route to be flown.

8.6.8 An integrated pre-flight information service facility could make briefing by telephone easier. Flight crew members would have only one office (call centre) to telephone rather than several. The State providing a integrated pre-flight information service must be prepared to resource this facility.

8.7 OVERVIEW OF LEVELS OF HARMONIZED PRE-FLIGHT INFORMATION

8.7.1 In order to assist in classifying how a particular pre-flight information service has been integrated and hence provide a measure by which States or authorized AIS may measure themselves, a quantitative means level of harmonization has been developed. The situation is described for each of six levels, one through to six, the latter being the most sophisticated level of harmonization.

8.7.2 Each of the levels demonstrates how the AIS, MET, ARO and ATFM functions may be integrated. It is however fully understood that integration is not an insignificant task and therefore the situation in each State should be examined and an assessment made as to the best order in which to integrate the individual services.

8.7.3 The following section gives a brief overview of each of the five levels.

**Level 1 – Distributed**

- Facilities and services in different location.
- Each facility visited at least once.
- Time taken to visit facility may be extensive.
- Multiple entries of flight details.
- Multiple PIB and flight documentation reports.

8.7.4 Typically at level 1, the flight crew member must access various facilities or services, in order to plan and execute a flight, at different locations, be it within a single building or not. For example, before
selecting a route both MET and ARO briefings may be required, once the preferred route has been selected then the flight plan may be filed and, if required, a slot obtained. Prior to the flight the flight crew member will visit in turn the MET and ARO briefing offices again to obtain the latest information.

8.7.5 The time taken to visit each of these facilities may be extensive and involve a significant amount of distance. The flight crew member will have to enter the flight plan on several occasions. The flight crew member will be presented with a series of briefings (AIS, MET etc.) with no cross-reference between them and no logical order in which they are presented. As a result, the flight crew member may need to sort through papers to obtain required information.

**Level 2 – Co-located**

- Facilities and services in one location
- Separate terminals for each facility/service
- Each terminal visited at least once
- Time taken to visit each facility reduced
- Multiple entries of flight details
- Multiple PIB and flight documentation reports

8.7.6 This level indicates that State or authorized AIS has integrated the services into a single facility but that each of the actual terminals required for pre-flight planning remains separated. As before, the flight crew member will have to make use of each of the various facilities, and use some facilities more than once.

8.7.7 The time taken to access each of the facilities will be significantly reduced and the distance will become negligible. However, the flight crew member will still have to enter the flight plan on several occasions.

8.7.8 Separate PIB and flight documentation are still produced and, as before, the flight crew member may need to sort through the papers to obtain the required information.

**Level 3 – Terminal integration**

- Facilities and services at one terminal
- Separate applications for each facility/service
- Only one terminal visited
8.7.9 At level three, the State or authorized AIS has provided a common system interface to the pre-flight information facilities. The applications remain separate but are hosted such that the use of a single terminal allows the flight crew member to access all necessary information.

8.7.10 At this level, the need to walk between rooms and indeed even between computers has been removed. Although improvement in access to the briefing systems has been offered, the flight crew member will still be required to enter the flight plan into each system and to access each of the applications on more than one occasion.

8.7.11 Separate PIB and flight documentation reports will still be produced for each of the areas (MET, AIS etc.) and as in the previous levels the flight crew member will still potentially have to sort through the papers.

8.7.12 Level four starts to bring the true benefits of integrated pre-flight information service – the ability to plan a flight and obtain a briefing without the necessity to enter the flight plan on more than one occasion, ensuring that the pre-flight information material prepared is consistent.

8.7.13 Through the use of a front-end application that allows a flight crew member to enter and maintain tailored data which they may recall at any stage, commonly flown routes PIB and flight documentation formats may quickly be recalled and used.

8.7.14 All applications are brought together, as a single application, through access to a common front-end application. Behind this, separate applications still exist. At this level the applications still prepare separate PIB and flight documentation reports which, the flight crew member will need to sort through to find the correct information.
8.7.15 At level five, full integration is achieved. A single front-end application is used to access the briefing services. These may still be separate background applications.

8.7.16 A single flight-plan entry is required from which all pre-flight information material is prepared. However, where level five brings benefit over level four is with respect to the delivery of pre-flight information material. Level five allows the various products (MET, AIS etc.) to be combined into a single output which may be tailored as requested by the flight crew member.

8.8 PRE-FLIGHT INFORMATION BULLETINS (PIB), METEOROLOGICAL FLIGHT DOCUMENTATION AND PRE-FLIGHT INFORMATION PACKAGES

8.8.1 Pre-flight information bulletin (PIB) is a presentation of current NOTAM information of operational significance, prepared prior to flight in the form of plain-language. The provision of daily bulletins PIB is of primary significance in a self-briefing service. Manually prepared, The PIB are provided printed plain-language bulletins for collection by pilots, to flight crew members and other aeronautical personnel concerned, containing current information on the status of facilities and services should be provided. Additionally, make amendments to the information contained in bulletins PIB should be made available, in the form of handout sheets or updated PIB in accordance with methods described in 8.8.17.

8.8.2 Where aerodrome/heliport AIS units have overlapping coverage zones or route stages, central bulletin production offers the most efficient method of providing PIB. For this purpose, sufficiently rapid and reliable air or surface (electronic) communications must be available for bulletin distribution. The local AIS unit will have to update the bulletin, whenever necessary, with the latest information. The date and time of issue should therefore be given in each bulletin. The use of automated processes is ideally suited to central bulletin PIB production, since the information content is continually changing; direct line communications are, of course, essential for distribution purposes. This method of producing PIB can offer considerable savings in staffing requirements and enhance the consistency and consequent operational reliability of published information. The advantages of such a system are covered in greater detail in Chapter 9.

Meteorological flight documentation
8.8.3 The meteorological flight documentations include following information in alphanumeric and chart format:

a) forecast of upper wind and upper-air temperature,
b) SIGWX phenomena, SIGWXL, SIGWXM, SIGWXH;
c) METAR or SPECI;
d) TAF or amended TAF;
e) forecast for take-off;
f) SIGMET and special air reports (ARS) that is not already used in preparation of SIGMET;
g) volcanic ash and tropical cyclone advisories information;
h) GAMET and or area forecast for low-level flights in chart form;
i) AIRMET;

Pre-flight information packages

8.8.4 The term pre-flight information packages is used to emphasize the inclusion of AIS and MET information as well as other additional information, as required.

