# ICAO Doc.4444

# Chapter 11 AIR TRAFFIC SERVICES MESSAGES

# 11.1 CATEGORIES OF MESSAGES

#### 11.1.1 General

In accordance with the requirements in Chapter 10 — Coordination, the messages listed below are authorized for transmission via the aeronautical fixed service (including the aeronautical telecommunication network (ATN) and the aeronautical fixed telecommunication network (AFTN), direct-speech circuits or digital data interchange between ATS units, and direct teletypewriter and computer-computer circuits), or via the aeronautical mobile service, as applicable. They are classified in categories relating to their use by the air traffic services and providing an approximate indication of their importance.

Note.— The Priority Indicator in parentheses after each type of message is that specified in Annex 10 (Volume II, Chapter 4) for application when the message is transmitted on the AFTN. The priority for all ATS interfacility data communication (AIDC) messages using the ATN shall be "normal priority flight safety messages" as determined by the ATN Internet protocol priority categorization.

#### 11.1.2 Emergency messages

This category comprises:

a) distress messages and distress traffic, including messages relating to a distress phase (SS);

b) urgency messages, including messages relating to an alert phase or to an uncertainty phase (DD);

c) other messages concerning known or suspected emergencies which do not fall under a) or b) above, and radiocommunication failure messages (FF or higher as required).

Note.— When the messages in a) and b) and, if required, in c) above are filed with the public telecommunication service, the Priority Indicator SVH, assigned to telegrams relating to the safety of life, to be used in accordance with Article 25 of the International Telecommunication Convention, Malaga, 1973.

# 11.1.3 Movement and control messages

This category comprises:

- a) movement messages (FF), including:
  - filed flight plan messages
  - delay messages
  - modification messages
  - flight plan cancellation messages
  - departure messages
  - arrival messages;
- b) coordination messages (FF), including:
  - current flight plan messages
  - estimate messages
  - coordination messages
  - acceptance messages
  - logical acknowledgement messages;
- c) supplementary messages (FF), including:
  - request flight plan messages
  - request supplementary flight plan messages
  - supplementary flight plan messages;
- d) AIDC messages, including:
  - notification messages
  - coordination messages
  - transfer of control messages
  - general information messages
  - application management messages;
- e) control messages (FF), including:
  - clearance messages
  - flow control messages
  - position-report and air-report messages.

# 11.1.4 Flight information messages

# 11.1.4.1 This category comprises:

a) messages containing traffic information (FF);

b) messages containing meteorological information (FF or GG);

c) messages concerning the operation of aeronautical facilities (GG);

d) messages containing essential aerodrome information (GG);

e) messages concerning air traffic incident reports (FF).

11.1.4.2 When justified by the requirement for special handling, messages transmitted via the AFTN should be assigned the Priority Indicator DD in place of the normal Priority Indicator.

# 11.2 GENERAL PROVISIONS

Note.— The use in this chapter of expressions such as "originated", "transmitted", "addressed" or "received" does not necessarily imply that reference is made to a teletypewriter or digital data rchange for a computer-to-computer message. Except where specifically indicated, the messages described in this chapter may also be transmitted by voice, in which case the four terms above represent "initiated", "spoken by", "spoken to" and "listened to" respectively.

# 11.2.1 Origination and addressing of messages

# 11.2.1.1 GENERAL

Note.— Movement messages in this context comprise flight plan messages, departure messages, delay messages, arrival messages, cancellation messages and position-report messages and modification messages relevant thereto.

11.2.1.1.1 Messages for ATS purposes shall be originated by the appropriate ATS units or by aircraft as specified in Section 11.3, except that, through special local arrangements, ATS units may delegate the responsibility for originating movement messages to the pilot, the operator, or its designated representative.

11.2.1.1.2 Origination of movement, control and flight information messages for purposes other than air traffic services (e.g. operational control) shall, except as provided for in Annex 11, 2.16, be the responsibility of the pilot, the operator, or a designated representative.

11.2.1.1.3 Flight plan messages, amendment messages related thereto and flight plan cancellation messages shall, except as provided in 11.2.1.1.4, be addressed only to those ATS units which are specified in the provisions of 11.4.2. Such messages shall be made available to other ATS units concerned, or to specified positions within such units and to any other addressees of the messages, in accordance with local arrangements. 11.2.1.1.4 When so requested by the operator concerned, emergency and movement messages which are to be transmitted simultaneously to ATS units concerned, shall also be addressed to:

a) one addressee at the destination aerodrome or departure aerodrome; and

b) not more than two operational control units concerned;

such addressees to be specified by the operator or its designated representative.

11.2.1.1.5 When so requested by the operator concerned, movement messages transmitted progressively between ATS units concerned and relating to aircraft for which operational control service is provided by that operator shall, so far as practicable, be made available immediately to the operator or its designated representative in accordance with agreed local procedures.

# 11.2.1.2 USE OF THE AFTN

11.2.1.2.1 ATS messages to be transmitted via the AFTN shall contain:

a) information in respect of the priority with which they are to be transmitted and the addressees to whom they are to be delivered, and an indication of the date and time at which they are filed with the aeronautical fixed station concerned and of the Originator Indicator (see 11.2.1.2.5);

b) the ATS data, preceded if necessary by the supplementary address information described in 11.2.1.2.6, and prepared in accordance with Appendix 3. These data will be transmitted as the text of the AFTN message.

11.2.1.2.2 PRIORITY INDICATOR

This shall consist of the appropriate two-letter Priority Indicator for the message as shown in parentheses for the appropriate category of message in Section 11.1.

Note.— It is prescribed in Annex 10 (Volume II, Chapter 4) that the order of priority for the transmission of messages in the AFTN shall be as follows:

Transmission Priority	Priority Indicator
1	SS
2	DD FF
3	GG KK

#### 11.2.1.2.3 ADDRESS

11.2.1.2.3.1 This shall consist of a sequence of Addressee Indicators, one for each addressee to whom the message is to be delivered.

11.2.1.2.3.2 Each Addressee Indicator shall consist of an eight-letter sequence comprising, in the following order:

a) the ICAO four-letter location indicator assigned to the place of destination;

Note.— A list of ICAO location indicators is contained in Doc 7910 — Location Indicators.

- b) i) the ICAO three-letter designator identifying the aeronautical authority, service or aircraft operating agency addressed, or
  - ii) in cases where no designator has been assigned, one of the following:
    - "YXY" in the case where the addressee is a military service/organization,
    - "ZZZ" in the case where the addressee is an aircraft in flight,
    - "YYY" in all other cases;

Note.— A list of ICAO three-letter designators is contained in Doc 8585 — Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services.

- c) i) the letter X, or
  - ii) the one-letter designator identifying the department or division of the organization addressed.

11.2.1.2.3.3 The following three-letter designators shall be used when addressing ATS messages to ATS units:

Centre in charge of a flight information region or an upper flight information region (whether ACC or FIC):

- if the message is relevant to an IFR flight	ZQZ
— if the message is relevant to a VFR flight	ZFZ
Aerodrome control tower	ZTZ
Air traffic services reporting Office	ZPZ

Other three-letter designators for ATS units shall not be used for that purpose.

# 11.2.1.2.4 FILING TIME

The filing time shall consist of a six-digit date-time group indicating the date and the time of filing the message fortransmission with the aeronautical fixed station concerned.

# 11.2.1.2.5 ORIGINATOR INDICATOR

The Originator Indicator shall consist of an eight-letter sequence, similar to an Addressee Indicator (see 11.2.1.2.3.2), identifying the place of origin and the organization originating the message.

# 11.2.1.2.6 SUPPLEMENTARY INFORMATION ON THE ADDRESS AND THE ORIGIN

The following supplementary information is required when, in the Indicators of the Address and/or Origin, the three-letter designators "YXY", "ZZZ" or "YYY" (see 11.2.1.2.3.2 b) ii)) are used:

a) the name of the organization or the identity of the aircraft concerned is to appear at the beginning of the text;

b) the order of such insertions is to be the same as the order of the Addressee Indicators and/or the Originator Indicator;

c) where there are more than one such insertion, the last should be followed by the word "STOP";

d) where there are one or more insertions in respect of Addressee Indicators plus an insertion in respect of the Originator Indicator, the word "FROM" is to appear before that relating to the Originator Indicator.

Note.— Regarding ATS messages received in teletypewriter page-copy form:

- ATS messages received via the AFTN will have been placed within a communications "envelope" (preceding and following character sequences which are necessary to ensure correct transmission via the AFTN). Even the text of the AFTN message may be received with words or groups preceding and following the ATS text.
- 2) The ATS message may then be located by the simple rule that it is preceded by an open bracket, e.g. '(' and followed by a close bracket, e.g. ')'.
- 3) In some local cases, the teletypewriter machines in use will always print two specific symbols other than open bracket and close bracket on receipt of ATS messages constructed as prescribed in Appendix 3. Such local variants are easily learned and are of no consequence.
  - 11.2.2 Preparation and transmission of messages

11.2.2.1 Except as provided for in 11.2.2.2, ATS messages shall be prepared and transmitted with standard texts in a standard format and in accordance with standard data conventions, as and when prescribed in Appendix 3.

