

Chapter 11

AIR TRAFFIC SERVICES MESSAGES

11.1 Categories of messages

11.1.1 General

The messages listed below are authorized for transmission via the aeronautical fixed service (including the aeronautical fixed telecommunication network (AFTN), direct speech circuits or digital data interchange between air traffic services units, and direct teletypewriter and 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.

11.1.2 Emergency messages

This category comprises:

- a) distress messages and distress traffic, including alerting messages relating to a distress phase (SS);
- b) urgency messages, including alerting messages relating to an alert phase or to an uncertainty phase (SS);
- c) other messages concerning known or suspected emergencies which do not fall under a) or b) above, and radio communication failure messages (FF or higher as required).

11.1.3 Movement and control messages

This category comprises:

- a) filed flight plan messages and associated update 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) control messages (FF), including:
 - ✍ clearance messages
 - ✍ transfer of control messages
 - ✍ flow control messages
 - ✍ position report and air-report messages.

11.1.4 Flight information messages

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).

11.1.5 When justified by the requirement for special handling, messages in the fixed service 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 interchange 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 air traffic services purposes shall be originated by the appropriate air traffic services units or by aircraft as specified in Section 11.3, except that, through special local arrangements, air traffic services 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 section 10.5, chapter 10 of this document, 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 air traffic services units which are specified in the provisions of 11.4.2. Such messages shall be made available to other air traffic services 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 air traffic services 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 air traffic services 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 Air traffic services messages to be transmitted via the AFTN shall contain:

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



- b) the air traffic services data, preceded if necessary by the supplementary address information described in 11.2.1.2.6, and prepared in accordance with Appendix 3 of PANS ATM DOC 4444. 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.— 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;
- 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;

- 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):

✍ 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 for transmission 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:

1) 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 of PANS ATM DOC 4444. Such local variants are easily learned and are of no consequence.

11.2.2 Preparation and transmission of messages

11.2.2.1 Air traffic services 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 of PANS ATM DOC 4444.

11.2.2.2 When messages are exchanged orally between the relevant air traffic services units, an oral acknowledgement shall constitute evidence of receipt of the message. No confirmation in written form shall therefore be required.

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 dependent 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 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.

11.3.6 Filed flight plan data and associated update messages

Filed flight plan data and associated update 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 process comprising the following stages:

- a) the announcement of the flight and the proposed conditions of transfer of control; and
- b) coordination of the conditions of transfer and acceptance followed by the assumption of control by the receiving unit.

11.3.7.2 The announcement 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 ATS unit.

11.3.7.3 A receiving ATS unit to whom the proposed conditions of transfer are not acceptable shall decline to accept the aircraft as proposed and shall initiate further coordination by proposing alternative acceptable conditions.

11.3.7.4 The coordination process 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 counter-proposals, are accepted by an operational or logical procedure.

11.3.7.5 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 process employing computer-to-computer links. This message shall be transmitted when the transfer data has been received and processed to the point that, in the event of a temporary failure by the receiving computer, the information will be brought to the attention of the appropriate air traffic controller.

11.3.7.6 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.

11.3.7.7 When the transfer of control involves exchange of data, the proposal for transfer shall include radar information if appropriate. Since the proposal relates to previously accepted coordination data, further

coordination shall normally not be required. However, acceptance shall be required.

11.3.7.8 If after receipt of radar information the accepting centre is unable to identify the aircraft immediately, additional communication shall ensue to obtain new radar information, if appropriate.

11.3.7.9 When control has been assumed of the transferred aircraft the accepting unit shall complete the transfer of control process 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 flight 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 filed 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 and 11.4.1.3.

11.4.1.2 Alerting (ALR) Messages

11.4.1.2.1 When an air traffic services unit considers that an aircraft is in a state of emergency as defined in Chapter 9 of this

document, an alerting message shall be transmitted to any air traffic services 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, of PANS ATM DOC 4444 as is available or can be obtained.

11.4.1.2.2 When so agreed between the air traffic services 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), supplemented by a verbal message giving the additional details prescribed for inclusion in an alerting message.

11.4.1.3 Radio communication Failure (RCF) Messages

Note.— Provisions governing the action to be taken in the event of radio communication failure are set forth in Chapter 15, Section 15.2 of this document.

