EUROPEAN ORGANISATION FOR THE SAFETY OF AIR NAVIGATION

EUROCONTROL

Integrated Briefing - *i*PIB Guidelines for Presentation

AIM/AEP/BRIEF/0029

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EUROPEAN AIR TRAFFIC MANAGEMENT PROGRAMME

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Abstract

This report presents the guidelines for output of integrated pre-flight information bulletins (PIB) means that include AIS, MET, Flow and FPL elements. It defines the types of information to be included in each type of PIB and the basic rules and filters that may be used to customise the final PIB output.

Keywords

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DOCUMENT APPROVAL

The following table identifies all management authorities that have successively approved the present issue of this document.

AUTHORITY	NAME AND SIGNATURE	DATE
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DOCUMENT CHANGE RECORD

The following table records the complete history of the successive editions of the present document.

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1. INTRODUCTION

1.1 Background

In order to obtain the required pre-flight information, the user needs to address different services (e.g. AIS, MET, ARO) using various data/information sources (e.g. AIP, NOTAM, MET, ARO, ATFM) to obtain an output. The process is, to a certain extent, not tailored to the specific needs of the flight nor are the relationships of the information elements considered. This is neither user friendly nor efficient or flexible.

For this reason the Integrated Briefing Project was conceived, based upon the previously identified User Requirements (ATM URD - Air Traffic Management User Requirements Document Vol. 2 Ed. 2.0; AIS URD – Aeronautical Information Services User Requirement Document Edition 0.6). Furthermore, the project is also based upon the ICAO EUR DOC010 "Harmonised access to AIS and MET Services relating to pre-flight planning".

Briefing is a complex process that is provided through a variety of service levels. However, in the scope of this document, solely the system output of an integrated PIB is described. In this regard the term of ***i***PIB is introduced. The document is based on the Integrated Briefing Concept documents (**[4]** and **[5]**). It is also based on the EAD INO Reporting System and has been extended in terms of integrating MET and FPL elements.

It is very important to understand that an enormous amount of data needs to be accessed by a system in order to create a PIB. For example, in an average European briefing system (as used for intercontinental flight operation) about 7000-11000 NOTAM are stored on a daily basis which need to be taken into consideration for PIB creation. Hence a clever interface with possibilities for selective filtering and tailoring is vital to fulfil user requirements.

An Integrated Briefing facility does not necessarily depend on an automated system. However, it is important to realise that maximum use of integration and tailoring or customisation can only be achieved through systems support.

1.1.1 Integrated Briefing – the Concept of “One Stop Shop”

Two concept documents form the baseline for this report.

- The High-Level Concept Document **[4]** sets out the business environment for Integrated Briefing: The "Why" of the project.
- The Technical Concept Document **[5]** presents a technical view of an Integrated Briefing facility, the “One Stop Shop”: The "What" of the project.

1.1.2 The Key Requirement Of Users

This can simply be summarised by answering the main question a pilot has, namely “Can I fly or not?”.

The challenge is that BRIEF must be able to answer this question concerning main “show stoppers” relatively quickly before the user runs through various customisation steps.

1.2 Objective And Scope

The Integrated Briefing project, established as part of the AIS AHEAD programme, is to assist in the future development of briefing facilities, so that access to the necessary information, irrespective of source, is improved.

The objective of this document is to present guidelines for the output and presentation of integrated Pre-flight Information Bulletins (***i***PIB) that include AIS, MET, Flow and FPL elements. It defines the types of information to be included in each type of PIB, the basic rules and filters used for customisation and samples for the presentation of an ***i***PIB.

The scope is all information components such as AIS/MAP, ATFM, MET, ARO (flightplan and related messages) including military information, if publicly available. Main attention will be addressed to the pre-flight phase, however the continuity requirement for information provision into other phases of flight will be taken into account..

The Integrated Briefing project does not design or create a system. It shall provide consolidated information to enable system development or service improvement or facilitate adaptation of existing services or systems. In its current scope, this project does not include functionality for dispatch services or systems.

1.3 References

Reference	Title	Number
[1]	PANS Rules of the Air and Air Traffic Services	ICAO Doc 4444-RAC/501
[2]	Basic CFMU Handbook	
[3]	AIS Manual	ICAO Doc 8126
[4]	Integrated Briefing High-Level Concept Document	AIM/AEP/BRIEF/0024
[5]	Integrated Briefing Technical Concept Document	AIM/AEP/BRIEF/0025
[6]	ICAO International Standards and Recommended Practices – Aeronautical Charts.	ICAO Annex 4
[7]	Integrated Briefing Report on Standards, Regulations and User Requirements	AIM/AEP/BRIEF/0007
[8]	Harmonised Access to AIS and MET Services Relating to Pre-flight Planning	ICAO EUR DOC 010

2. GENERAL

2.1 Related ICAO SARPs

[7] and **[8]** contain specific definitions concerning Briefing and PIB. The most important are summarised below.

2.1.1 Annex 15

"Pre-flight information bulletin (PIB). A presentation of current NOTAM information of operational significance, prepared prior to flight."

PIBs are part of the Integrated Aeronautical Information Package.

“8.2.2 Recommendation. Automated pre-flight information systems providing a harmonized, common point of access by operations personnel, including flight crew members and other aeronautical personnel concerned, to aeronautical information in accordance with 8.2.1 above and meteorological information in accordance with 9.9.1 of Annex 3 Meteorological Service for International Air Navigation, should be established by an agreement between the civil aviation authority or the agency to which the authority to provide service has been delegated in accordance with 3.1.1 c) and the relevant meteorological authority.”

“8.2.4 Self-briefing facilities of an automated pre-flight information system shall provide for access by operations personnel, including flight crew members and other aeronautical personnel concerned, to consultation as necessary with aeronautical information service by telephone or other suitable telecommunications means. The human/machine interface of such facilities shall ensure easy access in a guided manner to all relevant information/data.”

More guidance is to be found in ICAO Doc 8126 **[3]**.

2.1.2 Annex 3

"9.3.1 Briefing and/or consultation shall be provided, on request, to flight crew members and/or other flight operations personnel. Its purpose shall be to supply the latest available information on existing and expected meteorological conditions along the route to be flown, at the aerodrome of intended landing, alternate aerodromes and other aerodromes as relevant, either to explain and amplify the information contained in the flight documentation or, if so agreed between the meteorological authority and the operator, in lieu of flight documentation.

"3.4.3 Recommendation. The aerodrome meteorological offices at which briefing, consultation and/or flight documentation are required, as well as the areas and/or air routes to be covered, should be determined by regional air navigation agreement and, as necessary, by supplementary agreement between the meteorological authority and the operator concerned."

“9.9.4 Automated pre-flight information systems providing self-briefing facilities shall provide for access by operators and flight crew members to consultation, as necessary, with a meteorological office by telephone or other suitable telecommunications means.”

2.1.3 Interpretation Of Differences Of Annexes

The term PIB does not exist as such in Annex 3 but service levels of Briefing are covered defining Briefing, Consultation and Display. A MET term equivalent to the AIS PIB would be flight documentation.