11.2.2.2 Where appropriate, the messages prescribed in Appendix 3 shall be supplemented with, and/or replaced by, AIDC messages prescribed in Appendix 6, on the basis of regional air navigation agreements.

11.2.2.2.1 Where AIDC messages are transmitted via the ATN, the messages shall utilize the packed encoding rules using abstract syntax notation one (ASN.1).

Note.— Provisions and information on the ASN.1 packed encoding rules and AIDC addressing rules are contained in Annex 10, Volume II, Part I, and the Manual of Technical Provisions for the Aeronautical Telecommunication Network (ATN) (Doc 9705). Guidance material concerning the operational use of AIDC messages is contained in the Manual of Air Traffic Services Data Link Applications (Doc 9694).

11.2.2.2.2 Where AIDC messages are transmitted via the AFTN, the format for the AIDC messages shall, as far as practicable, comply with the appropriate data conventions contained in Appendix 3. data fields to be transmitted via the AFTN that are inconsistent with, or additional to, the

data conventions contained in Appendix 3 shall be provided for on the basis of regional air navigation agreements.

11.2.2.3 When messages are exchanged orally between the relevant ATS units, an oral acknowledgement shall constitute evidence of receipt of the message. No confirmation in written form directly controllers shall therefore be required. The confirmation of coordination via the exchange of messages between automated systems shall be required unless special arrangements have been made between the units concerned.

Note.— See Annex 11, Chapter 6, regarding the requirement fo g of direct-speech communications.

#### 11.3 METHODS OF MESSAGE EXCHANGE

11.3.1 The lead-time requirements of air traffic control and flow control procedures shall determine the method of message exchange to be used for the exchange of ATS data.

11.3.1.1 The method of message exchange shall also be ndent upon the availability of adequate communications channels, the function to be performed, the types of data to be exchanged and the processing facilities at the centres concerned.

11.3.2 Basic flight plan data necessary for flow control procedures shall be furnished at least 60 minutes in advance of the flight. Basic flight plan data shall be provided by either a filed flight plan or a repetitive flight plan submitted by mail in the form of a repetitive flight plan listing form or other media suitable for electronic data-processing systems.

11.3.2.1 Flight plan data submitted in advance of flight shall be updated by time, level and route changes and other essential information as may be necessary.

11.3.3 Basic flight plan data necessary for air traffic control purposes shall be furnished to the first en-route control centre at least 30 minutes in advance of the flight, and to each successive centre at least 20 minutes before the aircraft enters that centre's area of jurisdiction, in order for it to prepare for the transfer of control.

11.3.4 Except as provided for in 11.3.5, the second en-route centre and each successive centre shall be provided with current data, including updated basic flight plan data, contained in a current flight plan message or in an estimate message supplementing already available updated basic flight plan data.

11.3.5 In areas where automated systems are utilized for the exchange of flight plan data and where these systems provide data for several ACCs, approach control units and/or aerodrome control towers, the appropriate messages shall not be addressed to each individual ATS unit, but only to these automated systems.

Note.— Further processing and distribution of the data to its associated ATS units is the internal task of the receiving system.

11.3.5.1 When AIDC messages are used, the sending unit shall determine the identity of the receiving ATS unit and all messages shall contain the identification of the next ATS unit. The receiving unit shall accept only messages intended for it.

# 11.3.6 Movement messages

Movement messages shall be addressed simultaneously to the first en-route control centre, to all other ATS units along the route of flight which are unable to obtain or process current flight plan data, and to air traffic flow management units concerned.

# 11.3.7 Coordination and transfer data

11.3.7.1 Progression of a flight between successive control sectors and/or control centres shall be effected by a coordination and transfer dialogue comprising the following stages:

a) notification of the flight in order to prepare for as necessary;

b) coordination of conditions of transfer of control by the transferring ATC unit;

c) coordination, if necessary, and acceptance of conditions of transfer of control by the accepting ATC unit; and

d) the transfer of control to the accepting unit.

11.3.7.2 Except as provided for in 11.3.7.3, the notification of the flight shall be by a current flight plan message containing all relevant ATS data or by an estimate message containing the proposed conditions of transfer. An estimate message shall be used only when updated basic flight plan data is already available at the receiving unit, i.e. a filed ight plan message and associated update message(s) have already been sent by the transferring unit.

11.3.7.3 Where AIDC messages are used, the notification of the flight shall be via a Notification message and/or Coordination Initial message containing all relevant ATS data.

11.3.7.4 Except as provided for in 11.3.7.5, the coordination dialogue shall be considered to be completed as soon as the proposed conditions contained in the current flight plan message, or in the estimate message or in one or more counterproposals, are accepted by an operational or logical procedure.

11.3.7.5 Where AIDC messages are used, any coordination dialogue shall be considered to be completed as soon as the Coordinate Initial message or a counterproposal (Coordinate Negotiate message) has been accepted.

11.3.7.6 Except as provided for in 11.3.7.7, unless an operational acknowledgement is received, a Logical Acknowledgement message shall be

automatically transmitted by the receiving computer in order to ensure the integrity of the coordination dialogue employing computer-to-computer links. This message shall be transmitted when the transfer data has been received and processed to the point that it is considered free of syntactic and semantic errors, i.e. the message contains valid information.

11.3.7.7 Where AIDC messages are used, an Application Accept message shall be automatically transmitted by the receiving computer in order to ensure the integrity of the coordination dialogue employing computer-to-computer links. This message shall be transmitted when the coordination, general information or transfer data has been received, processed and found free of errors and, where relevant, is available for presentation at the control position.

11.3.7.8 The transfer of control shall be either explicit or, by agreement between the two units concerned, implicit, i.e. no communication need be exchanged between the transferring and accepting units.

11.3.7.9 When the transfer of control involves exchange of data, the proposal for transfer shall include information derived from an ATS surveillance system, if appropriate. Since the proposal relates to previously accepted coordination data, further coordination shall normally not be required. However, acceptance of the proposed transfer conditions shall be required.

11.3.7.10 In situations where the proposed transfer conditions are no longer acceptable to the accepting unit, further coordination shall be initiated by the accepting unit by proposing alternative acceptable conditions.

11.3.7.11 Transfer of Communication messages may be used as an alternative to Transfer of Control messages. If Transfer of Communication messages are used to instruct a flight to establish communications with the receiving unit and the transfer of control will take place at the control area boundary, or such other time or place, specified in letters of agreement, Transfer of Control messages need not be used.

11.3.7.12 If, after receipt of information derived from an ATS surveillance system, the accepting centre is unable to identify the aircraft immediately, additional communication shall ensue to obtain new surveillance information, if appropriate.

11.3.7.13 When control of the transferred aircraft has been assumed, the accepting unit shall complete the transfer of control dialogue by communicating assumption of control to the transferring unit, unless special arrangements have been made between the units concerned.

# 11.3.8 Supplementary data

11.3.8.1 When basic flight plan data or supplementary plan data are required, request messages shall be addressed to the ATS unit which is most likely to have access to the required data.

Note.— See 11.4.2.4.2 and 11.4.2.4.3 for ATS units to which request messages shall be addressed.

11.3.8.2 If the requested information is available, a led or a supplementary flight plan message shall be transmitted.

# 11.4 MESSAGE TYPES AND THEIR APPLICATION

#### 11.4.1 Emergency messages

11.4.1.1 The various circumstances surrounding each known or suspected emergency situation preclude the specification of standard message types to provide for emergency communications, except as described in 11.4.1.2, 11.4.1.3 and 11.4.1.4.

#### 11.4.1.2 ALERTING (ALR) MESSAGES

11.4.1.2.1 When an ATS unit considers that an aircraft is in a state of emergency as defined in Annex 11, Chapter 5, an alerting message shall be transmitted to any ATS unit that may be concerned with the flight and to the associated rescue coordination centres, containing such of the information specified in Appendix 3, Section 1, as is available or can be obtained.

11.4.1.2.2 When so agreed between the ATS units concerned, a communication relating to an emergency phase and originated by a unit employing automatic data-processing equipment may take the form of a modification message (as in 11.4.2.2.4) or a coordination message (as in 11.4.2.3.4 or 11.4.2.4.4), supplemented by a verbal message giving the additional details prescribed for inclusion in an alerting message.

11.4.1.3 RADIOCOMMUNICATION FAILURE (RCF) MESSAGES

Note.— Provisions governing the action to be taken in the event of radiocommunication failure are set forth in Annex 2, 3.6.5.2, and in Chapter 15, Section 15.6 of this document.