8.8.5 NOTAM are the principal source of aeronautical information while meteorological information includes observation, reports, forecasts and warnings.

8.8.6 One significant difference between AIS and MET messages are that AIS use one type of messages; NOTAM to express different conditions when MET uses a number of different types of messages and charts. Meteorological observation and reports are normally valid 30-60 minutes, they will either be superseded or the information is considered to be obsolete. Forecasts have a defined period of validity and are issued at fixed time. NOTAM are issued when needed and could have a fixed period of validity or an estimated period.

8.8.7 Different messages entities, by their nature allow a different complexity of retrieval for pre-flight information; however all the messages can be geographical coded and can be retrieved either as aerodrome, FIR or area.

8.8.8 While the NOTAM allow selective retrieval by the e.g. NOTAM qualifiers, the meteorological information is selected by type of messages and location indicators.

Scope of bulletins

8.8.9 Bulletins PIB may take the simple form of a list of current NOTAM information of operational significance covering selected routes or areas, or at the discretion of the State, may be presented in a more elaborate form. A list of the types of bulletins that can be made available is found in 8.8.15.

8.8.15 Bulletins should be prepared for major traffic areas or air routes, the choice of areas and/or air routes being dependent upon the needs of the major users and the degree to which it is feasible to provide a specialized service. For example, a group of routes extending in the same general direction may be treated collectively. To facilitate use of the bulletin, the information for each area or route may be divided into the following two categories and published as separate bulletins:

a) navigation warnings, i.e. activation of areas over which the flight of aircraft is dangerous or restricted (termed
“NAV WARNINGS” — sample format at Figure 8.3); and

b) information other than navigation warnings, i.e. routine serviceability reports, changes in procedures, etc. (termed “GENERAL” — sample format at Figure 8.4).

**Entries**

8.7.5 Entries made on the bulletin relating to the serviceability of facilities should clearly indicate:

a) the location of the facility including, if appropriate, the city and the aerodrome/heliport served by the facility, together with the four-letter location indicator where available; and

b) the information to be conveyed, in plain language, including, where appropriate, ICAO abbreviations.

8.8.10 One of more of following types of messages and elements should be possible to select for inclusion in the pre-flight information:

a) AIS information

1. NOTAM (default);

2. SNOWTAM;

3. ASHTAM.

b) MET information, if integrated pre-flight information services

1. METAR and or SPECI;

2. TAF (including amended TAF);

3. SIGMET;

4. AIRMET;

5. GAMET and or graphical low level forecast;

6. Upper wind and upper-air temperature forecast, tables or charts;

7. SIGWX charts (High, Medium, Low level);

8. Volcanic ash and tropical cyclone advisory information, text or graphical.

c) Flow management information if integrated pre-flight information service.

**Note.** If any of the above messages or elements are not available from the information source being used, the option will be disabled. If any additional messages types or elements area available (e.g. State specific) they will be appended to the list of options.

8.8.11 Automated pre-flight information system may enable flight crew members to select information for inclusion at various levels, for example:

a) type of PIB, Area, Route and Aerodrome;
b) messages type(s), NOTAM, SNOWTAM, ASHTAM, if integrated services also include METAR, TAF, SIGMET, AIRMET, GAMET, upper wind and upper-air temperature forecast, tables or charts, SIGWX charts, volcanic ash and tropical cyclone advisory, text or graphical;

c) messages filter, Traffic, Purpose and Scope; and

d) flight crew member data input e.g. flight details or specific intentions.

8.8.12 System help functions may enable flexible entry of location indicators in plain name, ICAO code or IATA code supported by search features.

8.8.13 In order to give individual flight crew members tailored briefing information from the pre-flight information systems a range of criteria and so-called filter could be applied. Default setting would cater for standardized output. The following figure shows the relationship between the different information selections levels that the flight crew members may employ for retrieval of a bulletin.

Figure 8-1 Different information selections levels

**Bulletin** PIB or pre-flight information packages types

8.7.8.8.14 There are two broad categories of bulletin PIB or pre-flight information packages, the “area”, and “route” and “aerodrome” types, as well as a variety of subdivisions of each of these. The common set of NOTAM qualifiers, as explained in the instructions for completing the NOTAM Format (see Chapter 6, Appendix A), enables a system to provide this range of bulletins. From the foregoing it can be seen that NOTAM are the principal source of information which affect the contents of PIB and data can be structured to meet the needs of any user(s) flight crew members, based on specific operational requirements.

8.7.8.8.15 Depending on the requirements of users, flight crew members and other aeronautical personnel concerned, PIB make information should be made available in the form of:

a) area type bulletin PIB or pre-flight information packages;

b) route type bulletin PIB or pre-flight information packages;
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8.7.9 The bulletins should be provided using a standard format and sequence of information. These standard formats are given in Figures 8-5 to 8-7. PIB should only contain information of operational significance that differs from that published in the AIP, and should be tailored to meet both operational and administrative users’ needs.

8.8.15 The common set of NOTAM qualifiers and if integrated services, type of meteorological messages, enables a system to provide this range of document.

Area type bulletin PIB or pre-flight information packages
(FIR, groups of FIR or State(s))

8.7.10 Area type PIB contains relevant information such as NOTAM, SNOWTAM, and ASHTAM related to FIR(s), States or area and selected aerodromes situated inside a selected area.

8.8.16 Area type PIB or pre-flight information packages consist of relevant information such as NOTAM, SNOWTAM, ASHTAM, SIGMET, AIRMET, METAR, SPECI, TAF, GAMET, upper wind and upper air temperature text or charts, SIGWX charts, and tropical cyclone and volcanic ash advisory related to FIR(s) or country and selected aerodromes situated inside a selected area. The document will only present AIS and MET information about this requested area.

The following area type bulletins can be made available from within an automated system:

— a) all PIB information;
— b) IFR PIB information;
— c) VFR PIB information;
— d) OPSIG information;
— e) IMMEDIATE NOTIFICATION information;
— f) only en-route information (IFR, VFR, OPSIG, IMMEDIATE NOTIFICATION, LOWER/UPPER);
— g) selected lists by aerodrome location indicators; and
— h) any combination of the above.