However, basic principles for composing flight documentation are the same as used to create an AIS PIB. For this reason, the term *i*PIB is used for simplicity.

2.2 The Issue Of Integrating MET And AIS Messages

There is one significant difference between AIS and MET messages that explains the difficulty for *i*PIB creation.

While MET uses many different messages, each with a short life span, to express different conditions, AIS uses mainly NOTAM to express many information conditions in the one message type. A NOTAM often has a relatively long existence.

Different message entities, by their nature allow a different complexity of retrieval for Briefing. For example:

- SNOWTAM and METAR are retrieved on the basis of their existence for a specific aerodrome and are presented in the PIB section for that specified aerodrome,
- SIGMET and TAF are retrieved on the basis of their existence for a specific area or FIR and are presented in the PIB section for that specified area/FIR,
- NOTAM allow most selective retrieval, such as Area (Aerodrome and FIR), Traffic, Purpose, Scope. They also allow specific output based on message, subject or condition if required as defined by the NOTAM selection criteria.

2.3 Data Selection For *i*PIB

The user will be able to select the information that will be included in the *i*PIB at various levels. These levels are:

- *i*PIB type,
- Message types,
- Message filters,
- User data / input.

The geographical scope for which messages are included will depend on the *i*PIB type selected and on the actual user input specifying flight details or specific intentions.

Figure 1 shows the relationship between the different information selection levels that may be employed by the User for the retrieval of an *i*PIB.

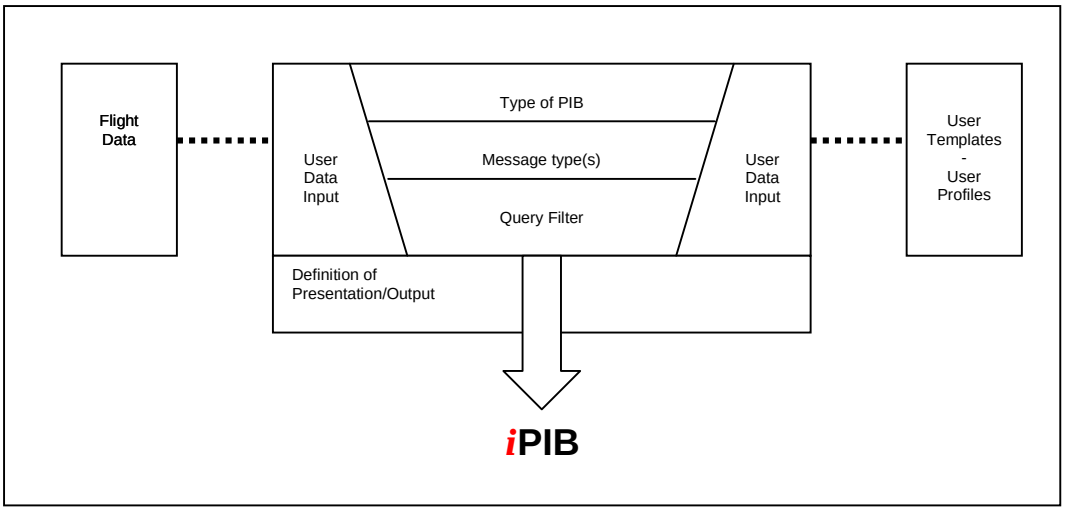


Figure 1: Information Selection Levels

2.4 The *i*PIB Types

Five types of *i*PIB are considered in this document:

- Aerodrome *i*PIB,
- FIR (or Area) *i*PIB,
- Route (Area Type) *i*PIB,
- Route (Narrow Path) *i*PIB,
- Update *i*PIB.

A description of each of these types of bulletin is given in **[3]** and **[7]**. Administrative bulletins are not further considered in this document.

2.5 Message Types

The selection of types of message (NOTAM, SNOWTAM, METAR, TAF etc.) for inclusion in an *i*PIB is discussed in 3.2.3.

2.6 Filtering

Filtering is the selection of criteria that influence the creation of *i*PIB based on specific flight related criteria. For example, a user performing an IFR flight will not be supplied with NOTAM which are originated solely with "Traffic VFR".

Note: NOTAM selection criteria are contained in the AIS Manual ICAO Doc 8126, Appendix C.

Filtering may be achieved through the use of a User profile or on an ad-hoc basis.

Profiles and their use are discussed in **[5]** but, in essence, may be used to save, amongst other things, the basic presentation criteria and the filter selections related to a specific User or a specific flight.

The filter settings stored in a profile may be over-ridden in order to investigate “what-if” scenarios. These settings may then be stored either as part of the existing profile, as a new profile, or discarded.

If the user does not have a profile, or does not wish to use an existing profile, default settings will be provided. The user may then over-ride these settings to achieve the desired filtering.

The filtering available to a user when requesting a *i*PIB is discussed further in chapter 3.

2.7 Definition Of Presentation And Composition Of Output

The definition of the *i*PIB output and its presentation may be selected at the following levels:

- The sorting of *i*PIB sections,
- The sorting of messages within their relevant sections.

If no specific sorting criteria are specified, the system will operate according to default settings. Those default settings are mentioned in the following sections.

2.7.1 Sorting Of *i*PIB Sections

The system output, as a result of the User selection, is performed at a logical level which is basically presented in the sequence of flight covered in three *i*PIB sections - see 4.2. This may be changed, if required, and stored together with the profile.

- Aerodrome section (Departure, Destination, Alternatives),
- Route section (in sequence of flight),
- Additional Information (attachment, charts etc.).

2.7.2 Sorting Messages Within *i*PIB Sections

The User selection is performed at message entity level under each *i*PIB section (e.g. the AD section). For example, NOTAM first, followed by METAR, SNOWTAM, etc.

- Select required sequence of messages, e.g. NOTAM, METAR, SNOWTAM,
- Select specific sorting. E.g. most recent message on top, or in ascending order of start validity date.

2.8 Presentation - Basic Features

In some cases, although selected in the query, information may not be presented in the *i*PIB because the information (message) does not fulfil the criteria or simply does not exist.

In these cases it is important to make the user aware of the non-existence of messages through a default text to ensure that the system treated his query properly. For example, "FIR LOVV - No information available".

Some States provide State-specific information. These will be added to the *i*PIB messages available for inclusion on an individual basis in predefined areas. This will most likely be at the beginning or end of the *i*PIB.

It shall be noted, however, that such information, if present in large quantities, may distract the User from the essential information.

Specific symbols, colours or bold display may be applied to focus the Users attention. For example: "+" in front of a NOTAM may indicate that this NOTAM was

published in the last x hours (or days). A similar principle could be applied to colours.

The pages of the ***i***PIB shall carry clear Header and Footer information providing the following as a minimum:

- The bulletin identification (Flight Number and ***i***PIB Identification Number),
- The Number Of Pages,
- The date/time of report production.

All User selected criteria and filters used are to be shown in the ***i***PIB header.

The bulletin identification serves as reference in case of enquiries or investigations. It also enables the production of an update ***i***PIB based on the “Master ***i***PIB”.