11.4.1.3.1 When an ATS unit is aware that an aircraft in its area is experiencing radiocommunication failure, an RCF message shall be transmitted to all subsequent ATS units along the route of flight which have already received basic flight plan data (FPL or RPL) and to the aerodrome control tower at the destination aerodrome, if basic f ight plan data has been previously sent.

11.4.1.3.2 If the next ATS unit has not yet received basic flight plan data because it would receive a current flight plan message in the coordination procedure, then an RCF message and a current flight plan (CPL) message shall be transmitted to this ATS unit. In turn, this ATS unit shall transmit an RCF message and a CPL message to the next ATS unit.

# 11.4.1.4 FREE TEXT EMERGENCY MESSAGES (AIDC, APPENDIX 6 REFERS)

11.4.1.4.1 Whenever operational information needs to be transmitted concerning an aircraft known or believed to be in a state of emergency and the information cannot be formatted to comply with any other AIDC message type, a free text emergency message shall be sent.

11.4.1.4.2 The following are some examples of circumstances which could justify the use of a free text emergency message:

a) reports of emergency calls or emergency locator transmission reports;

b) messages concerning unlawful interference or bomb warnings;

c) messages concerning serious illness or disturbance passengers;

d) sudden alteration in flight profile due to technica or navigational failure; and

e) communication failure.

#### 11.4.2 Movement and control messages

#### 11.4.2.1 GENERAL

Messages concerning the intended or actual movement of aircraft shall be based on the latest information furnished to ATS units by the pilot, the operator or its designated representative, or derived from an ATS surveillance system.

#### 11.4.2.2 MOVEMENT MESSAGES

11.4.2.2.1 Movement messages comprise:

- filed flight plan messages (11.4.2.2.2)

- delay messages (11.4.2.2.3)
- modification messages (11.4.2.2.4)
- flight plan cancellation messages (11.4.2.2.5)
- departure messages (11.4.2.2.6)
- arrival messages (11.4.2.2.7).

# 11.4.2.2.2 FILED FLIGHT PLAN (FPL) MESSAGES

Note.— Instructions for the transmission of an FPL message a contained in Appendix 2.

11.4.2.2.2.1 Unless repetitive flight plan procedures being applied or current flight plan messages are being employed, filed flight plan messages shall be transmitted for all flights for which a flight plan has been submitted with the object of being provided with air traffic control service, flight information service or alerting service along part or the whole of the route of flight.

11.4.2.2.2.2 A filed flight plan message shall be orig and addressed as follows by the ATS unit serving the departure aerodrome or, when applicable, by the ATS unit receiving a flight plan from an aircraft in flight:

a) an FPL message shall be sent to the ACC or flight information centre serving the control area or FIR within which the departure aerodrome is situated;

b) unless basic flight plan data are already available as a result of arrangements made for repetitive flight plans, an FPL message shall be sent to all centres in charge of each FIR or upper FIR along the route which are unable to process current data. In addition, an FPL message shall be sent to the aerodrome control tower at the destination aerodrome. If so required, an FPL message shall also be sent to flow management centres responsible for ATS units along the route;

c) when a potential re-clearance in flight (RIF) request is indicated in the flight plan, the FPL message shall be sent to the additional centres concerned and to the aerodrome control tower of the revised destination aerodrome;

d) where it has been agreed to use CPL messages but where information is required for early planning of traffic flow, an FPL message shall be transmitted to the ACCs concerned;

e) for a flight along routes where flight information and alerting service only are provided, an FPL message shall be addressed to the centre in charge of each FIR or upper FIR along the route and to the aerodrome control tower at the destination aerodrome.

11.4.2.2.2.3 In the case of a flight through intermediate stops, where flight plans for each stage of the flight are filed at the first departure aerodrome, the following procedure shall be applied:

a) the air traffic services reporting office at the first departure aerodrome shall:

- 1) transmit an FPL message for the first stage of flight in accordance with 11.4.2.2.2;
- transmit a separate FPL message for each subsequent stage of flight, addressed to the air traffic services reporting office at the appropriate subsequent departure aerodrome;

b) the air traffic services reporting office at each subsequent departure aerodrome shall take action on receipt of the FPL message as if the flight plan has been filed locally.

11.4.2.2.2.4 When so required by agreement between the appropriate ATS authorities to assist in the identification of flights and thereby eliminate or reduce the need for interceptions in the event of deviations from assigned track, FPL messages for flights along specified routes or portions of routes in close proximity to FIR boundaries shall also be addressed to the centres in charge of each FIR or upper FIR adjacent to such routes or portions of routes.

11.4.2.2.2.5 FPL messages shall normally be transmitted immediately after the filing of the flight plan. However, if a flight plan is filed more than 24 hours in advance of the estimated off-block time of the flight to which it refers, that flight plan shall be held in abeyance until at most 24 hours before the flight begins so as to avoid the need for the insertion of a date group into that flight plan. In addition, if a flight lan is filed early and the provisions of 11.4.2.2.2.2 b) or e) or 11.4.2.2.2.3 apply, transmission of the FPL message may be withheld until one hour before the estimated off-block time, provided that this will permit each ATS unit concerned to receive the information at least 30 minutes before the time at which the aircraft is estimated to enter its area of responsibility.

# 11.4.2.2.3 DELAY (DLA) MESSAGES

11.4.2.2.3.1 A DLA message shall be transmitted when the departure of an aircraft, for which basic flight plan data (FPL or RPL) has been sent, is delayed by more than 30 minutes after the estimated off-block time contained in the basic flight plan data.

11.4.2.2.3.2 The DLA message shall be transmitted by the ATS unit serving the departure aerodrome to all recipients of basic flight plan data.

Note.— See 11.4.2.3.4 concerning notification of a delayed departure of an aircraft for which a CPL message hasbeen transmitted.

# 11.4.2.2.4 MODIFICATION (CHG) MESSAGES

A CHG message shall be transmitted when any change is to be made to basic flight plan data contained in previously transmitted FPL or RPL data. The CHG message shall be sent to those recipients of basic flight plan data which are affected by the change.

Note.— See 11.4.2.3.4 concerning notification of a change to coordination data contained in a previously transmitted current flight plan or estimate message.

# 11.4.2.2.5 FLIGHT PLAN CANCELLATION (CNL) MESSAGES

A flight plan cancellation (CNL) message shall be transmitted when a flight, for which basic flight plan data has been previously distributed, has been cancelled. The ATS unit serving the departure aerodrome shall transmit the CNL message to ATS units which have received basic flight plan data.

# 11.4.2.2.6 DEPARTURE (DEP) MESSAGES

11.4.2.2.6.1 Unless otherwise prescribed on the basis regional air navigation agreements, a DEP message shall be transmitted immediately after the departure of an aircraft for which basic flight plan data have been previously distributed.

11.4.2.2.6.2 The DEP message shall be transmitted by the ATS unit serving the departure aerodrome to all recipients of basic flight plan data.

Note.— See 11.4.2.3.4 concerning notification of the departure of an aircraft for which a CPL message has been transmitted.

# 11.4.2.2.7 ARRIVAL (ARR) MESSAGES

11.4.2.2.7.1 When an arrival report is received by the ATS unit serving the arrival aerodrome, this unit shall transmit an ARR message:

a) for a landing at the destination aerodrome:

- 1) to the ACC or flight information centre in whose area the arrival aerodrome is located, if required by that unit; and
- 2) to the ATS unit, at the departure aerodrome, which iginated the flight plan message, if that message included a request for an ARR message;
- b) for a landing at an alternate or other aerodrome:
  - 1) to the ACC or flight information centre in whose area the arrival aerodrome is located; and
  - 2) to the aerodrome control tower at the destination aerodrome; and
  - 3) to the air traffic services reporting office at the departure aerodrome; and
  - 4) to the ACC or flight information centre in charge of each FIR or upper FIR through which the aircraft would have passed according to the flight plan, had it not diverted.

11.4.2.2.7.2 When a controlled flight which has experienced failure of two-way communication has landed, the aerodrome control tower at the arrival aerodrome shall transmit an ARR message:

- a) for a landing at the destination aerodrome:
  - 1) to all ATS units concerned with the flight during the period of the communication failure; and
  - 2) to all other ATS units which may have been alerted;
- b) for a landing at an aerodrome other than the destination aerodrome:

to the ATS unit serving the destination aerodrome; this unit shall then transmit an ARR message to other ATS units concerned or alerted as in a) above.

# 11.4.2.3 COORDINATION MESSAGES (APPENDIX 3 REFERS)

Note.— The provisions governing coordination are contained in Chapter 10. Phraseology to be used in voice communication is contained in Chapter 12. See paragraph 11.4.2.5 below for the provisions governing AIDC messages, as prescribed in Appendix 6.