8.8.18 An Area type PIB or pre-flight information packages provides information based on:

1) A FIR or selected FIRs
2) Groups of FIRs or pre-defined (adjustable) areas or groups of States (e.g. Benelux)
3) An area defined by flight crew members:
   1) Given airspace or special areas (TMA, CTR etc.);
   2) Coordinates or aerodrome names or aerodrome location indicators plus radius;
3) A polygon defined by coordinates or aerodrome names or aerodrome location indicators, or navigations aids.

Note: An area type PIB or pre-flight information packages provides at least the options: area info only, aerodrome info for selected area, aerodrome info for selected aerodrome within area.

Route type bulletins PIB or pre-flight information packages

8.7.118.19 The following route type bulletins PIB or pre-flight information packages can contain the same type of information as the area type bulletins PIB or pre-flight information packages in the form of:

a) FIR route specific: i.e. providing information based on: regarding FIR crossed and specific departure, destination and alternate aerodromes/heliports; and

1) aerodrome information; aerodrome of departure, destination, alternate(s); and

2) route information; FIR or the sequence of FIRs crossed by the indented flight route (source FPL/RPL or flight crew members input).

b) Narrow path route specific: i.e. providing information based on a specific route of flight usually based on the route and aerodrome information as contained in FPL. It may also be based on a flight path, including aerodrome of departure, destination and alternate, with a defined width along: significant points, airways, navigation aids, coordinates, direct between aerodrome of departure and aerodrome of destination. Only information that intersect with the narrow route path are included: only for an area determined by a strip defined geographically about the route with departure, destination and alternate aerodromes/heliports.

8.7.128.20 A benefit of route-specific bulletins PIB based on FIR is that they can also include information for the return flight which does not always follow the same routing for the outgoing one. Also, when there is a choice of two or more routings between one city pair, for which a narrow path bulletin could be inadequate, a bulletin PIB based on FIR may be preferable. There could be a requirement, in addition to the above, for the provision of more refined data retrieval which requires the introduction of a geographical reference feature. This form of retrieval can provide narrow-path route-specific bulletins PIB which may be required for RNAV operations and to cater to a higher level of automation within certain air navigation services and user systems.

8.8.21 Route type pre-flight information packages is based on a generalised route of flight that may also be the route information as contained in FPL field 15. It provides relevant messages such as NOTAM, SNOWTAM, ASHTAM, SIGMET, AIRMET, METAR, SPECI, TAF, GAMET, upper wind and upper air temperature text or charts, SIGWX charts, and tropical cyclone and volcanic ash advisory containing information on facilities, services, procedures, observations, forecasts, warnings and possible hazards along the specific route flown. It presents the crossed FIRs in the sequence of flight plus the selected aerodromes.

Aerodrome type bulletins PIB or pre-flight information packages

8.7.138.22 Essentially, aerodrome type bulletins PIB should contain relevant information such as NOTAM, SNOWTAM, and ASHTAM related on to selected aerodromes/heliports as may be necessary. Depending on user requirements, such bulletins can contain data on aerodromes/heliports within one or more FIR, for specified sectors or for destination and alternate aerodromes/heliports only. These requirements should be established through agreement between the AIS authority and the operator(s) concerned.
8.8.23 Aerodrome type pre-flight information packages consist of messages such as NOTAM, SNOWTAM, METAR, SPECI, TAF, SIGMET, AIRMET, SIGWX charts, and tropical cyclone and volcanic ash advisory containing information on facilities, services, procedures, observations and forecasts related to an aerodrome or its vicinity.

8.8.24 An aerodrome PIB or pre-flight information packages provides information based on:

a) single aerodrome information;

b) single aerodrome information plus surrounding area information (selection of aerodrome, range plus flight level). If range is requested, information irrespective of national boundaries is provided;

c) all aerodromes within an FIR (or other predefined area) or a group of FIRs; or

d) ATC sectors or a list of specified aerodromes (aerodrome information only).

Immediate automatic notification of items of urgent operational significance pertinent information

8.7.14 8.8.25 Items of urgent operational significance Annex 11 4.2 specifies that flight information service shall provide pertinent information to aircraft. Hence AIS must make sure that pertinent information likely to affect safety, which are listed separately identified by NOTAM with Purpose N, in the NOTAM Selection Criteria (see Chapter 6, Appendix B), must be brought to the attention of operators concerned even after the pre-flight briefing stage in accordance with agreement, are distributed to the flight information services concerned and flight crew members.

8.8.26 If providing integrated service items of urgent operational significance, SIGMET, AIRMET and amended TAF should be brought to the attention of flight crew members concerned, in accordance with agreement between the meteorological office and the air traffic service units concerned. Aircraft in flight under ATC control will be notified immediately (or on request) of any changes of operational significance.

8.8.27 Whenever it becomes apparent that the meteorological information included in the flight documentation will differ materially from that made available for pre-flight planning and in-flight re-planning, advise the flight crew member(s) immediately and, if practicable, supply the revised information as agreed between the flight crew member and the meteorological office concerned.

Administrative bulletin reports

8.7.15 8.8.28 The following administrative bulletins must be provided Administrative reports must provide at least:

a) checklists of all current NOTAM by State, FIR, aerodrome or heliport; and

b) all NOTAM input since a specified date-time group. (This procedure greatly facilitates briefings.)

8.8.29 Additional filtering criteria may enable retrieval of for example:

a) NOTAM number or range of numbers;

b) All active NOTAM;

c) All PERM NOTAM;

d) Trigger NOTAM (all valid; effective from (AIRAC date or defined by flight crew member);
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- e) Company profile (or as option in flight crew members profiles);
- f) NOTAM by subject;
- g) EST NOTAM;
- h) NOTAM processed (since a specified date-time group / by whom);
- i) History: system history of changes, retrieved bulletins/ID or pre-flight information packages;
- j) Administrator functions.

**BulletinPIB update**

8.7.148.8.30 Cover the The updating of PIB should be covered by:

- a) the system products listed in 8.7.14 8.8.25 or 8.7.15 8.8.28 b); or
- b) a request for a new bulletinPIB.

8.7.178.8.31 The above-mentioned bulletin types methods would make obsolete the requirement for specific PIB update bulletins which have been found to require complex time reference procedures.