3. REPORT REQUEST

3.1 Briefing Pre-requisites

A Briefing process is initiated by a User either with or without an existing flight plan. In the case of the existence of a flight plan, the system automatically fills all relevant selection fields based on that particular flight plan.

When no flight plan is available, the User must provide all selection information manually.

It shall be noted that various scenarios exist that require the initiation of a Briefing process. In most cases, flight plan and Briefing are processed in the same time frame. There are, however, instances that require Briefing without an existing flight plan, for example, as in the case of a preliminary Briefing the day (or days) before flight operation. It will then be possible to use the ***i***PIB as the basis for the creation of the flight plan.

3.2 General Option Selection

This section details the type of information that may be selected for inclusion in an ***i***PIB.

The way in which the selections may be made is shown in Figure 2. Each step in the selection process, along with the options available, is described below. The decision boxes are considered to be self-explanatory and are not included in the following description.

The users profile will be used as the basis of the selection. It will be possible, however, to make changes to the selection on an ad-hoc basis. The user may then decide to save the changes for future use, either as a new profile or by overwriting an existing profile, or to return to the profile originally selected.

If no user profile is selected the indicated defaults will be offered.

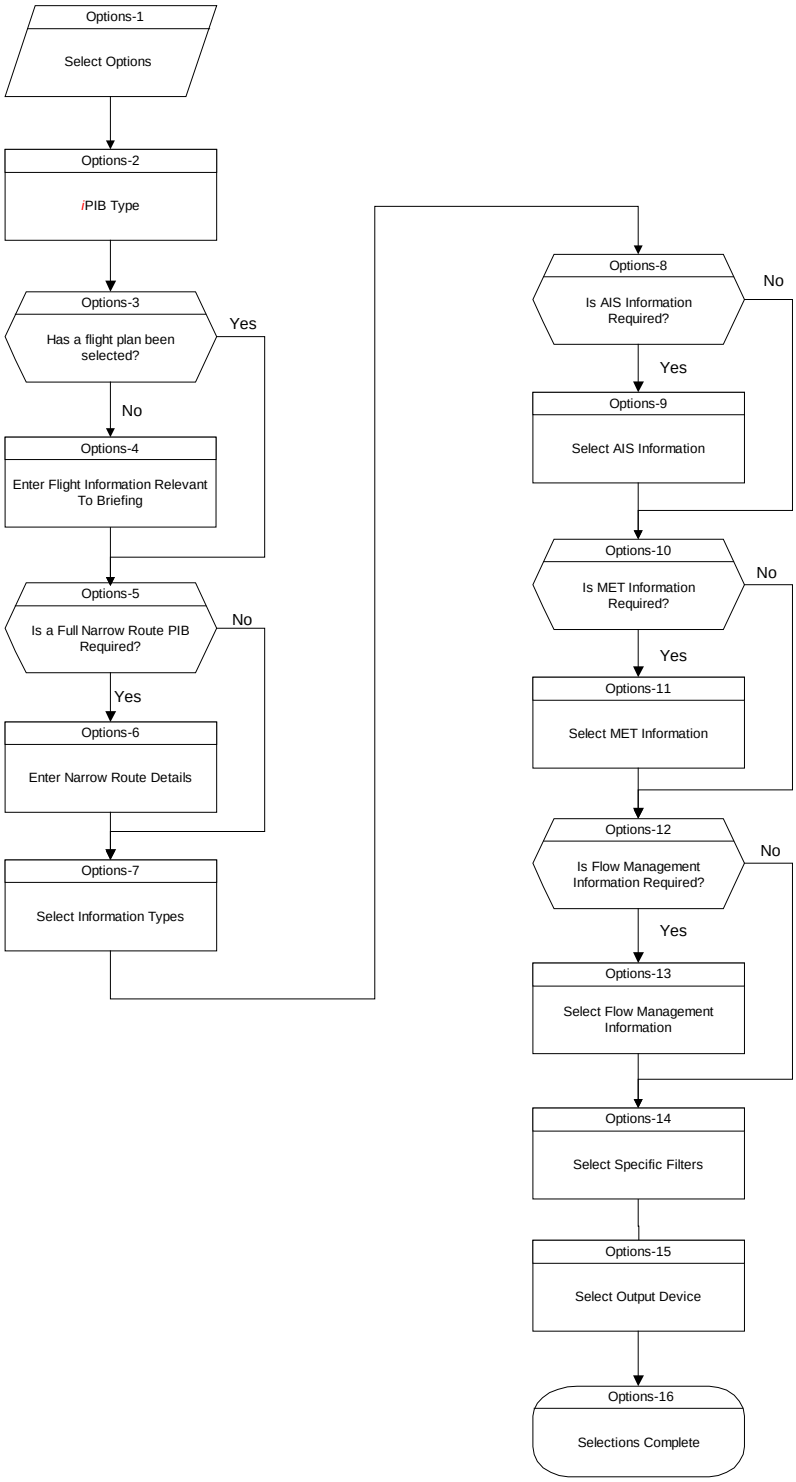


Figure 2: Selection of options

3.2.1 Select *i*PIB Type

The user will be able to select one or more of the following options:

- Aerodrome *i*PIB,
- FIR (Area) *i*PIB,
- Area Type Route *i*PIB (default),
- Narrow Path Route *i*PIB,
- Update *i*PIB.

If Update ***i***PIB is selected the user will then have to specify the Master ***i***PIB reference for which the update shall be generated. Update ***i***PIB will only be possible if:

- the same briefing system has been used for production of the Master ***i***PIB,
- the Master ***i***PIB has not been retrieved earlier than a certain number of hours (e.g. 12 hours),
- if the basic user filter setting is unchanged (e.g. change of traffic will not be permitted for an update ***i***PIB).

3.2.2 Flight Information Relevant To Briefing

In case a query performed is not based on a concrete flight plan (FPL or template), the following minimum information must be supplied by the user to retrieve a ***i***PIB:

FPL field	***i***PIB Type			
	AD	Area	Route	Narrow Path Route
Aircraft identification			x	x
Flight rules	x	x	x	x
Departure aerodrome and time of departure		x	x	x
Cruising speed and level			x	x
Route	x	x	x	x
Destination aerodrome, estimated total elapsed time and alternate aerodrome(s)	x		x	x

In all other cases the minimum data set will be extracted from a flightplan itself.

More details are available in paragraph 6.3.4 of **[5]**.

3.2.3 Flightplan Details For A Narrow Path PIB

If a Narrow Path Route ***i***PIB has been selected, at least field 15 of the flight plan must be provided by the user or be made available through the briefing system.

Note: If a system flight plan is used, the User must be made aware of the need for a consistent route in the flight plan.

If an Update Narrow Path Route *i*PIB has been selected, the details used for the original report will be used.

3.2.4 Select Message Types

The user will be able to select one or more of the following types of information to be included in the report:

- AIS Information,
- MET Information,
- Flow Management Information.

As a default, all of the above will be selected for inclusion in the *i*PIB.

3.2.4.1 Select AIS Information

If the user has selected Dynamic AIS Information to be included in the *i*PIB, they will be able to select one or more of the following message types:

- NOTAM (default),
- SNOWTAM,
- ASHTAM,
- BIRDTAM.