11.4.2.3.1 Coordination messages comprise:

- current flight plan messages (11.4.2.3.2)
- estimate messages (11.4.2.3.3)
- coordination messages (11.4.2.3.4)
- acceptance messages (11.4.2.3.5)
- logical acknowledgement messages (11.4.2.3.6).

11.4.2.3.2 CURRENT FLIGHT PLAN (CPL) MESSAGES

11.4.2.3.2.1 Unless basic flight plan data have already been distributed (FPL or RPL) which will be supplemented by coordination data in the

estimate message, a CPL message shall be transmitted by each ACC to the next ACC and from the last ACC to the aerodrome control tower at the destination aerodrome, for each controlled flight, and for each flight provided with air traffic advisory service along routes or portions of routes where it has been determined by the appropriate ATS authority that adequate point-to-point communications exist and that conditions are otherwise suitable for forwarding current flight plan information.

11.4.2.3.2.2 When an aircraft traverses a very limited portion of a control area where, by agreement between the appropriate ATS authorities concerned, coordination of air traffic through that portion of the control area has been delegated to and is effected directly by the two centres whose control areas are separated by that portion, CPLs shal be transmitted directly between such units.

11.4.2.3.2.3 A CPL message shall be transmitted in sufficient time to permit each ATS unit concerned to receive the information at least 20 minutes before the time at which the aircraft is estimated to pass the transfer of control point or boundary point at which it comes under the control of such unit, unless another period of time has been prescribed by the appropriate ATS authority. This procedure shall apply whether or not the ATS unit responsible for origination of the message has assumed control of, or established contact with, the aircraft by the time the transmission is to be effected.

11.4.2.3.2.4 When a CPL message is transmitted to a centre which is not using automatic data-processing equipment, the period of time specified in 11.4.2.3.2.3 may be insufficient, in which case an lead-time shall be agreed.

11.4.2.3.2.5 A CPL message shall include only informat concerning the flight from the point of entry into the next control area or advisory airspace to the destination aerodrome.

#### 11.4.2.3.3 ESTIMATE (EST) MESSAGES

11.4.2.3.3.1 When basic flight plan data for a flight has been provided, an EST message shall be transmitted by each ACC or flight information centre to the next ACC or flight information centre along the route of flight.

11.4.2.3.3.2 An EST message shall be transmitted in sufficient time to permit the ATS unit concerned to receive the information at least 20 minutes before the time at which the aircraft is estimated to the transfer of control point or boundary point at which it comes under the control of unit, unless another period of time has been prescribed by the appropriate ATS authority. This procedure shall apply whether or not the ACC or flight information centre responsible for origination of the message has assumed control of, or established contact with, the aircraft by the time the transmission is to be effected.

11.4.2.3.3.3 When an EST message is transmitted to a centre which is not using automatic data-processing equipment, the period of time specified in 11.4.2.3.3.2 may be insufficient, in which case an increased lead-time shall be agreed.

#### 11.4.2.3.4 COORDINATION (CDN) MESSAGES

11.4.2.3.4.1 A CDN message shall be transmitted during the coordination dialogue by an accepting unit to the transferring unit when the former wishes to propose a change to coordination data as contained in a previously received CPL or EST message.

11.4.2.3.4.2 If the transferring unit wishes to propose a change to the data contained in a CDN message received from the accepting unit, a CDN message shall be transmitted to the accepting unit.

11.4.2.3.4.3 The dialogue described above is repeated ntil the coordination dialogue is completed by the transmission of an acceptance (ACP) message by one of the two units concerned. Normally, however, when a change is proposed to a CDN message, direct-speech circuits shall be used to resolve this issue.

11.4.2.3.4.4 After the coordination dialogue has been if one of the two ATS units concerned wishes to propose or notify any change in basic flight plan data or conditions of transfer, a CDN message shall be transmitted to the other unit. This requires that the coordination dialogue be repeated.

11.4.2.3.4.5 A repeated coordination dialogue is completed by the transmission of an ACP message. Normally, in a repeated coordination dialogue, direct-speech circuits shall be used.

#### 11.4.2.3.5 ACCEPTANCE (A CP) MESSAGES

11.4.2.3.5.1 Unless special arrangements have been made between the air traffic control units concerned in accordance with Chapter 10, 10.1.2.2.1, an ACP message shall be transmitted by an accepting unit to the transferring unit to indicate that data in a CPL or an EST message is accepted.

11.4.2.3.5.2 Either the accepting unit or the transferring unit shall transmit an ACP message to indicate that data received in a CDN message is accepted and that the coordination dialogue is completed.

#### 11.4.2.3.6 LOGICAL ACKNOWLEDGEMENT MESSAGES (LAM)

11.4.2.3.6.1 An LAM shall be used only between ATC computers.

11.4.2.3.6.2 An ATC computer shall transmit an LAM in to a CPL or EST or other appropriate message which is received and processed up to the point where the operational content will be by the appropriate controller.

11.4.2.3.6.3 The transferring centre shall set an appropriate reaction time parameter when the CPL or EST message is transmitted. If the LAM is not received within the parameter time, an operational warning shall be initiated and reversion to telephone and manual mode shall ensue.

#### 11.4.2.4 SUPPLEMENTARY MESSAGES

11.4.2.4.1 Supplementary messages comprise:

- request flight plan messages (11.4.2.4.2)

- request supplementary flight plan messages (11.4.2.4.3)

- supplementary flight plan messages (11.4.2.4.4).

# 11.4.2.4.2 REQUEST FLIGHT PLAN (RQP) MESSAGES

A request flight plan (RQP) message shall be transmitted when an ATS unit wishes to obtain flight plan data. This might occur upon receipt of a message concerning an aircraft for which no corresponding basic flight plan data had been previously received. The RQP message shall be transmitted to the transferring ATS unit which originated an EST message, or to the centre which originated an update message for which no corresponding basic flight plan data are available. If no message has been received at all, but an aircraft establishes radiotelephony (RTF) communications and requires air traffic services, the RQP message shall be transmitted to the previous ATS unit along the route of flight.

11.4.2.4.3 REQUEST SUPPLEMENTARY FLIGHT PLAN (RQS) MESSAGES

A request supplementary flight plan (RQS) message shal be transmitted when an ATS unit wishes to obtain supplementary flight plan data. The message shall be transmitted to the air traffic services reporting office at the departure aerodrome or in the case of a flight plan submitted during flight, to the ATS unit specified in the flight plan message.

11.4.2.4.4 SUPPLEMENTARY FLIGHT PLAN (SPL) MESSAGES

Note.— Instructions for the transmission of an SPL are contained in Appendix 2.

An SPL message shall be transmitted by the ATS reporting office at the departure aerodrome to ATS units requesting information additional to that already transmitted in a CPL or FPL message. When transmitted by the AFTN, the message shall be assigned the same priority indicator as that in the request message.

#### 11.4.2.5 AIDC MESSAGES (APPENDIX 6 REFERS)

11.4.2.5.1 AIDC messages comprise:

- Notify messages (11.4.2.5.3)
- Coordinate Initial messages (11.4.2.5.4)
- Coordinate Negotiate messages (11.4.2.5.5)
- Coordinate Accept messages (11.4.2.5.6)
- Coordinate Reject messages (11.4.2.5.7)
- Coordinate Cancel messages (11.4.2.5.8)
- Coordinate Update messages (11.4.2.5.9)
- Coordinate Standby messages (11.4.2.5.10)
- Transfer Initiate messages (11.4.2.5.11)
- Transfer Conditions Proposal messages (11.4.2.5.12)
- Transfer Conditions Accept messages (11.4.2.5.13)
- Transfer Communication Request messages (11.4.2.5.14)

- Transfer Communication messages (11.4.2.5.15)
- Transfer Communication Assume messages (11.4.2.5.16)
- Transfer Control messages (11.4.2.5.17)
- Transfer Control Assume messages (11.4.2.5.18)
- General Point messages (11.4.2.5.19)
- General Executive Data messages (11.4.2.5.20)
- Free Text Emergency messages (11.4.1.4)
- Free Text General messages (11.4.2.5.21)
- Application Accept messages (11.4.2.5.22)
- Application Reject messages (11.4.2.5.23).

11.4.2.5.2 The requirements with regard to the selection of AIDC messages and the associated procedures should be established on the basis of regional air navigation agreements in order to facilitate the harmonization of ATS in adjacent airspaces.

Note.— While the implementation of AIDC messages is intended o automate the ATC coordination process and minimize the requirement for voice coordination, it is not a complete replacement for voice, especially when a flight is in close proximity to the boundary with an adjoining unit.