**Postal bulletinPIBs**

8.7.188.8.32 It is envisaged that, for the foreseeable future, there will still be a need for a very comprehensive area type bulletinPIB, containing information from a specified date-time group projected ahead to another date-time group, which will have to be distributed to minor aerodromes/ or heliports by post. It is essential AIS authorities should therefore ensure that such data are expedited with a minimum of delay.

**Filtering – querying and retrieval of PIB or pre-flight information packages**

8.8.33 Filtering is the selection of criteria that influence the creation of PIB and pre-flight information packages, apart from the selection based on type of PIB or pre-flight information packages. Apply the following filters to reduce the output:

- a) validity period;
- b) vertical criteria;
- c) geographical criteria;
- d) NOTAM qualifiers criteria, for example:
  1) NOTAM code for inclusion or exclusion;
  2) Traffic;
  3) Purpose; and
  4) Scope.
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8.8.34 Definition of validity period of the PIB or pre-flight information packages is important for a tailored output. Following examples of time window is foreseen:

a) at a given data and time = current.
   - valid information for overview or general planning to be used by for example, airport authorities other NOTAM originators, flight dispatch, station manager, business aviation, long term planning units, NOF, CAA. All types of PIB and administrative reports.

b) flight plan based, for a given estimated of block time (EOBT), all information active between this time and in the next given number of hours.
   - active information for performing a flight used by flight crew members. Usually route or narrow route PIB. Possible default setting for a FPL based time window e.g. EOBT – 1 HR till ETA + 4 HR.

c) for time periods for example current date-time plus x hours, from-to.
   - active information for performing a flight, specific overview used by flight crew members, flight dispatch, station managers for short term planning. All types of PIB except administrative reports.

8.8.35 NOTAM qualifiers and NOTAM code act as retrieval filters to tailor PIB.

a) Traffic:
   1) IFR – include all NOTAM with traffic I and IV;
   2) VFR – include all NOTAM with traffic V and IV;
   3) combination IFR/VFR – include all NOTAM with traffic I, V and IV; and
   4) mixed flight rules (ref FPL): for each portion of the flight only NOTAM with the traffic corresponding to the flight rules of the respective portion of flight is included.

b) Purpose:
   1) N - NOTAM for the immediate attention of flight crew members,
2) **B** - NOTAM of operational significance selected for bulletin entry,

3) **O** – NOTAM concerning flight operations

4) **M** - NOTAM about miscellaneous information, which is not subject for a standard briefing but maybe made available on request.

c) **Scope:**

1) Aerodrome – include all NOTAM with scope A, AE and AW, default for an Aerodrome pre-flight information packages;

2) En-route – include all NOTAM with scope E and AE; and

3) Navigation warnings – include all NOTAM with scope W and AW.

d) **Lower/upper limit:**

   Vertical criteria (flight levels) will enable to tailor the PIB content whenever appropriate (system selection by lower and upper limits in NOTAM qualifiers).

e) **NOTAM code e.g.:**

1) exclusion of trigger NOTAM as option (system selection by condition “TT”); and

2) exclusion of obstacles (system selection by subjects “OB” and “OL”).

**Bulletin PIB and pre-flight information packages format**

8.7.19 The bulletin output must have the following characteristics:

   a) NOTAM text in significations/uniform abbreviated phraseology assigned to the ICAO NOTAM Code complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language; and

   b) NOTAM number to the right of text.

8.7.20 Bulletins must be prepared in the following sequence:

   a) a heading (identity of origination, area covered and for whom prepared);

   b) en-route information;

   c) aerodrome/heliport information; and

   d) navigation warnings.

8.7.21 Within each of subparagraphs b) to d) above, the information should be presented in the order of subsections of the AIP. These may also be used as subheadings, if so desired, but are not essential as the subject should be clear from Item E) of the NOTAM (see Chapter 6).
Example of a PIB standard format and sequence of information are given in Figures 8-4 to 8-6. PIBs contain only information of operational significance which differs from information published in the AIP. For integrated service example of pre-flight information packages standard format and sequence of information, is given in Figures 8-7. Administrative reports are foreseen mainly for NOTAM offices and other specialized personnel who are familiar with NOTAM procedures and NOTAM format.

Include the following main sections and sequence in the PIB or pre-flight information packages:

a) the PIB or pre-flight information packages header, including:
   1. identity of origination;
   2. area covered;
   3. for whom prepared;
   4. date and time for pre-flight information query;
   5. PIB or pre-flight information packages validity time;
   6. type of PIB or pre-flight information packages and content (e.g. requested aerodromes);
   7. selection criteria and filters applied as well as any other information regarding the documents content;
   8. special symbols used, if applicable; and
   9. the chosen time window clearly indicted as document validity, for example FROM 10 DEC 2011 1155 TO 12 DEC 2011 0600.

b) the aerodrome and heliport section:
   1. departure aerodrome;
   2. destination aerodrome; and
   3. alternate aerodrome(s).

c) the en-route (FIR) section:
   1. FIR of departure;
   2. FIR(s) in sequence of the flight; and
   3. FIR of destination.

d) Flow information, if integrated service is provided;

e) Additional information:
   1. charts; and
   2. graphical information.
8.8.38 Besides the default settings further sorting options could be offered for all document types, for example sorting according to effective data, NOTAM codes by subject groups, by flight route.

8.8.39 Appropriate detailed sorting of MET information, the latest information should be first:

a) The aerodrome/heliport section:
   - METAR/SPECI;
   - TAF/amended TAF

b) En-route (FIR) section:
   - SIGMET;
   - AIRMET;
   - GAMET
   - Volcanic ash and tropical cyclone advisory information, text;
   - Upper wind and upper-air temperature forecast, tables.

c) Additional information:
   - Upper wind and upper-air temperature forecast charts;
   - SIGWX charts (High/Medium/Low level);
   - Volcanic ash and tropical cyclone advisory information, graphical.