3.2.4.2 Select MET Information

If the user has selected MET Information to be included in the *i*PIB, they will be able to select one or more of the following message types:

- METAR (default),
- SPECI,
- TAF C,
- TAF T,
- SIGMET (default),
- AIRMET,
- GAMET.

If any of the above messages are not available from the information source being used, the option will be disabled. If any additional messages types are available (State-specific messages, for example) they will be appended to the list of options.

If the user has selected MET Information to be included in the *i*PIB, they will be able to select one or more of the following:

a. Charts
   - High-level Wind and Temperature Charts,
   - SIGWX Charts,
   - Low Level Forecast Charts.

b. Satellite/Radar Images
   - Rainfall Radar Image,

- Visible Satellite Image,
- Infrared Satellite Image.

3.2.4.3 Select Flow Management Information

If the user has selected Flow Management Information to be included in the ***i***PIB, they will be able to select one or more of the following message types:

- CRAM,
- AIM,
- ANM.

3.2.5 Select Specific Filters

The user will be able to specify:

- Validity period,
- Scope (NOTAM only),
- Purpose (NOTAM only),
- NOTAM Code for inclusion or exclusion (NOTAM only).

Definition of validity period of the ***i***PIB is very important for a tailored Briefing output. By specifying flying times, together with lead and lag times (the required time window for the ***i***PIB), a concise and focussed output can be provided by the system.

If a flight plan is used for the Briefing, default calculations will be performed by a system, e.g. 90 minutes before estimated off-block time until 60 minutes after estimated time of arrival. These default values may be modified by the user, as required.

3.2.6 Select Output Device

The user will be able to select one of the following options:

- Screen,
- Printer (including remote printer),
- Fax,
- E-mail,
- Other (e.g. file transfer).

3.2.7 Select Output Format

The user will be able to select one of the following options:

- Textual Format (default),
- Short text feature for NOTAM,
- Graphical Format.

PIBs generated with the "graphical format" selected will contain all of the information provided in ***i***PIBs generated with the textual format selected. In addition, the former will contain graphical illustrations of the geographical location of the information. Hyperlinks will be provided to the actual information (for example MET messages)

so that viewing electronic versions of the report (possibly on a laptop in the cockpit) will be made easier.

3.3 Requesting An Aerodrome *i*PIB

The process of selecting general options (as detailed in paragraph 3.1) will be available when requesting an Aerodrome *i*PIB.

In addition, if no flight plan is selected, the user will be able to specify the aerodromes for which the *i*PIB is required.

If a flight plan is selected, the *i*PIB will be based on the Departure, Destination and Alternative aerodromes.

3.4 Requesting An FIR (Area) *i*PIB

The process of selecting general options (as detailed in paragraph 3.1) will be available when requesting a FIR (Area) *i*PIB.

In addition, if no flight plan is selected, the user will be able to specify the FIRs for which the *i*PIB is required. Aerodromes existing within the selected FIR(s) may also be selected.

If a flight plan is selected, the *i*PIB will be based on the FIR from which the flight originates, and the FIR in which it terminates.

3.5 Requesting An Area Type Route *i*PIB

The process of selecting general options (as detailed in paragraph 3.1) will be available when requesting an Area Type Route *i*PIB.

In addition, if no flight plan is selected, the user will be able to specify the Departure, Destination and Alternative aerodromes and the route for which the *i*PIB is required in the sequence of FIRs crossed.

If a flight plan is selected, the *i*PIB will be based on the Departure, Destination and Alternative aerodromes, and the route specified in the flight plan.

3.6 Requesting A Narrow Path Route *i*PIB

The process of selecting general options (as detailed in paragraph 3.1) will be available when requesting a Narrow Path Route *i*PIB.

In addition, if no flight plan is selected, the user will be able to specify the Departure, Destination and Alternative aerodromes and the route for which the *i*PIB is required.

If a flight plan is selected, the *i*PIB will be based on the Departure, Destination and Alternative aerodromes, the route specified in the flight plan and the route width specified either in the user profile or during the general option selection process detailed in paragraph 3.2.

Default route widths (e.g. 10 nautical miles left and right) will be proposed by the system which may be modified by the User as required.

4. OUTPUT OF *i*PIB

4.1 Output Types

An *i*PIB may be output to the user in 3 ways:

- Displayed on the screen of the briefing system/interface,
- Displayed on a screen being used by a different application, or
- Printed to paper.

4.1.1 Using The Screen Of The Briefing System

This method of output will provide the user with the maximum functionality and interaction. The user will be able to:

- Perform searches,
- Request the sorting of data,
- View entire (original) messages by selecting hyperlinks,
- Refine queries,
- Modify and store setting in the user profile,
- Obtain an update briefing,
- Obtain a history of interactions,
- Edit the briefing on line and transfer to other media.

4.1.2 Using A Screen Of An External Application

The briefing may be viewed on the screen of an external application after download or export. It will provide the user with a limited amount of functionality and interaction. The user will be able to:

- Perform searches,
- Edit the briefing (off-line),
- Restructure the report (off-line),
- Perform further electronic processing and transfer.

4.1.3 Paper Output

The paper format of a briefing may be taken into the cockpit and referred to in flight.

4.2 Structure And Layout Of An *i*PIB

Figure 3 shows the general layout of a Narrow Route *i*PIB.

The report is structured into the following PIB sections:

- The PIB header.
- The Aerodrome section:
  - Departure
  - Destination
  - Alternate

- The Route (FIR) section:
  - FIR of departure
  - FIRs in sequence of flight
  - FIR of destination
- Additional Information.

PIB sections cluster the message sub-sections which themselves contain the message groups. Messages are integrated depending on the actual PIB type e.g. a METAR does not appear in the FIR section.

Message subsections and the relevant message groups are:

MET

- SIGMET
- METAR
- SPECI
- TAF
- GAMET
- IFR AIRMET
- Turbulence AIRMET
- Icing AIRMET

AIS

- SNOWTAM
- ASHTAM
- NOTAM
- BIRDTAM

FLOW Info

- CRAM
- AIM
- ANM

Other

- Specific message text (domestic procedures)

Additional information:

- Charts
- Graphs

A user may prefer to sort his subsections differently. Above default structure shall be customisable through the user profile.