# 11.4.2.5.3 NOTIFY MESSAGES

11.4.2.5.3.1 Notify messages shall be transmitted in advance to the ATS unit(s) for which coordination for the flight will be required. This could include ATS units that may be affected by the flight's trajectory even though the flight may not actually enter the airspace of these ATS units. The initial Notify message shall be sent at or prior to an agreed time or distance before the common boundary with the receiving unit. This time or distance shall normally occur prior to the transmission of the initial coordination message. If an aircraft is departing an aerodrome close to the common boundary, however, adjacent units may agree that no Notify message is required and that a Coordinate Initial message will suffice.

11.4.2.5.3.2 All Notify messages shall include boundary estimate data. Route data, when included, shall as a minimum contain information from a point prior to entry into the receiving unit to the destination aerodrome.

Note 1.— The amount of route information prior to the point of entry into the airspace of the receiving units depends on the environment of the flight. Typically, more route information would be required in a procedural environment.

Note 2.— To permit the synchronization of flight data information with adjacent units, the initial Notify message may contain all flight plan data associated with the flight.

11.4.2.5.3.3 Prior to the transmission of the Coordinate Initial message, amendments to the contents of a previously transmitted Notify message shall be communicated by transmission of another Notify message containing the amended data. Amendments to the level, route or destination aerodrome, may also necessitate a change to the ATS units to which the new Notify message is sent.

11.4.2.5.3.4 If the destination of an aircraft is amended prior to the transmission of the initial Notify message, the destination aerodrome in the Notify message shall contain the amended destination. the destination is amended after the transmission of the initial Notify message but prior to the transmission of the Coordinate Initial message, a new ify message shall be transmitted containing the original destination in destination aerodrome data, and the new destination as the amended destination. Subsequent AIDC messages to the same unit shall contain only the amended destination in the destination aerodrome data.

11.4.2.5.3.5 There is no operational response to a Notify message.

# 11.4.2.5.4 COORDINATE INITIAL MESSAGES

11.4.2.5.4.1 A Coordinate Initial message shall be transmitted by each area control centre to the next area control centre and from the last area control centre to the approach control unit serving the destination aerodrome (or aerodrome control if such a unit does not exist), for each controlled flight, and for each flight provided with air traffic advisory service, along routes or portions of routes where it has been determined by the appropriate ATS authority that conditions are suitable for forwarding coordination information. This may include ATS units that will be affected by the flight's trajectory even though the flight may not actually enter the airspace of these ATS units.

11.4.2.5.4.2 The Coordinate Initial message constitutes a proposal for coordination of a flight in accordance with the information contained in the coordination message and any previously received notif message(s) (if applicable). All Coordinate Initial messages shall inc boundary estimate data. Route data, when included, shall as a minimum contain information from a point prior to entry into the next unit the destination aerodrome.

Note 1.— The amount of route information prior to the point of entry into the airspace of the receiving ATS units depends on the environment of the flight. Typically, more route information would be required in a proceduralenvironment.

Note 2.— To permit the synchronization of flight data information with adjacent units if a Notify message has not been previously transmitted, the Coordinate Initial message may contain all flight plan data associated with the flight.

11.4.2.5.4.3 When an aircraft traverses a very limited portion of a control area where, by agreement between the appropriate ATS authorities, coordination of air traffic through that portion of the control area has been delegated to, and is effected directly between, the two units whose control areas are separated by that portion, Coordinate Initia messages shall be transmitted directly between such units, in addition to the ATS unit whose airspace is being traversed.

11.4.2.5.4.4 A Coordinate Initial message shall be transmitted in sufficient time to permit each ATS unit concerned to receive the information at least 20 minutes before the time at which the aircraft is estimated to pass the transfer of control point or boundary point with the receiving unit, unless another period of time has been prescribed by the appropriate ATS authority. This requirement shall apply whether or not the ATS unit responsible for origination of the Coordinate Initial message has assumed control of, or established contact with, the aircraft the time the coordination is to be effected.

11.4.2.5.4.5 When a Coordinate Initial message is transmitted to an ATS unit which is not using automatic data-processing equipment, the period of time specified in 11.4.2.5.4.4 may be insufficient, in which case an increased time parameter may be agreed upon.

11.4.2.5.4.6 The standard responses to a Coordinate Initial message are either a Coordinate Negotiate or a Coordinate Accept message. However, if a Coordinate Initial message is received proposing non-standard coordination conditions and the Coordinate Negotiate message is not an appropriate response, the Coordinate Reject message may be used to reject the Coordinate Initial message. If this occurs, local procedures shall prescribe the requirements to complete the coordination process.

# 11.4.2.5.5 COORDINATE NEGOTIATE MESSAGES

11.4.2.5.5.1 A Coordinate Negotiate message shall be transmitted by the receiving unit to the transferring unit during the initial coordination dialogue when the receiving unit wishes to propose an to the coordination conditions contained in the Coordinate Initial message.

11.4.2.5.5.2 Normally, when further negotiation is required in response to a Coordinate Negotiate message received during the initial coordination dialogue, direct-speech circuits shall be used to resolve the issue. However, where so agreed between the two units, a Coordinate Negotiate message shall be transmitted in response. This message exchange is repeated until the coordination dialogue is completed by the transmission of a Coordinate Accept message by one of the units.

11.4.2.5.5.3 A Coordinate Negotiate message shall be transmitted after successful completion of coordination by either the transferring or receiving unit to propose an amendment to the previously agreed coordination conditions. The Coordinate Negotiate message is sent if the amendments are not in accordance with letters of agreement between the transferring and receiving units, or if Coordinate Update messages are not in use.

11.4.2.5.5.4 A Coordinate Negotiate message would not be transmitted after the transition to the transfer state has commenced. However, where so agreed between ATS units, a Coordinate Negotiate message shall be transmitted by the receiving ATS unit to propose a modification to the flight details after the transfer control of the flight has been completed, but when the flight is still within proximity of the boundary between the two ATS units.

11.4.2.5.5.5 Normally, when a further change is required in response to a Coordinate Negotiate message received after the initial coordination has been successfully completed, direct-speech circuits shall be used to resolve the issue. However, where so agreed between ATS units, a Coordinate Negotiate message may be transmitted in response. This message exchange is repeated until the negotiation dialogue is completed by the transmission of either a Coordinate Accept or Coordinate Reject message by one of the units.

11.4.2.5.5.6 If a Coordinate Negotiate message is used propose an amendment to the destination aerodrome, the Coordinate Negotiate message shall contain the original destination in the aerodrome data, and the new destination as the amended destination. The operational response to this Coordinate Negotiate message shall also contain the original destination in the destination aerodrome data. Provided that the amendment is accepted, subsequent AIDC messages to the same unit shall refer only to the amended destination in the destination in the destination aerodrome data.

11.4.2.5.5.7 All Coordinate Negotiate messages shall contain boundary estimate data. When agreed between the two units, a Coordinate Negotiate message shall be sent to update other flight plan data such as CNS equipment and other information. Route data, when included due to a new route needing to be coordinated, shall as a minimum contain information from a point prior to entry into the next unit to the where the new route rejoins the previously coordinated route.

11.4.2.5.5.8 A Coordinate Negotiate message would normally be presented to the controller for manual processing.

#### 11.4.2.5.6 COORDINATE ACCEPT MESSAGES

11.4.2.5.6.1 A Coordinate Accept message shall be transmitted by the ATS unit receiving a Coordinate Initial, Coordinate Update or Coordinate Negotiate message to indicate that the proposed coordination conditions (or revision thereto) contained in the received message are accepted.

11.4.2.5.6.2 When a Coordinate Accept message is transmitted in response to a negotiation dialogue proposing an amendment to the destination aerodrome, the Coordinate Accept message may (optionally) contain the previous destination in the destination aerodrome data.

Note.— The use of the previous destination in the destination aerodrome data of the Coordinate Accept message may be required to ensure the proper association with the Coordinate Negotiate message proposing the amendment of the destination aerodrome.

11.4.2.5.6.3 The Coordinate Accept message terminates the coordination or negotiation dialogue. There is no operational response to a Coordinate Accept message.

#### 11.4.2.5.7 COORDINATE REJECT MESSAGES

11.4.2.5.7.1 When agreed between the two units, a Coordinate Reject message may be used to reject the coordination conditions proposed in a Coordinate Initial message if these coordination conditions are not in

accordance with letters of agreement. The Coordinate Reject message may only be used as a response to a Coordinate Initial message provided that local procedures exist to complete the coordination of the flight.

11.4.2.5.7.2 A Coordinate Reject message shall be transmitted by the ATS unit receiving a Coordinate Update or Coordinate Negotiate message to indicate that the proposed revision to coordination conditions contained in the received message are not acceptable and that no counterproposal will be made by the use of a Coordinate Negotiate message.

11.4.2.5.7.3 When a Coordinate Reject message is transmitted in response to a negotiation dialogue proposing an amendment to the aerodrome, the Coordinate Reject message may (optionally) contain the previous destination in the destination aerodrome data.