8.8.40 Appropriate detail sorting of NOTAM; the newest NOTAM is normally given first, same NOTAM text appear only once (no duplicates over different FIRs). In further FIRs, if relevant only a reference to the NOTAM number is be provided:

a) the aerodrome and heliport section:
   1. SNOWTAM; and
   2. NOTAM

b) The en-route (FIR) section:
   1. NOTAM, to be differentiated between scope E and AE and W navigation warnings; and
   2. ASHTAM

8.8.41 General format applicable to PIB and pre-flight information packages, all items are presented in a self-explanatory manner:

a) All alphanumerical meteorological messages are presented with the identification of message type included in the format
b) NOTAM text in significations and uniform abbreviated phraseology assigned to the NOTAM code complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language;

c) The Q-line which only serves as filtering features is left out and it may be confusing for flight crew members;

d) Item A, which is already present in the header and or item E); and

e) Identification of NOTAM items A – E including brackets is left out;

a) insert NOTAM number to the right of the text;

b) indicate in printed PIB the number of pages in the form of “page of pages” e.g. 01/15;

c) indicate “no data available” in the PIB for a requested aerodrome or FIR if no NOTAM is valid and in pre-flight documentation if no SIGMET or AIRMET is valid;

d) indicate end of bulletin;

e) encode date-times generally e.g. 08 AUG 2011 0630; and

f) translate location indicators into plain language whenever possible.

**Provision of PIB and pre-flight information packages**

8.8.42 Provide a PIB or pre-flight information packages to the flight crew members, including schedule delivery for large scale users, in any or all of following ways:

a) displayed on a graphical user interface of the pre-flight information system;

b) displayed on a graphical user interface using a different application;

c) displayed in electronic flight bag;

d) printed, including on a remote printer;

e) send to a fax;

f) send as an e-mail;

g) post.

8.8.43 Using the graphical user interface could provide the flight crew member with the maximum functionality and interaction. The flight crew member may be able to:

a) Perform searches;

b) Request the sorting of data;

c) View original messages by selecting hyperlinks;

d) Refine queries;
e) Modify and store setting in the flight crew members profile;  
f) Obtain an updated briefing;  
g) Obtain a history of interactions;  
h) Edit the briefing on line and transfer to other media.

Navigation warning display

8.7.48.8.44 In an automated environment the navigation warning could be printed from or displayed on a graphical 
user interface using graphical computer tools. Narrow route PIB facilitates the identification of navigation warnings 
affecting the flight route. In the PIB, Navigation warnings are identified by their NOTAM number or AIP Supplement 
references.

8.7.48.8.45 As mentioned in 8.3.2 a) 2), The navigation warnings that appear in the navigation warning PIB could 
also be plotted on a the wall display. should include a plot of the navigation warnings that appear in the daily navigation 
warning bulletins. A 1:1 000 000 scale chart is suitable for this purpose, but the actual scale chosen will depend upon 
the coverage zone of the bulletin PIB and the wall space available. If there is insufficient wall space, consideration 
should be given to the use of a mobile board. The bulletin PIB coverage zone may be divided into areas (e.g. FIR or 
States) and each area allocated a letter. Allocate this This letter and a number should be allocated to all navigation 
warnings in that area. Additionally, each navigation warning should be allocated a number. Thus all navigation warnings 
in a particular area will have the same identifying letter and each a separate number. This reference would appear on 
the left side of the bulletin and, as a means of identification, on the chart on which the warnings are plotted (see Figure 
8-5). To further facilitate self-briefing, and as a time saver for those using the service, the reference on the chart of 
navigation warnings that have an upper limit in excess of a specified flight level/altitude may be underlined in red. This 
will help the users to readily identify navigation warnings that may affect their flight. A suitable notice would have to be 
displayed on or adjacent to the chart indicating the meaning of the red underlining.

8.8.9 POST-FLIGHT INFORMATION

[8.3]

Purpose of post-flight information

8.8.18.9.1 The purpose of post-flight information is to ensure that inadequacies of facilities essential to the safety 
of flight operations, and the presence of birds on or around the airport constituting a potential hazard to aircraft 
operations, observed by a a pilot flight crew member during the flight, are reported without delay to the authority 
responsible for those facilities. Annex 6, Part I, Chapter 4, 4.1.2 and Part III, Section II, Chapter 2, 2.1.2 places on the 
operator flight crew members the responsibility for reporting any inadequacy. Annex 15, 8.3 requires States to ensure 
that arrangements are made at aerodromes/heliports to receive this information and to make it available to the AIS “for 
such distribution as the circumstances necessitate”. This is the basis on which the collection and distribution of post-
flight information should be administered, and should influence the formulation of a format for the collection of such 
information.

8.8.28.9.2 Furthermore, Annex 15, 8.3.2 requires States to ensure that arrangements are made to receive at 
aerodromes or heliports information concerning the presence of birds observed by aircrews flight crew members and 
ensure that such information is made available to the AIS for such distribution as the circumstances necessitate.

Collection of post-flight information
8.8.3.9.3 In most cases, an inadequacy of a facility or the presence of birds is reported by the pilot flight crew members on the appropriate ATS frequency, and this information must then be passed on to the responsible authority and to AIS for required action.

8.8.4.8.4 After landing, a pilot flight crew members wishing to confirm in writing any observations, or wishing to make an initial report, may do so at the aerodrome/heliport AIS unit, where a post-flight report form should be available. A specimen post-flight report form is at Figure 8-9. A space could also be provided on a PIB bulletin to facilitate the reporting of such data in writing at the aerodrome/heliport of destination.

8.8.5.8.5 Copies of the post-flight report form could also be made available in the airline operator’s offices at the aerodrome/heliport or on a dedicated web site to facilitate filing of post-flight reports by the pilot flight crew members. The report must subsequently be made available to the AIS without delay.
### NAME OF AERODROME/HELIPORT AIS UNIT

<table>
<thead>
<tr>
<th>Operator</th>
<th>Destination</th>
<th>Alternates</th>
<th>ATS route(s)</th>
<th>FIR</th>
<th>NOF</th>
<th>Frequency</th>
<th>Departure time(s)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Explanatory notes on information required under column headings**

1. **Operator.** All operators using or intending to use the aerodrome or heliport at which the aerodrome/heliport AIS unit is located.

2. **Destination.** The aerodrome of first intended landing on the air route stage originating at the aerodrome at which the aerodrome/heliport AIS unit is located.

3. **Alternates.** The alternate aerodrome(s) or heliport(s) for the destination given in the preceding column, specified by the
4. **ATS route(s).** The air traffic service (ATS) route(s), as applicable, specified by the operator for flight to the destination and alternate(s).

5. **FIR.** The flight information region(s) through which the flight to the destination and alternate(s) is planned, together with those adjacent FIR which contain information significant to the flight.