Flight Number / Addressee

	AERONAUTICAL INFORMATION SERVICES **<Country and Organisation>**
i Pre-Flight Information Bulletin: **Narrow-Route**	VALIDITY (UTC): **<DD MON YYYY hh:mi>-<DD MON YYYY hh:mi>**
Profile: **<profile name>**	
Service Type: <Full/Update>	Last Generation: **<DD MON YYYY hh:mi>**
NOTAM not older than: <days>	PERM NOTAM not older than: **<days>**
Date: <**DD MON YYYY>** Time: <**hh:mm>** UTC	Flight Rules: **IFR/VFR**
Contents: <plain language>	

	Height Limits (lower/upper):	
First: 000/120	Other: 120/999	Last: 000/120

ADEP: <**AD**>	ADES: <**AD**>	Alternates: <**AD**> - <**AD**> - <**AD**> -, etc.
FIR: <**FIR**> - <**FIR**> - <**FIR**> - <**FIR**> - <**FIR**> -, etc.		
FPL Route: <**RouteElement**> - <**RouteElement**> - <**RouteElement**> -, etc.		
Width of Route: <**Width**>		

Legend:

+ NOTAM not older than 3 days
* Different from original
- Beginning of the message
Item X) short version of NOTAM text; for full text please contact AIS unit

AERODROMES

AERODROME (DEPARTURE)

<AD> - <Name of AD>

MET

AIS

FLOW Info

Other

AERODROME (DESTINATION)

<AD > - <Name of AD>

MET

AIS

FLOW Info

Other

AERODROME (ALTERNATES)

<AD> - <Name of AD>

MET

AIS

FLOW Info

Other

EN-ROUTE

<FIR1> - <Name of FIR>
MET

AIS

FLOW Info

Other

<FIR2>
Etc.

Additional Information

Met Charts

Etc.

- END OF BULLETIN -

Figure 3: *i*PIB Layout

4.2.1 Report Header

Figure 3 shows the elements included in the report header. It is expected that the graphic in the top-left corner of the report header (in this case representing the AIS AHEAD project) would be replaced by a graphic logo or name representing the State or organisation supplying the *i*PIB.

Table 1 defines the items in the report header. This table also indicates where the information is only relevant to some report types.

Element	Description
Flight Number / Addressee	This field is used to identify who is being addressed by the *i*PIB. This is necessary especially for big AIS offices where many *i*PIBs are created and made available to the clients on paper. The addressee can also be combined with the flight number.
Country and Organisation	The content of this field contains the name of the authority supplying the *i*PIB.
Content	This field includes the purpose and scope in plain language.
Flight Rules	• IFR for instrumental flight rules, • VFR for visual flight rules, • IFR/VFR for both.
Profile	Name of profile used.
Service Type	• Full – *i*PIB with all NOTAMs found according to the criteria, • Update – Update *i*PIB only with NOTAMs that are new, have been replaced or cancelled since the last generation. Prerequisites: profile must be selected and a full *i*PIB for this profile must already have been created.
Last Generation	Timestamp of last *i*PIB generation according to the selected profile.
Date Time	Timestamp of the generated *i*PIB.
Validity	The time period for which effective NOTAMs have been selected.

Element	Description
Legend (Markers)	The "+" sign marks NOTAMs that are not older than X days (specified by system parameter) by default. The "*" sign marks NOTAMs that have been edited during NOTAM processing. This means that the original NOTAM that arrived via AFTN is different from the processed NOTAM. The "-" sign marks the beginning of NOTAMs not marked by any other sign. The "Item X" stands for the short abbreviation of NOTAM Text.
Height Limits	For an aerodrome or area report, a single pair of upper and lower height limits is provided. In an Area Type or Narrow Path Route *i*PIB, the upper and lower height limits of the first FIR, followed by the intermediate height limits, and finally the height limits for the last FIR are provided.
Aerodromes	For an aerodrome report, the list of aerodromes for which information has been requested is included. For an Area Type or Narrow Path Route *i*PIB, the departure aerodrome, destination aerodrome, and alternate aerodromes are listed.
FIR	For a FIR report, the list of FIRs for which information has been requested is included. For an Area Type or Narrow Path Route *i*PIB, a list of FIRS through which the flight passes, in the order in which they are encountered, is included.
FPL Route	The elements of all selected routes are included (as per field 15 of the filed flight plan. Alternatively, the full flight plan as used for the production of the *i*PIB could be provided following the header information.
Width of Route	The requested route width is included.

Table 1: Content of Report Header

4.2.2 Aerodrome Section

This section will be included in all types of report. In the case of an Area *i*PIB, this section is only included if aerodrome information has been explicitly requested.

The MET, AIS and Flow messages of the types specified for inclusion in the report for each of the specified aerodromes are included as indicated in Figure 3.

Table 2 defines the items in the header of each included aerodrome.

Element	Description
AD	The ICAO Location Indicator of the aerodrome.
Name of AD	The name of the aerodrome.

Table 2: Content of Aerodrome Header

4.2.3 FIR Section

This section will be included in Area and Route *i*PIBs.

The MET, AIS and Flow messages of the types specified for inclusion in the report for each of the specified aerodromes are included as indicated in Figure 3.

Table 3 defines the items found in the header of each included FIR.

Element	Description
FIR	The ICAO Location Indicator of the FIR.
Name of FIR	The name of the FIR.

Table 3: Content of FIR Header

4.2.4 Additional Information

This section will include any charts and images that have been selected for inclusion in the report.

Sub-sections may be created for each category of graphic.

4.3 Basic Sections For Other *i*PIB s

4.3.1 Aerodrome *i*PIB s

This will contain a section for each aerodrome specified. Each aerodrome section will be the same as the aerodrome sections of the Narrow Route *i*PIB as defined in 4.2.2.

4.3.2 Area *i*PIB s

This will contain:

- FIR section for the specified area. This will have the layout defined in 4.2.3.
- A section for each aerodrome within the specified area. Each section will have the layout defined in 4.2.2.

APPENDIX A STRAWMAN (AREA TYPE) ROUTE *i*PIB

Flight Number / Addressee

	AERONAUTICAL INFORMATION SERVICES **<Country and Organisation>**
*i*PIB Pre-Flight Information Bulletin: **Narrow-Route**	VALIDITY (UTC): **<DD MON YYYY hh:mi>-<DD MON YYYY hh:mi>**
Profile: **<profile name>**	
Service Type: <Full/Update>	Last Generation: **<DD MON YYYY hh:mi>**
NOTAM not older than: <days>	PERM NOTAM not older than: **<days>**
Date: **<DD MON YYYY>** Time: **<hh:mm>** UTC	Flight Rules: **IFR/VFR**
Contents: <plain language message types> <plain language qualifiers>	
Height Limits (lower/upper): First: 000/120 | Other: 120/999 | Last: 000/120	
ADEP: **<AD>** | ADES: **<AD>** | Alternates: **<AD>** - **<AD>** - **<AD>** -, etc.	
FIR: **<FIR>** - **<FIR>** - **<FIR>** - **<FIR>** - **<FIR>** -, etc.	
Route: **<RouteElement>** - **<RouteElement>** - **<RouteElement>** -, etc.	
Width of Route: **<Width>**	
Legend: + NOTAM not older than 3 days * Different from original - Beginning of the message Item X) short version of NOTAM text; for full text please contact AIS unit	

AERODROMES

AERODROME (DEPARTURE)

<AD> - <Name of AD>

MET

- <text of METAR>
  OBSERVED: <DD MON YYYY hh:mm> UTC

- <text of SPECI 1>
  OBSERVED: <DD MON YYYY hh:mm> UTC
- <text of SPECI 2>
  OBSERVED: <DD MON YYYY hh:mm> UTC

- <text of TAF FC>
  FORECAST: <DD MON YYYY hh:mm> UTC

- <text of TAF FT>
  FORECAST: <DD MON YYYY hh:mm> UTC

- <text of IFR AIRMET>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> UTC

- <text of Turbulence AIRMET>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> UTC