Note.— The use of the previous destination in the destination aerodrome data of the Coordinate Reject message may be required to ensure the proper association with the Coordinate Negotiate message proposing the amendment of the destination aerodrome.

11.4.2.5.7.4 A Coordinate Reject message terminates the coordination or negotiation dialogue. If the Coordinate Reject was a response to a negotiation dialogue after coordination had been completed, any previously agreed coordination conditions remain valid. There is no operational response to a Coordinate Reject message.

# 11.4.2.5.8 COORDINATE CANCEL MESSAGES

11.4.2.5.8.1 A Coordinate Cancel message shall be transmitted by the transferring unit to the receiving unit to abrogate the existing notification or coordination of a flight in the event that it is delayed indefinitely or the route or level is amended such that the flight is no longer expected to enter the airspace of the receiving unit directly from that of the transferring unit. If the amendments to the route or level of the flight are such that it will now affect another unit the transmission of an initial Notify message and/or Coordinate Initial message to that unit may be required.

11.4.2.5.8.2 The Coordinate Cancel message may include information regarding the reason for the cancellation. This information is defined in the Manual of Air Traffic Services Data Link Applications (Doc 9694).

11.4.2.5.8.3 There is no operational response to a Coordinate Cancel message.

#### 11.4.2.5.9 COORDINATE UPDATE MESSAGES

11.4.2.5.9.1 A Coordinate Update message shall be transmitted by the transferring unit to the receiving unit to propose an amendment to the previously agreed coordination conditions, provided that the proposed amendment is in accordance with letters of agreement. If the amendment is not in accordance with letters of agreement, a Coordinate Negotiate message shall be used instead. A Coordinate Update message shall be transmitted before coordination has been successfully completed, or after the transition to the transfer state has commenced.

11.4.2.5.9.2 If the flight is greater than an agreed time or distance prior to the boundary, amendments contained in a Coordinate Update message are automatically processed by the receiving unit, and a Coordinate Accept message is transmitted automatically in response. If the flight is within this agreed time or distance prior to the boundary, a Coordinate Negotiate message shall be used.

11.4.2.5.9.3 If a Coordinate Update message is used to propose an amendment to the destination aerodrome, the Coordinate Update message shall contain the original destination in the destination aerodrome data, and the new destination as the amended destination. The operational destination in the destination are update message shall also contain the original destination in the destination aerodrome data. Provided that the amendment is accepted, subsequent AIDC messages to the same unit shall contain only the amended destination in the destination in the destination in the destination in the destination aerodrome data.

11.4.2.5.9.4 All Coordinate Update messages shall contain boundary estimate data. When agreed between the two units, a Coordinate Update message shall be sent to update other flight plan data such as CNS equipment and other information. Route data, when included due to a new route needing to be coordinated, shall as a minimum contain information from a point prior to entry into the next unit to the point where the new route rejoins the previously coordinated route.

# 11.4.2.5.10 COORDINATE STANDBY MESSAGES

The Coordinate Standby message shall be sent by the unit receiving a Coordinate Initial or Coordinate Negotiate message to indicate to the sending unit that their proposal has been received and will be responded to in due course. It could be used for example, if the coordination message had to be referred for manual processing or if further coordination had to be conducted with another unit.

# 11.4.2.5.11 TRANSFER INITIATE MESSAGES

11.4.2.5.11.1 The transfer of control and communication messages that are to be used in a specific ATC environment shall be agreed between the units concerned and should be agreed on a regional basis. The messages used in a high density continental environment will be different from those required in a low density remote airspace environment.

11.4.2.5.11.2 The Transfer Initiate message shall be transmitted automatically by the transferring unit at or prior to an agreed time or distance before the common boundary. This message, initiating the transfer phase, shall be sent only after coordination has been successfully completed with the receiving unit.

11.4.2.5.11.3 The Transfer Initiate message contains a executive data and may optionally include any track data relating to the flight. This information updates the receiving unit with the current control environment of the flight, e.g. current cleared flight level and any speed restrictions, rate of climb or descent, heading or direct routing that may have been assigned.

11.4.2.5.11.4 The Transfer Initiate message alleviates the requirement for the controller in the transferring unit to verbally provide this information to the controller in the receiving unit while also allowing the automatic update of the flight data held by the receiving unit.

11.4.2.5.11.5 There is no operational response to a Transfer Initiate message.

#### 11.4.2.5.12 TRANSFER CONDITIONS PROPOSAL MESSAGES

11.4.2.5.12.1 The Transfer Conditions Proposal message shall be used to manually transfer a flight early, or under conditions that are not in accordance with those specified in the applicable letter of agreement (e.g. assigned speed greater than that agreed to in the letter of agreement, aircraft on heading). If a Transfer Initiate message had not previously been sent, the Transfer Conditions Proposal message initiates the transfer phase, and the transmission of the Transfer Initiate message is not required.

11.4.2.5.12.2 Subsequent amendments to the control environment of the flight are coordinated by the transmission of another Transfer Conditions Proposal message containing new executive data to the receiving unit.

11.4.2.5.12.3 The Transfer Conditions Proposal message proposes the transfer of communication and control of the flight to the controller in the accepting unit, together with updated control environment data. The message should be referred to the controller in the receiving unit for manual processing.

Note.— The terms of the transfer of control contained in the relevant letter of agreement may restrict control of the aircraft until the aircraft has reached the transfer of control point.

11.4.2.5.12.4 The operational response to a Transfer Conditions Proposal is a Transfer Conditions Accept message.

11.4.2.5.13 TRANSFER CONDITIONS ACCEPT MESSAGES

11.4.2.5.13.1 The Transfer Conditions Accept message is transmitted by the accepting unit to indicate that the controller has agreed to accept the transfer of communication and control of the flight in accordance with the conditions proposed in the Transfer Conditions Proposal message.

11.4.2.5.13.2 Where required, the Transfer Conditions message shall include the radiotelephony frequency(ies) or channel(s) as appropriate that the flight is to be transferred to.

11.4.2.5.13.3 There is no operational response to a Transfer Conditions Accept message.

#### 11.4.2.5.14 TRANSFER COMMUNICATION REQUEST MESSAGES

11.4.2.5.14.1 The Transfer Communication Request message shall be transmitted by the controller in the accepting unit to request the transfer of communication of a flight. The message shall be used when the controller in the accepting unit requires communication with the flight forthwith and indicates that the controller in the transferring unit should transmit appropriate contact instructions to the relevant aircraft. Where required, the Transfer Communication Request message shall include the radiotelephony frequency(ies) or channel(s) as appropriate that the flight is to be transferred to.

11.4.2.5.14.2 There is no operational response required for the Transfer Communication Request message, but receipt of this message would normally result in a Transfer Communication message being transmitted by the transferring unit when the flight is instructed to contact the receiving unit.

# 11.4.2.5.15 TRANSFER COMMUNICATION MESSAGES

The Transfer Communication message shall indicate that the controller in the transferring unit has instructed the flight to establish communication with the controller in the accepting unit. On receipt of this message the controller in the receiving unit shall ensure that communication is established shortly thereafter. The Transfer Communication message may optionally include any "release conditions" for the transfer of control. These release conditions may include climb, descent or turn restrictions, or a combination thereof. If a Transfer Initiate message has not been previously sent, the Transfer Communication message initiates the transfer phase.

# 11.4.2.5.16 TRANSFER COMMUNICATION ASSUME MESSAGES

The Transfer Communication Assume message shall be transmitted by the accepting unit to indicate that the flight has established communications with the appropriate controller and completes the transfer.

# 11.4.2.5.17 TRANSFER CONTROL MESSAGES

11.4.2.5.17.1 The Transfer Control message is a proposal for the transfer of control of a flight to the accepting unit. This message shall be transmitted either automatically by the transferring unit at, or prior to, an agreed time or distance before the common boundary, or manually by the controller in the transferring unit. This message, initiating the transfer phase, shall be transmitted only after coordination has been successfully completed with the receiving unit.

11.4.2.5.17.2 The operational response to a Transfer Control message is a Transfer Control Assume message.

# 11.4.2.5.18 TRANSFER CONTROL ASSUME MESSAGES

The Transfer Control Assume message shall indicate that the controller in the accepting unit has accepted control responsibility for the flight. The receipt of this message completes the transfer of control process.

# 11.4.2.5.19 GENERAL POINT MESSAGES

The General Point message shall be transmitted to draw the attention of the controller receiving the message to a flight to support voice coordination. The General Point message shall include details of a flight that may have been previously unknown to the receiving unit, to permit it to be displayed if required. This may include, for example, a flight that had planned to operate in airspace under the control of one ATS unit requesting climb or diversion into airspace controlled by another ATS unit which has no details of the flight.