6. **NOF.** The international NOTAM offices responsible for the provision of aeronautical information in the FIR specified in the preceding column.

7. **Frequency.** The number of flights, specified as per day or per week, for the given air route stage.

   *Note.— This will determine the PIB reproduction requirements.*

8. **Departure time(s).** The scheduled departure time(s) for the given air route stage.

   *Note.— This will determine the PIB optimum release time.*

9. **Remarks.** Any additional information concerning the given air route stage; e.g. pre-flight information required for lower airspace only.

   **Figure 8-48-2.** Information coverage zone form
1. *Regulations and procedures*
   a) Basic publications and recent amendments and supplements
   b) Procedures applicable to airspace to be used
   c) ATS procedures
   d) Altimeter setting procedures

2. *Meteorological information*
   a) Availability of MET facilities, forecasts and weather reports
   b) If agreed, provision of relevant available meteorological information where there is no meteorological office at the aerodrome/heliport, including weather information reported by enroute aircraft

3. *Route and destination information*
   a) Suggestions concerning available routes
   b) Tracks, distances, general topography and terrain features and information required to maintain safe levels enroute
   c) Availability and serviceability state of aerodromes/heliports and aerodrome/heliport facilities
   d) Availability and serviceability state of navigation aids
   e) SAR procedures and facilities and functions of the SAR organization

4. *Communication facilities and procedures*
   a) Availability and serviceability of air/ground communication facilities
   b) Procedures
   c) Radio frequencies and hours of operation
   d) Communication facilities available to aircraft not equipped with radio for forwarding movement reports

5. *Hazards to air navigation*

6. *Any other essential information* (including that requested by a pilot/flight crew members which might not be available locally but which can be obtained from the appropriate source)

**Figure 8-28-3. Briefing checklist**
### Pre-flight Information Bulletin

#### Navigation Warnings

<table>
<thead>
<tr>
<th>EIR/UIR</th>
<th>Period</th>
<th>Area and nature of activity</th>
<th>Upper limit</th>
<th>Lower limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHANNON FIR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>28/8/03 0945-1015</td>
<td>10 KM RADIUS OF 532800N 0105600W. DEMOLITION OF EXPLOSIVES.</td>
<td>2 000 M MSL</td>
<td>GND</td>
</tr>
<tr>
<td><strong>SHANNON OCEANIC FIR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A5</td>
<td>23/8/03 0700-1600</td>
<td>SECTOR: 573000N 0111500W GEO-BRG 200° AND TO 280° DEG, DISTANCE 45 KM. FIRING ON TOWED TARGET TARGET TOWING.</td>
<td>4 500 M MSL</td>
<td>SFC</td>
</tr>
<tr>
<td>A7</td>
<td>21-25/8/03 0800-2200</td>
<td>AREA: 503600N 0114200W 502000N 0115300W 503300N 0125200W 505000N 0124500W 503600N 0114200W</td>
<td>FL-180</td>
<td>FL-120</td>
</tr>
<tr>
<td><strong>GANDER-DENHAM FIR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>22/8/03 0300-1200</td>
<td>20 KM radius of 473000N 0533000W. AIR-TO-AIR FIRING.</td>
<td>500 M MSL</td>
<td>SFC</td>
</tr>
</tbody>
</table>

---

**Figure 8.3** Sample of pre-flight information bulletin — navigation warnings
Figure 8-5. Sample navigation warning display
### Pre-flight Information Bulletin

<table>
<thead>
<tr>
<th>Location</th>
<th>Facility</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>LONDON FIR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LONDON/Heathrow</td>
<td>EGLL</td>
<td>Closed for maintenance 2100-0500 on nights of 7, 8 and 9 Nov.</td>
</tr>
<tr>
<td>REYKJAVIK FIR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KEFLAVIK/Keflavik</td>
<td>ILS</td>
<td>AVBL for RWY 12 only.</td>
</tr>
<tr>
<td>SONDRESTROM FIR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRINS CHRISTIANS SUND</td>
<td>BGPC</td>
<td></td>
</tr>
<tr>
<td>GANDER FIR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GANDER</td>
<td>CYQX</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>112.7 MHZ—Voice unserviceable.</td>
</tr>
</tbody>
</table>

**Figure 8-4.** Sample of pre-flight information bulletin—information other than navigation warnings
### Pre-flight information bulletin (Aerodrome)

<table>
<thead>
<tr>
<th>Date/time: 03/06/15/1000</th>
<th>Period: 03/06/15/0000 to 03/06/16/2400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of traffic: IFR/VFR</td>
<td>Height limits: LowerUpper</td>
</tr>
<tr>
<td>Bulletin contents: General purpose/OPSIG, AD</td>
<td></td>
</tr>
<tr>
<td>Aerodromes: EDDF, EDDM, EDDV, etc.</td>
<td></td>
</tr>
</tbody>
</table>

**FRANKFURT/MAIN (EDDF)**

--- [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]

**MUNCHEN/RIEM (EDDM)**

--- [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]

**HANNOVER/LANGENHAVEN (EDDV)**

--- [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]

Other aerodromes (name/ICAO location indicator), etc.

---

**Figure 8-6** — Example of standard PIB format — Aerodrome type (skeleton for a two-day period)
## Pre-flight Information Bulletin (Area)

<table>
<thead>
<tr>
<th>Date/time: 03/06/15/1000</th>
<th>Period: 03/06/15/0000 to 03/06/16/2400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of traffic: IFR/VFR</td>
<td>Height limits: Lower000Upper999</td>
</tr>
<tr>
<td>Bulletin contents: General purpose/OPSIG, en-route, AD, NAV warning</td>
<td></td>
</tr>
</tbody>
</table>

**Area: RJTG (Tokyo)**

### EN-ROUTE

[NOTAM sorted in the order of subsections of AIP Part 2 — En-route (ENR)]

### AERODROMES

RJAA (XXXX — aerodrome)

[NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]

### Other aerodromes (names of aerodromes)

### NAV WARNINGS

---

**Figure 8-7 — Example of standard PIB format — Area type (skeleton for a two-day period)**
### Pre-flight information bulletin