- <text of Icing AIRMET>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> UTC

AIS

- <text of SNOWTAM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

- <text of ASHTAM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- <text of NOTAM>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> EST ***<NOF Series no./year>***

- <text of NOTAM>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> EST ***<NOF Series no./year>***

- <text of BIRDTAM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- *Etc.*

FLOW Info

- <text of AIM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- *Etc.*

Other

- <text of other message or entity required>

AERODROME (ARRIVAL)

<AD> - <Name of AD>

MET

- <text of METAR>
  OBSERVED: <DD MON YYYY hh:mm> UTC

- <text of SPECI 1>
  OBSERVED: <DD MON YYYY hh:mm> UTC
- <text of SPECI 2>
  OBSERVED: <DD MON YYYY hh:mm> UTC

- <text of TAF FC>
  FORECAST: <DD MON YYYY hh:mm> UTC

- <text of TAF FT>
  FORECAST: <DD MON YYYY hh:mm> UTC

- <text of IFR AIRMET>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> UTC

- <text of Turbulence AIRMET>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> UTC

- <text of Icing AIRMET>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> UTC

AIS

- <text of SNOWTAM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- <text of ASHTAM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- <text of NOTAM>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> EST ***<NOF Series no./year>***

- <text of NOTAM>
  FROM: <DD MON YYYY hh:mm> TO: <DD MON YYYY hh:mm> EST ***<NOF Series no./year>***

- <text of BIRDTAM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- *Etc.*

FLOW Info

- <text of AIM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- *Etc.*

Other

- <text of other message or entity required>

AERODROME (ALTERNATES)

<AD> - <Name of AD>

MET

- <text of METAR>
  OBSERVED: <DD MON YYYY hh:mm> UTC

- <text of SPECI 1>
  OBSERVED: <DD MON YYYY hh:mm> UTC
- <text of SPECI 2>
  OBSERVED: <DD MON YYYY hh:mm> UTC

- <text of TAF FC>
  FORECAST: <DD MON YYYY hh:mm> UTC
- <text of TAF FT>
  FORECAST: <DD MON YYYY hh:mm> UTC

- <text of IFR AIRMET>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm UTC

- <text of Turbulence AIRMET>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm UTC

- <text of Icing AIRMET>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm UTC

AIS

- <text of SNOWTAM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- <text of ASHTAM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- <text of NOTAM>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm EST ***<NOF Series no./year>***

- <text of BIRDTAM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- *Etc.*

FLOW Info

- <text of AIM>
  REPORTED: *<DD MON YYYY hh:mm> UTC*

- *Etc.*

Other

- <text of other message or entity required>

EN-ROUTE

<FIR1> - <Name of FIR>

MET

- <text of SIGMET>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm UTC
- <text of TAF FC>
  FORECAST: <DD MON YYYY hh:mm> UTC
- <text of TAF FT>
  FORECAST: <DD MON YYYY hh:mm> UTC

- <text of GAMET>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm UTC

AIS

- <text of ASHTAM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

- <text of NOTAM>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm EST ***<NOF Series no./year>***

- etc.

FLOW Info

- <text of CRAM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

- <text of AIM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

- <text of ANM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

Other

- <text of other message or entity required>

<FIR2> - <Name of FIR>

MET

- <text of SIGMET>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm UTC

- <text of TAF FC>
  FORECAST: <DD MON YYYY hh:mm> UTC
- <text of TAF FT>
  FORECAST: <DD MON YYYY hh:mm> UTC

- <text of GAMET>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm UTC

AIS

- <text of ASHTAM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

- <text of NOTAM>
  FROM: <DD MON YYYY hh:mm TO: DD MON YYYY hh:mm EST ***<NOF Series no./year>***

FLOW Info

- <text of CRAM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

- <text of AIM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

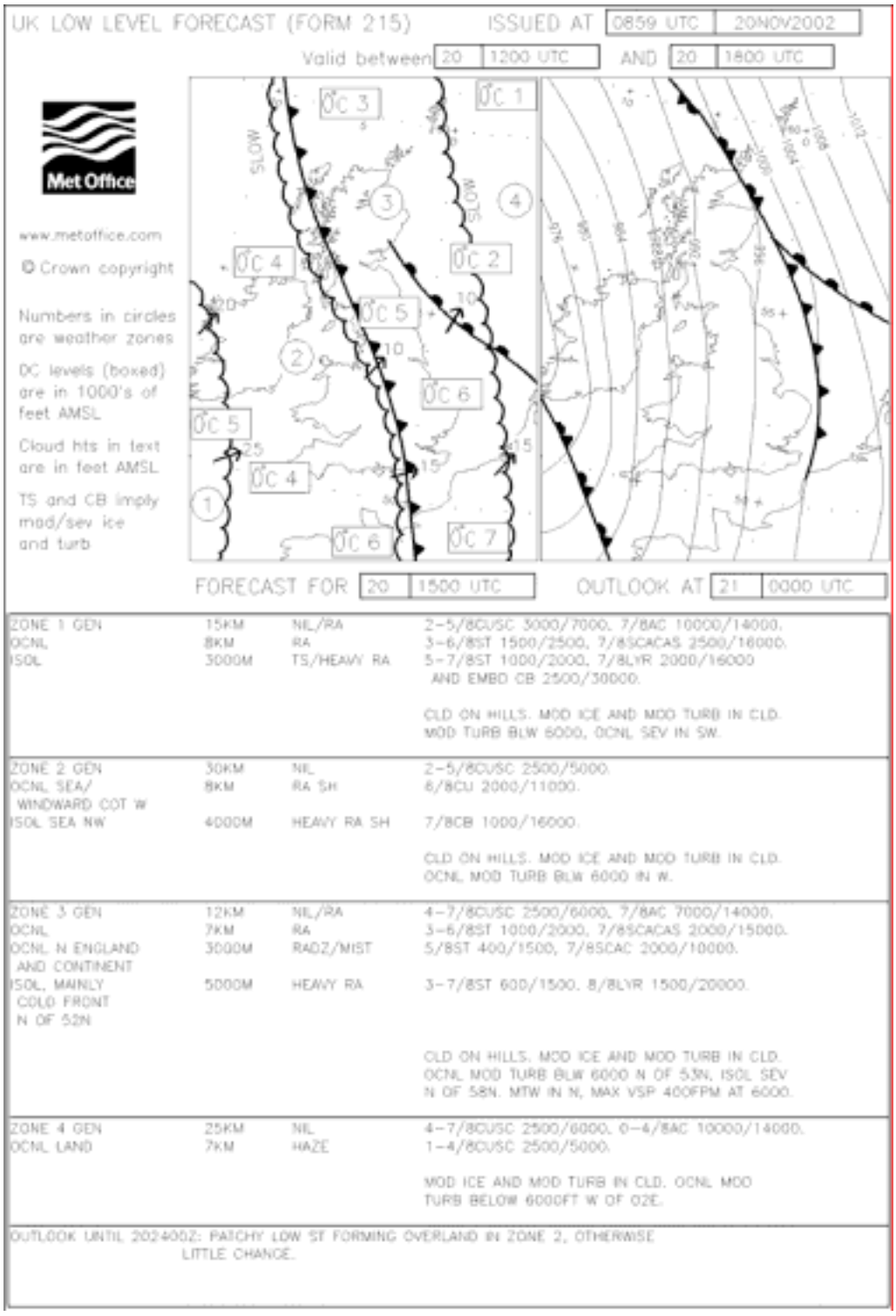
- <text of ANM>
  REPORTED*: <DD MON YYYY hh:mm> UTC*