# 11.4.2.5.20 GENERAL EXECUTIVE DATA MESSAGES

11.4.2.5.20.1 The General Executive Data message shall be sent after the transition to the transfer state has commenced and prior to the Transfer Control Assume or Transfer Communication Assume messages, either by the transferring unit to the receiving unit or from the receiving unit to the transferring unit, to inform the unit receiving the message of any modification to data relating to the control environment of a flight. If the General Executive Data message is sent by the transferring unit, it may include information such as the current cleared (intermediate) flight level and, if applicable, speed restrictions, climb/descent restrictions and the heading (or direct routing) assigned to the flight. If the General Executive Data message is sent by the receiving unit, it includes the radiotelephony frequency or channel as appropriate to which the flight is to be transferred.

11.4.2.5.20.2 There is no operational response required for the General Executive Data message.

# 11.4.2.5.21 FREE TEXT GENERAL MESSAGES

Note.— See 11.4.1.4 for details on Free Text Emergency messages.

The Free Text General message shall only be used to transmit operational information for which any other message type is not appropriate, and for plain-language statements. Normally free text information would be presented directly to the controller responsible — or expecting to be responsible — for the flight. When the message does not refer to a specific flight, a facility designation shall be used to allow the information to be presented to the appropriate ATS position.

# 11.4.2.5.22 APPLICATION ACCEPT MESSAGES

Except for another application management message, or a message within which an error has been detected, the Application Accept message shall be sent by an ATS unit receiving an AIDC message that has been processed, found free of errors and is available for presentation to a control position.

# 11.4.2.5.23 APPLICATION REJECT MESSAGES

11.4.2.5.23.1 The Application Reject message shall be by an ATS unit receiving an AIDC message within which an error has been detected. The Application Reject message shall include a code that enables identification of the nature of the error. Regional air navigation agreement shall be the basis for specifying the codes that are available to be implemented.

Note.— Information concerning the available ATN application codes can be found in the Manual of Technical Provisions for the Aeronautical Telecommunication Network (ATN) (Doc 9705), Volume III, 3.2.7.1.1.

11.4.2.5.23.2 When Application Reject messages are not in use, local procedures shall ensure that the appropriate controller is alerted within a specified time parameter where no Application Accept message has been received in response to a transmitted AIDC message.

# 11.4.2.6 CONTROL MESSAGES

11.4.2.6.1 Control messages comprise:

- clearance messages (11.4.2.6.2)

- flow control messages (11.4.2.6.4)

- position-report and air-report messages (11.4.2.6.5).

# 11.4.2.6.2 CLEARANCE MESSAGES

Note.— Provisions governing clearances are contained in Chapter 4, Section 4.5. The following paragraphs set forth the contents of clearance messages together with certain procedures relating to the transmission thereof. Procedures governing the use of CPDLC for the delivery of clearances are contained in Chapter 14. Specifications regarding the intent, message attributes and display options can be found in Chapter 14, Table 14-1 to Table 14-4 and Appendix 5.

11.4.2.6.2.1 Clearances shall contain the following in the order listed:

a) aircraft identification;

b) clearance limit;

c) route of flight;

d) level(s) of flight for the entire route or part thereof and changes of levels if required;

Note.— If the clearance for the levels covers only part of the route, it is important for the air traffic control unit to specify a point to which the part of the clearance regarding levels applies whenever necessary to ensure compliance with 3.6.5.2.2 a) of Annex 2.

e) any necessary instructions or information on other such as SSR transponder operation, approach or departure manoeuvres, communications and the time of expiry of the clearance.

Note.— The time of expiry of the clearance indicates the time after h the clearance will be automatically cancelled if the flight has not been started.

11.4.2.6.2.2 Instructions included in clearances relating to levels shall consist of:

a) cruising level(s) or, for cruise climb, a range of levels, and, if necessary, the point to which the clearance is valid with regard to the level(s);

Note.— See 11.4.2.6.2.1 d) and associated Note.

b) levels at which specified significant points are to be crossed, when necessary;

c) the place or time for starting climb or descent, when necessary;

d) the rate of climb or descent, when necessary;

e) detailed instructions concerning departure or approach levels, when necessary.

11.4.2.6.2.3 It is the responsibility of the aeronautical station or aircraft operator who has received the clearance to transmit it to the aircraft at the specified or expected delivery time, and to notify the air traffic control unit promptly if it is not delivered within a specified period of time.

11.4.2.6.2.4 Personnel receiving clearances for transmission to a shall transmit such clearances in the exact phraseology in which they are received. In those cases where the personnel transmitting the clearances to the aircraft do not form part of the air traffic services, it is essential that appropriate arrangements be made to meet this requirement.

11.4.2.6.2.5 Level restrictions issued by ATC in air-ground communications shall be repeated in conjunction with subsequent level clearances in order to remain in effect.

Note.— See also Chapter 6, 6.3.2.4 and 6.5.2.4, regarding le I restrictions published as elements of SIDs and STARs.

#### 11.4.2.6.3 FLOW CONTROL MESSAGES

Note 1.— Provisions governing the control of air traffic flow are set forth in Annex 11, 3.7.5 and in Chapter 3, 3.2.5.2 of this document. Attention is drawn, however, to the guidance material contained in the Air Traffic Services Planning Manual (Doc 9426) regarding flow control.

Note 2.— Format and data conventions for automated interchange of flow control messages have not yet been developed.

11.4.2.6.4 POSITION-REPORT AND AIR-REPORT MESSAGES

Note.— Provisions governing position reporting are set forth in Annex 2, 3.6.3 and 5.3.3, and in Chapter 4, Sections 4.11 and 4.12 of this document.

11.4.2.6.4.1 The format and data conventions to be used in positionreport and air-report messages are those specified on the model AIREP/AIREP SPECIAL form at Appendix 1, using:

a) for position-report messages: Section 1;

b) for air-report messages: Section 1 followed by Sections 2 and/or 3 as relevant.

11.4.2.6.4.2 Where special air-report messages transmitted by voice communications are subsequently forwarded by automatic data-processing equipment which cannot accept the special air-report message type designator ARS, the use of a different message-type designator shall be permitted by regional air navigation agreement and should be reflected in the Regional Supplementary Procedures (Doc 7030) provided that:

a) the data transmitted accord with that specified in the special air-report format; and

b) measures are taken to ensure that special air-report messages are forwarded to the appropriate meteorological unit and to other aircraft likely to be affected.

# 11.4.3 Flight information messages

# 11.4.3.1 MESSAGES CONTAINING TRAFFIC INFORMATION

Note.— Provisions governing the issuance of traffic information are set forth in Annex 11, 4.2.2 b) and Notes 1 and 2 and in Chapter 5, Section 5.10, and Chapter 7, Section 7.4.1 of this document.

# 11.4.3.1.1 MESSAGES CONTAINING TRAFFIC INFORMATION TO AIRCRAFT OPERATING OUTSIDE CONTROLLED AIRSPACE

11.4.3.1.1.1 Due to the factors influencing the nature of the flight information services, and particularly the question of provision of information on possible collision hazards to aircraft operating outside controlled airspace, it is not possible to specify standard texts for these messages.

11.4.3.1.1.2 Where such messages are transmitted they shall, however, contain sufficient data on the direction of flight and the estimated time, level and point at which the aircraft involved in the possible collision hazard will pass, overtake or approach each other. This information shal be given in such a way that the pilot of each aircraft concerned is able to appreciate clearly the nature of the hazard.

# 11.4.3.1.2 MESSAGES CONTAINING ESSENTIAL TRAFFIC INFORMATION TO IFR FLIGHTS OUTSIDE CONTROLLED AIRSPACE

Whenever such messages are transmitted they shall contain the following text:

a) identification of the aircraft to which the information is transmitted;

- b) the words TRAFFIC IS or ADDITIONAL TRAFFIC IS;
- c) direction of flight of aircraft concerned;

d) type of aircraft concerned;

e) cruising level of aircraft concerned and ETA for the significant point nearest to where the aircraft will cross levels.

# 11.4.3.1.3 MESSAGES CONTAINING ESSENTIAL LOCAL TRAFFIC INFORMATION

Whenever such messages are transmitted they shall contain the following text:

a) identification of the aircraft to which the information is transmitted;

b) the words TRAFFIC IS or ADDITIONAL TRAFFIC IS, if necessary;

c) description of the essential local traffic in terms that will facilitate recognition of it by the pilot, e.g. type, speed category and/or colour of aircraft, type of vehicle, number of persons;

d) position of the essential local traffic relative to the aircraft concerned, and direction of movement.