<table>
<thead>
<tr>
<th><strong>Pre-flight information bulletin</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Route)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>AERONAUTICAL INFORMATION SERVICE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date:</strong> 03/06/15/1000</td>
</tr>
<tr>
<td><strong>Time (UTC): 0835</strong></td>
</tr>
<tr>
<td><strong>Type of traffic:</strong> IFR</td>
</tr>
<tr>
<td><strong>Period:</strong> 03/06/15/0000 to 03/06/16/2400</td>
</tr>
<tr>
<td><strong>Bulletin contents:</strong> General purpose/OPSIG, en-route, AD, NAV warning</td>
</tr>
<tr>
<td><strong>Height limits:</strong> All FIR</td>
</tr>
<tr>
<td>(Lower/upper): 000/999</td>
</tr>
<tr>
<td><strong>Flight number:</strong></td>
</tr>
<tr>
<td><strong>Addep:</strong> EHAMADDEST: CYMX</td>
</tr>
<tr>
<td><strong>Alternates:</strong> CYYZ</td>
</tr>
<tr>
<td><strong>FIR: EHAA — EGTT — EISN — EGGX — CZQX — CZYL — CZYZ</strong></td>
</tr>
</tbody>
</table>

### EN-ROUTE

**EN ROUTE — EHAA (AMSTERDAM FIR)**

[NOTAM sorted in the order of subsections of AIP Part 2 — En-route (ENR)]

### AERODROMES

**AERODROME (DEPARTURE) EHAM (AMSTERDAM/Schiphol)**

[NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]

**AERODROME (ARRIVAL) CYMX (MONTREAL/Mirabel)**

[NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]

**AERODROMES (ALTERNATES)**

[Additional aerodrome information only if specially requested.]

### NAV WARNINGS

---

**Figure 8.8 — Example of standard PIB format — Route type**

(skeleton for a one-day period)
| Flight number / Addressee | Pre-flight information bulletin
---|---
| **Area** | **Validity (UTC)** |
| Issued time | 29JUN2011 1716 | FROM 29JUN2011 1800 TO 30JUN2011 0600 |
| Content | NOTAM |
| Height limits | 000 | 999 |
| FIR(s): | EACC |
| Flight rules: | IFR |
| Purpose: | BO |
| Scope: | En-Route, Aerodrome, Nav Warning |

**EACC – AMSWELL FIR**

**AERODROME INFORMATION**

**EADD – DONLON INTL**

REF CAT 9 AVAILABLE ON REQUEST. PPR SUBMITTED NOT LATER THAN 8 HOURS BEFORE FLIGHT. REF: AIP AD 2 YUDO – 1

FROM 02 MAY 2011 0900 TO PERM NOTAM A0733/11

**EADB – SIBY/BISTOCK**

DUE TO ILS REPLACEMENT RWY 27, RESTRICTIONS MAY BE EXPECTED.

FROM 30 MAY 2011 0600 TO 15 JUL 2011 1400 NOTAM A0724/11

**EN-ROUTE INFORMATION**

5 WINDTURBINES AT DONSBURG UNDER CONSTRUCTION AT PSN: 560741N0084106E - 560753N0084039E - 560747N0084053E - 560805N0084013E - 560759N0084026E.

HEIGHT 460 FT AGL, 611 FT AMSL. OBSTACLE LIGHTS LIM F R. REF: AIP ENR 5.4.

FROM 07 FEB 2011 0700 TO PERM NOTAM D0098/11

**NAV WARNINGS**

RESTRICTED AREA EAR1 BRAVO ACTIVATED.
LOWE: SFC
UPPER: 13200FT AMSL
FROM 29 JUN 2011 0600 TO 29 JUN 2011 2130 NOTAM B1209/11

---

**Figure 8-4. Example of standard PIB format – Area type**
**REPUBLIC OF DONLON**  
**AERONAUTICAL INFORMATION SERVICE**

<table>
<thead>
<tr>
<th>Flight number / Addressee</th>
<th>Validity (UTC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-flight information bulletin</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issued time</td>
<td>29JUN2011 1716</td>
</tr>
<tr>
<td>FROM 30JUN2011 0600</td>
<td>TO 01JUL2011 0600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contents</th>
<th>NOTAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height limits:</td>
<td>000 330</td>
</tr>
</tbody>
</table>

Aerodromes: EADD, EADB, EADS  
FIR(s): EACC  
Route: DCT  
Flight rules: IFR  
Purpose: BO  
Scope: En-Route, Aerodrome, Nav Warning

**AERODROME INFORMATION**

**DEPARTURE**  
EADD – DONLON/INTL  
REF CAT 10 1835-1052 DAILY OTHER TIMES CAT 9.  
FROM 02FEB2011 1835 TO 01OCT2011 1052

**DESTINATION**  
EADB – SIBY/BISTOCK  
NO DATA AVAILABLE

**ALTERNATE**  
EADS – HOLMSTOCK/LAND  
ARR ACFT LDG RWY 16 FOR EASTERN APN TO ARRANGE FLT TO VACATE RWY AT TWY A7 OR SOUTH OF. REF AIP DONLON EADS AD 2 - 53.4  
FROM 19JUN2011 2337 TO 01AUG2011 0600

**EN-ROUTE INFORMATION**  
EACC – AMSWELL FIR  
WEF 1106291600 AMEND DESIGNATED AIRSPACE HANDBOOK DATED 2 JUNE 2011 IFR WPT SECTION 21. ERC H4 TYPE 2. ERSA IFR WPT INSERT: APOVU/WPT 02 00 00S 082 00 00E EGARO/WPT 29 30 00S 114 00 00E  
FROM 23MAY2011 0308 TO PERM

**NAV WARNINGS**  
EACC – AMSWELL FIR  
BURGENVALK EAR3 ACT  
LOWER: SFC  
UPPER: FL450  
SCHEDULE: JUN 26-29 2245-0700 AND JUN 30 2245 – JUL 01 0400  
FROM 26JUN2011 2245 TO 01JUL2011 0400

---

**Figure 8-5 Example of a standard PIB format – Route type**
### REPUBLIC OF DONLON
AERONAUTICAL INFORMATION SERVICE

<table>
<thead>
<tr>
<th>Pre-flight information bulletin</th>
<th>Flight number / Addressee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerodrome</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Issued time</th>
<th>03JUN2011 1150</th>
<th>FROM 30JUN2011 0800</th>
<th>TO 30JUN2011 1800</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Contents</th>
<th>NOTAM SNOWTAM</th>
<th>Height limits:</th>
<th>000</th>
<th>999</th>
</tr>
</thead>
</table>