Other

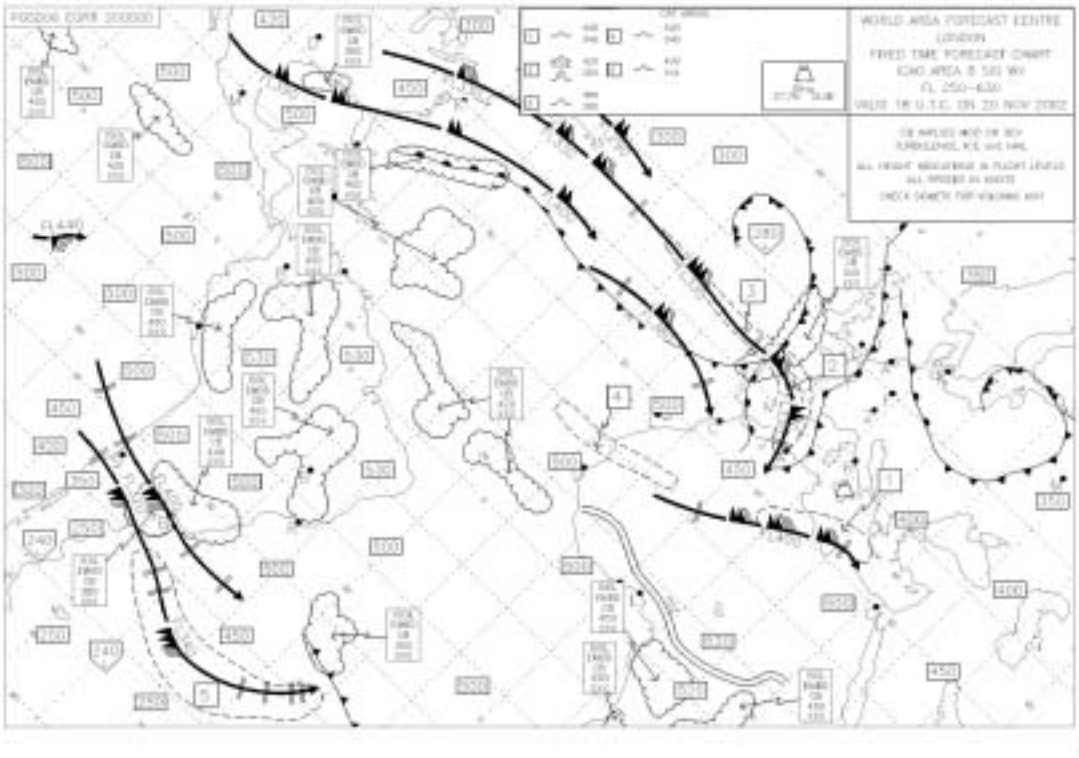
- <text of other message or entity required>