# 11.4.3.2 MESSAGES CONTAINING METEOROLOGICAL INFORMATION

Note.— Provisions governing the making and reporting of airc t observations are contained in Annex 3. Provisions concerning the contents and transmission of air-reports are contained in Chapter 4, Section 4.12 of this document, and the special air-report of volcanic activity form used for reports of volcanic activity is shown in Appendix 1 to this document. The transmission by ATS units, to meteorological offices, of meteorological information received from aircraft in flight is governed by provisions in Chapter 4, Section 4.12.6 of this document. Provisions governing the transmission by ATS units of meteorological information to aircraft are set forth in Annex 11, 4.2 and in this document (see Chapter 4, 4.8.3 and 4.10.4; Chapter 6, Sections 6.4 and 6.6; Chapter 7, 7.4.1; and Chapter 9, 9.1.3). The written forms of SIGMET and AIRMET messages and other plain-language meteorological messages are governed by the provisions of Annex3.

11.4.3.2.1 Information to a pilot changing from IFR fl to VFR flight where it is likely that flight in VMC cannot be maintained shall be given in the following manner:

# "INSTRUMENT METEOROLOGICAL CONDITIONS REPORTED (or forecast) IN THE VICINITY OF (location)".

11.4.3.2.2 Meteorological information concerning the meteorological conditions at aerodromes, to be transmitted to aircraft by the ATS unit concerned, in accordance with Annex 11, Chapter 4 and this document, Chapter 6, Sections 6.4 and 6.6 and Chapter 7, Section 7.4.1, shall be extracted by the ATS unit concerned from the following meteorological messages, provided by the appropriate meteorological office, supplemented for arriving and departing aircraft, as appropriate, by information from displays relating to meteorological sensors (in particular, those related to the surface wind and runway visual range) located in the ATS units:

a) local meteorological routine and special reports;

b) METAR/SPECI, for dissemination to other aerodromes beyond the aerodrome of origin (mainly intended for flight planning, VOLMET broadcasts and D-VOLMET).

11.4.3.2.3 The meteorological information referred to in 11.4.3.2.2 shall be extracted, as appropriate, from meteorological reports providing information on the following elements:

a) mean surface wind direction and speed and significant variations therefrom;

Note.— Information on surface wind direction provided to ATS units by the associated meteorological office is referenced to degrees true North. Information on surface wind direction obtained from the ATS surface wind indicator and passed to pilots by ATS units is given in degrees magnetic.

b) visibility, including significant directional variations;

c) runway visual range (RVR);

d) present weather;

e) amount and height of base of low cloud;

f) air temperature and dew-point temperature;

g) altimeter setting(s); and

h) supplementary information.

Note. — Provisions relating to meteorological information to be provided in accordance with 11.4.3.2.3 are contained in Annex 3 — Meteorological Service for International Air Navigation, Chapter 4 and Appendix 3.

# 11.4.3.3 MESSAGES CONCERNING THE OPERATION OF AERONAUTICAL FACILITIES

Note.— General provisions concerning this subject are set forth in Annex 11, 4.2.

Messages concerning the operation of aeronautical facilities shall be transmitted to aircraft from whose flight plan it is apparent that the operation of the flight may be affected by the operating status of the operating facility concerned. They shall contain appropriate data on the service status of the facility in question, and, if the facility is out of operation, an indication when the normal operating status will be restored.

# 11.4.3.4 MESSAGES CONTAINING INFORMATION ON AERODROME CONDITIONS

Note.— Provisions regarding the issuance of information on aerodrome conditions are contained in Chapter 7, 7.5.

11.4.3.4.1 Whenever information is provided on aerodrome conditions, this shall be done in a clear and concise manner so as to facilitate appreciation by the pilot of the situation described. shall be issued whenever deemed necessary by the controller on duty in the interest of safety, or when requested by an aircraft. If the information is provided on the initiative of the controller, it shall be transmitted to each aircraft concerned in sufficient time to enable the pilot to make proper use of the information.

11.4.3.4.2 Information that water is present on a runway shall be transmitted to each aircraft concerned, on the initiative of the controller, using the following terms:

DAMP — the surface shows a change of colour due to moisture.

WET — the surface is soaked but there is no standing water.

WATER PATCHES — patches of standing water are visible.

FLOODED — extensive standing water is visible.

11.4.3.5 MESSAGES CONCERNING AIR TRAFFIC INCIDENT REPORTS

When an aircraft involved in an incident has a destination outside the area of responsibility of the ATS unit where the incident occurred, the ATS unit at the destination aerodrome should be notified and requested to obtain the pilot's report.

The following information should be included in the message:

- a) type of incident (AIRPROX, procedure or facility);
- b) identification of the aircraft concerned;
- c) time and position at time of incident;
- d) brief details of incident.

# Örnekler ve açiklamasi

The following is an example of a filed flight plan message sent by London Airport to Shannon, Shanwick and Gander Centres.

(FPL-TPR101-IS

-B707M-CHOPV/CD

-EGLL1400

-N0450F310 G1 UG1 STU285036/M082F310 UG1 52N015W 52N020W 52N030W 50N040W 49N050W

-CYQX0455 CYYR

-EET/EINN0026 EGGX0111 20W0136 CYQX0228 40W0330 50W0415 SEL/FJEL)

2.3.1.2.1 Meaning

- Filed flight plan message aircraft identification TPR101 IFR, scheduled flight
- a Boeing 707, medium wake turbulence category equipped with Loran C, HF RTF, VOR, Doppler, VHF RTF and SSR transponder with Modes A (4096 code capability) and C - ADS capability
- departure aerodrome is London, estimated off-block time 1400 UTC
- —cruising speed and requested flight level for the first portion of the route are 450 knots and FL 310 - the flight will proceed on Airways Green 1 and Upper Green 1 to a point bearing 285 degrees magnetic and 36 NM from the Strumble VOR. From this point the flight will fly at a constant Mach number of .82, proceeding on Upper Green 1 to 52N15W; then to 52N20W; to 52N30W; to 50N40W; to 49N50W;
- -to destination Gander, total estimated elapsed time 4 hours and 55 minutes -alternate is Goose Bay
- captain has notified accumulated estimated elapsed times at significant points along the route, they are at the Shannon FIR boundary 26 minutes, at the Shanwick Oceanic FIR boundary 1 hour and 11 minutes, at 20W 1 hour and 36 minutes, at the Gander Oceanic FIR boundary 2 hours and 28 minutes, at 40W 3 hours and 30 minutes and at 50W 4 hours and 15 minutes - SELCAL code is FJEL.

The following is an example of a flight plan cancellation message sent by an ATS unit to all addressees of a filed flight plan message previously sent by that unit.

(CNL-DLH522-EDBB-LFPO)

2.3.3.2.1 Meaning

Flight plan cancellation message — cancel the flight plan of aircraft identification DLH522 — flight planned from Berlin to Paris.

The following is an example of a delay message sent from a departure aerodrome, or from a parent unit handling communications for a departure aerodrome, to each addressee of a filed flight plan message.

(DLA-KLM671-LIRF0900-LYDU)

2.3.4.2.1 Meaning

Delay message — aircraft identification KLM671 — revised estimated offblock time Fiumicino 0900 UTC destination Dubrovnik.

The following is an example of a departure message sent from a departure aerodrome, or from a parent unit handling communications for a departure aerodrome, to each addressee of a filed flight plan message.

(DEP-CSA4311-EGPD1923-ENZV)

2.3.5.2.1 Meaning

Departure message — aircraft identification CSA4311 — departed from Aberdeen at 1923 UTC — destination Stavanger.

The following is an example of an arrival message sent from the arrival aerodrome (= destination) to the departure aerodrome.

(ARR-CSA406-LHBP-LKPR0913)

2.3.6.2.1 Meaning

Arrival message — aircraft identification CSA406 — departed from Budapest/Ferihegy — landed at Prague/Ruzyne Airport at 0913 UTC. The following is an example of a request flight plan message sent by a centre to an adjacent centre after receipt of an estimate message, for which no corresponding filed flight plan message had been received previously.

(RQP-PHOEN-EHRD-EDDL)

2.5.1.2.1 Meaning

Request flight plan message — aircraft identification PHOEN departed from Rotterdam — destination Düsseldorf.

The following is an example of a supplementary flight plan message sent by the departure aerodrome of a flight to an ATS unit which had requested supplementary information recorded on the flight plan form (but not transmitted in filed flight plan messages or current flight plan messages).

(SPL-SAW502A

-EDDW0920

-EKCH0400 EKVB

-REG/GBZTA RMK/CHARTER

-E/0640 P/9 R/V J/L A/BLUE C/DENKE)

2.5.3.2.1 Meaning

Supplementary flight plan message — aircraft identification SAW502A no SSR — departed Bremen 0920 UTC —

destination Kastrup, total estimated elapsed time 4 hours — alternate Viborg — aircraft registration GBZTA — charter flight

endurance 6 hours and 40 minutes after departure — 9 persons on board
portable radio working on International Distress Frequency 121.5 MHz is carried — life jackets fitted with lights are carried — the aircraft colour is blue — the pilot's name is Denke.

Please read the article "How to file a Flight Plan" also.

Servet BASOL 091128