Aerodromes: EADD, EADA

Flight rules: IFR

Purpose: BO

Scope: Aerodrome

Other information including legend

### AERODROME INFORMATION

#### EADD – DONLON INTL

DUE TO MAINTENANCE OF DON VOR/DME 116.400/CH111X THE FOLLOWING CHANGES FOR SID RWY 09L OCCUR. PUBLISHED REMARKS AND GPS/FMS OVERLAYS REMAIN VALID UNLESS REPLACED BY THIS NOTAM:

- DKB 4L/6S, NOMBO 6L/6S, RATIM 3S, ROTEN 3L/5S AND SULUS 6L/6S: ADD REMARK: AFTER PASSING 2500 BRNAV EQUIPMENT NECESSARY. REF AIP AD 2 EADD 2-31

FROM 30 JUN 2011 0800 TO 30 JUN 2011 1300

#### EADA – AKVIN/AKVIN

DVOR/DME BOR 115.500/CH102X. COVERAGE REDUCED ON RADIAL 120 TO 22NM BELOW 3400FT MSL

FROM 31 MAY 2011 1056 TO 31 AUG 2011 1130 EST

END OF PIB

---

Figure 8-6 Example of standard PIB format – Aerodrome type
AERONAUTICAL INFORMATION SERVICE

Pre-flight information package

Issued time: 29JUN2011 1716
Validity (UTC): FROM 30JUN2011 0600 TO 30 JUN2011 1800
Contents: METAR/SPECI, TAF, SIGMET/AIRMET, SIGWX CHART, NOTAM, FLOW
Height limits: 000 330

Aerodromes: EADD, EADB, EADS
FIR(s): EACC
Route: DCT
Flight rules: IFR
Purpose: BO
Scope: En-Route, Aerodrome, Nav Warning

AERODROME INFORMATION

(DEPARTURE) EADD – DONLON/INTL

MET
METAR 300550Z 17008KT 110V220 CAVOK 16/04 Q1020 NOSIG
TAF 301100Z 3006/0106 19008KT 9999 FEW040

AIS
REF CAT 10 1835-1052 DAILY OTHER TIMES CAT 9.
FROM 02FEB2011 1835 TO 01OCT2011 1052
NOTAM A3001/11

FLOW
NO DATA AVAILABLE

(DESTINATION) EADB – SIBY/BISTOCK

MET
METAR 300550Z 29014KT 9999 FEW020 SCT040
TAF 301100Z 3006/3015 25015KT 9999 FEW020 SCT040

AIS
NO DATA AVAILABLE

FLOW INFORMATION

TAXI TIME EADB
VALID FROM: 2011-06-30
VALID UNTIL: 2011-06-30
RELEASED: 2011-06-30 04:02:06
TACT/CASA INFORMATION MESSAGE

1 REF: TAXI TIME EADB
2 VALID: WEF 30-04:11 UNTIL 30-07:30 UTC TAXI TIME 20 MIN
3 REMARK: CTOT FOR FLIGHTS DEPARTING IN THE ABOVE PERIOD WILL BE CALCULATED ACCORDING TO THE NEW TAXI TIME AND SLOT REVISION MESSAGES MAY BE ISSUED.
CFMU - BRUSSELS
ALTERNATE) EADS – HOLMSTOCK/LAND

MET
METAR 300550Z 021010KT 9999 FEW014 17/13 Q1020 NOSIG
TAF 301130Z 3006/0106 26008KT 9999 FEW025

AIS
ARR ACFT LDG RWY 16 FOR EASTERN APN TO ARRANGE FLT TO VACATE RWY AT TWY A7 OR SOUTH OF. REF AIP DONLON EADS AD 2 - 53.4
FROM 19JUN2011 2337 TO 01AUG2011 0600

FLOW INFORMATION
NO DATA AVAILABLE

EN-ROUTE INFORMATION

EACC – AMSWELL FIR

MET
EACC SIGMET 1 VALID 300500/300900 EADD- EACC AMSWELL FIR SEV TURB FCST W OF W030 FL240/350 MOV E 15 KT WKN

AIS
WEF 1106291600 AMEND DESIGNATED AIRSPACE HANDBOOK DATED 2 JUNE 2011 IFR WPT SECTION 21. ERC H4 TYPE 2. ERSA IFR WPT INSERT: APOVU/WPT 02 00 00S 082 00 00E EGARO/WPT 29 30 00S 114 00 00E
FROM 23MAY11 0308 TO PERM

NOTAM B2097/11

A/G FAC ACC/FIA AMSWELL CENTRE 127.1 SUBJ TO INTERFERENCE ALTN FREQ HF OR AS DIRECTED BY ATC.
FROM 18JUN2011 0614 TO 18JUL2011 0800 EST

NOTAM A0042/11

NAV WARNINGS

EACC – AMSWELL FIR

BURGENVALK EAR3 ACT
LOWER: SFC
UPPER: FL450
SCHEDULE: JUN 26-29 2245-0700 AND JUN 30 2245 – JUL 01 0400
FROM 26JUN2011 2245 TO 01JUL2011 0400

NOTAM A4217/11

FLOW INFORMATION
NO DATA AVAILABLE

ADDITIONAL INFORMATION

SIGWX CHART
Figure 8-7 Example of standard pre-flight information packages format – Route type
### POST-FLIGHT REPORT

**Aircraft nationality or common mark and registration mark:**

**Owner/FLT NR:**

**Departure aerodrome:**

ATD (UTC):

ATA (UTC):

**Arrival aerodrome:**

**Facility** | **Location** | **Details of inadequacy*** | **Time of observation**
--- | --- | --- | ---

**Birds** | **Location** | **Details** | **Time of observation**
--- | --- | --- | ---

---

Date: ______________________  
Signature of pilot: ___________________________________________________

---

*Includes flight altitude/level distance and bearing from the facility(ies) observed.

**Figure 8-98-8** Post-flight report on inadequacies in the status and operation of air navigation facilities and presence of birds
8.1.3 A recapitulation of current NOTAM information of operational significance and other information of urgent character shall be made available to flight crews in the form of plain-language pre-flight information bulletins (PIB).

Note.— Guidance on the preparation of PIB is contained in the Aeronautical Information Services Manual (Doc 8126).