Additional Information

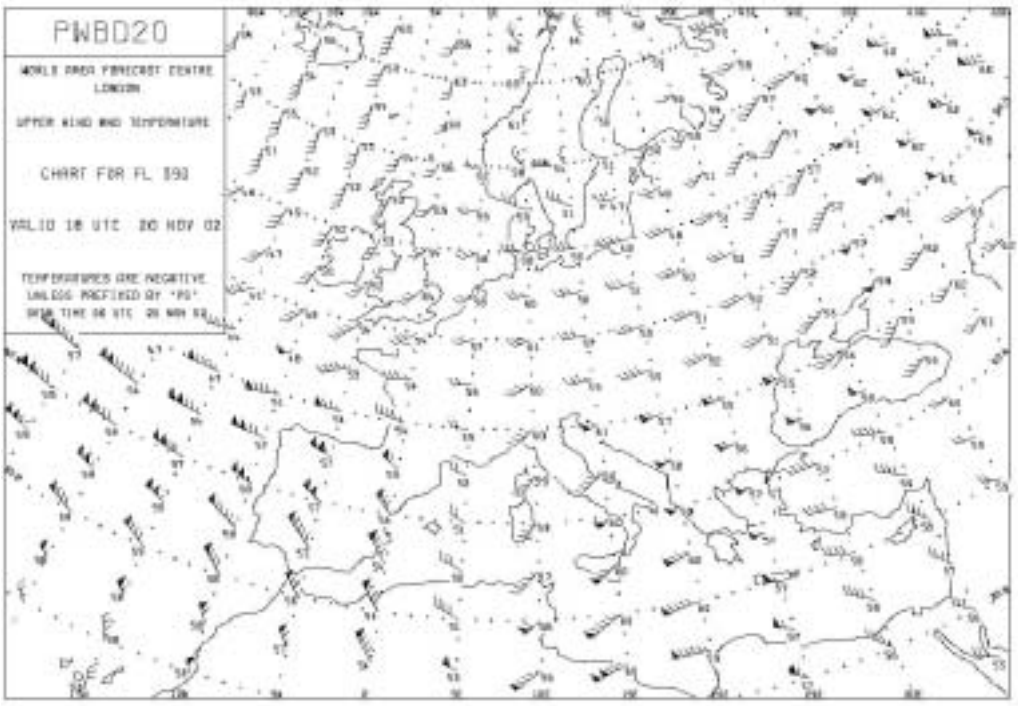
Low-level Forecast Chart



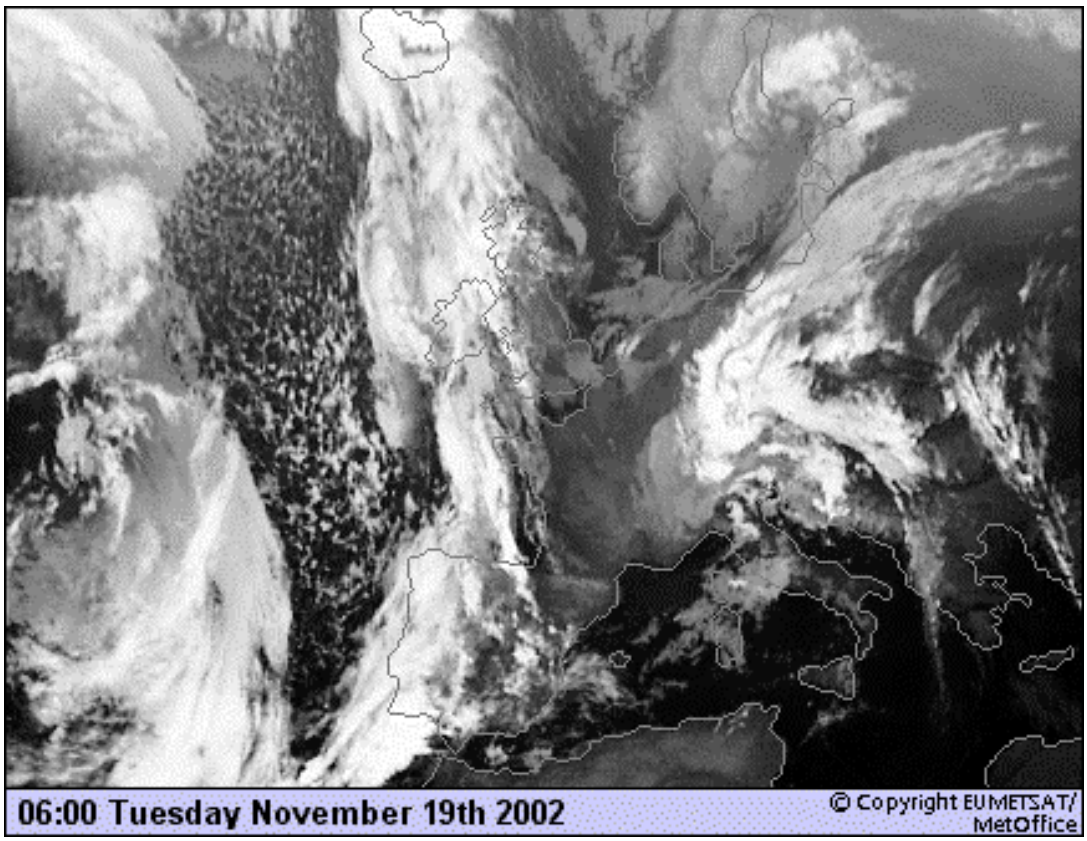
SIGWX Chart



High-level Wind and Temperature Chart

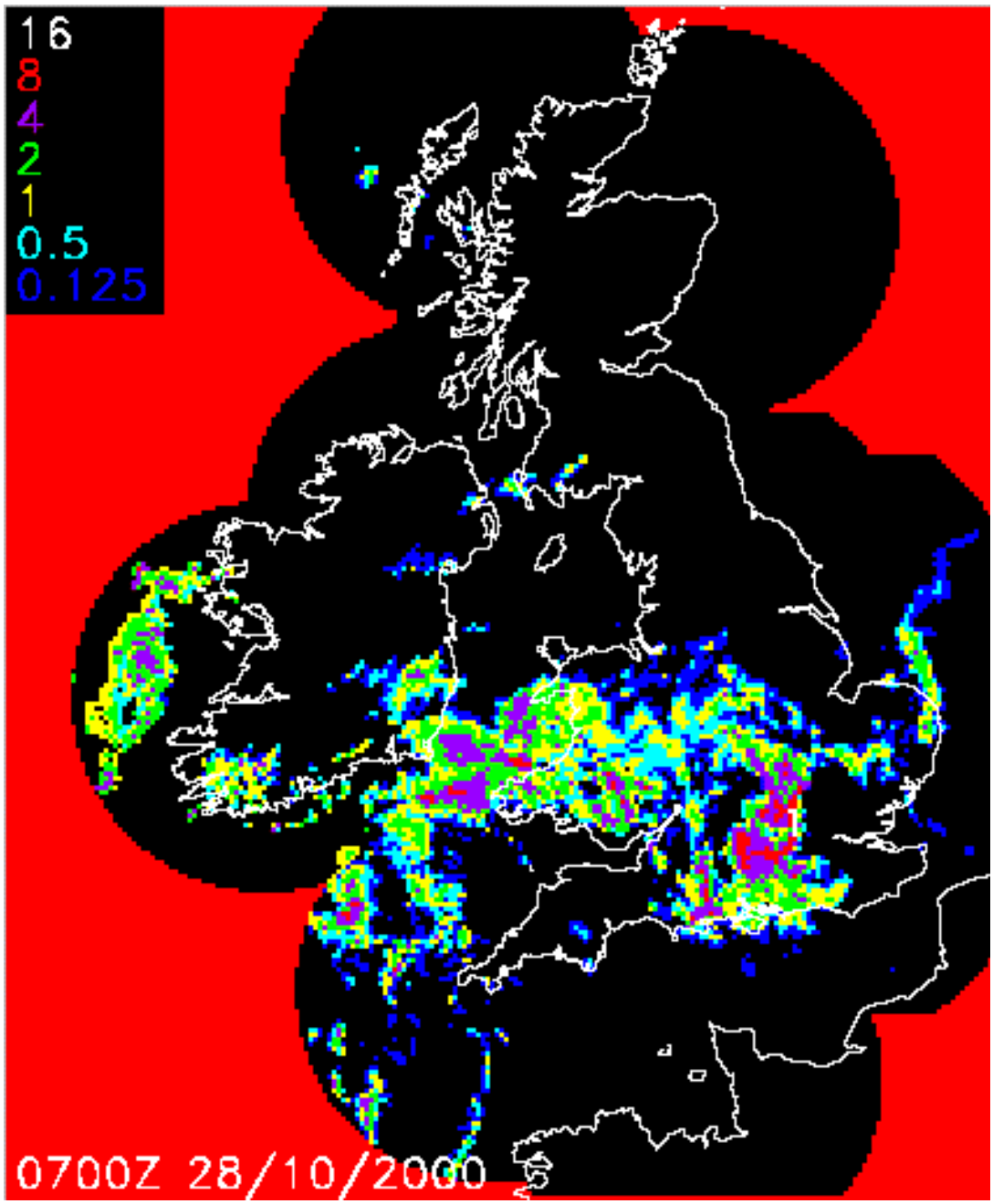


Infrared Satellite Image



Visible Satellite Image

Rainfall Radar Image



- END OF BULLETIN -

APPENDIX B ABBREVIATIONS

AD	Aerodrome
AFTN	Aeronautical Fixed Telecommunication Network
AHEAD	Automation & Harmonisation of European Aeronautical Data
AIM	ATFM Information Message
AIP	Aeronautical Information Publication
AIRMET	Airman's Meteorological Report
AIS	Aeronautical Information Service
ANM	ATFM Notification Message
ARO	Air Traffic Services Reporting Office
ASHTAM	Special Series NOTAM relating to volcanic activity
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management
BIRDTAM	Special Series NOTAM relating to bird activity
CFMU	Central Flow Management Unit
CRAM	Conditional Route Availability Message
EAD	European AIS Database
EUROCONTROL	European Organisation for the Safety of Air Navigation
FIR	Flight Information Region
FPL	Flight Plan
GAMET	General Area Meteorological Report
ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
INO	International NOTAM Operation
*i*PIB	Integrated Pre-flight Information Bulletin
MET	Meteorological
METAR	Meteorological Aeronautical Report
NOTAM	Notice To Airmen
PIB	Pre-flight Information Bulletin
SARPS	Standards And Recommended Practices
SIGMET	Significant Weather Message
SIGWX	Significant Weather
SNOWTAM	Special Series NOTAM relating to snow and ice
SPECI	Special Meteorological Aeronautical Report
TAF	Terminal Aerodrome Forecast
URD	User Requirements Document
VFR	Visual Flight Rules

End of Document