11.4.1.3.1 When an air traffic services unit is aware that an aircraft in its area is experiencing radio communication 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 flight 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 process, 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. The above process shall be repeated progressively from centre to centre up to the first ATS unit along the remaining

route of flight to which basic flight plan data has already been sent.

11.4.2 Movement and control messages

11.4.2.1 Messages concerning the intended or actual movement of aircraft shall be based on the latest information furnished to air traffic services units by the pilot, the operator or its designated representative, or derived from ground based radar.

11.4.2.2 Filed flight Plan Messages and associated update messages

11.4.2.2.1 Filed flight plan messages and associated update 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*

11.4.2.2.2.1 Unless repetitive flight plan procedures are 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 originated and addressed as follows by the air traffic services unit serving the departure aerodrome or, when applicable, by the air traffic services 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 reclearance 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 service 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 11.4.2.2.2.2;
 - 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 plan 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 air traffic services 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 air traffic services 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 has been 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 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 air traffic services unit, at the departure aerodrome, which originated the flight plan message, if that message included a request for an ARR message;

b) or 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 air traffic services units concerned with the flight during the

period of the communication failure; and

2) to all other air traffic services 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

Note.— The provisions governing coordination are contained in Chapter 10. Phraseology to be used in voice communication is contained in Chapter 12.

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 prescribed in Letter Of Agreement / MATS 2 and where 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 shall be transmitted directly between such units.

11.4.2.3.2.3 A CPL message shall be transmitted in sufficient time to permit each air traffic services 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 in LOA / MATS 2. 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 increased lead-time shall be agreed.

11.4.2.3.2.5 A CPL message shall include only information 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 air traffic services 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 in LOA / MATS 2. 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 process 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 process described above is repeated until the coordination process 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 process has been completed, 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 process be repeated.

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

11.4.2.3.5 Logical Acknowledgement (LAM) Messages

11.4.2.3.5.1 An LAM message shall be used only between ATC computers.

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

11.4.2.3.5.3 The transferring centre shall set an appropriate reaction time parameter when the CPL or EST message is transmitted. If the LAM message 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 shall be transmitted when an air traffic services 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 air traffic services unit specified in the flight plan message.

11.4.2.4.4 Supplementary flight plan (SPL) messages

An SPL message shall be transmitted by the air traffic services reporting office at the departure aerodrome to air traffic services 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 Control messages

11.4.2.5.1 Control messages comprise:

- ✍ clearance messages (11.4.2.5.2)
- ✍ transfer of control messages (11.4.2.5.3)
- ✍ flow control messages (11.4.2.5.4)
- ✍ position report and air-report messages (11.4.2.5.5).

11.4.2.5.2 Clearance messages

11.4.2.5.2.1 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;
- e) any necessary instructions or information on other matters 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 which the clearance will be automatically cancelled if the flight has not been started.

11.4.2.5.2.2 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);
- 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.

11.4.2.5.2.3 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.

11.4.2.5.2.4 Personnel receiving clearances for transmission to aircraft 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.

11.4.2.5.3 Position report and air-report messages

The format and data conventions to be used in position report and air-report messages are those specified on the model AIREP/AIREP SPECIAL form at Appendix 1 of PANS ATM DOC 44444, using:

- ✍ for position-report messages: Section 1;
- ✍ for air-report messages: Section 1 followed by Sections 2 and/or 3 as relevant.

11.4.3 Flight information messages

11.4.3.1 Messages containing traffic information

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 shall 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 within 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, etc.;
- d) position of the essential local traffic relative to the aircraft concerned, and direction of movement.

1 11.4.3.2 *Messages containing meteorological information*

11.4.3.2.1 Information to a pilot changing from IFR flight 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, 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 indicators 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) meteorological reports in the METAR/SPECI code forms, for dissemination to other aerodromes beyond the aerodrome of origin (mainly intended for flight planning, VOLMET broadcasts).

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 in accordance with the following:

11.4.3.2.3.1 *Mean surface wind direction and speed and significant variations therefrom*

11.4.3.2.3.1.1 In meteorological reports, the direction shall be given in degrees true and the speed in kt. All directional and speed variations shall refer to the preceding 10-minute period. Directional variation shall be given when the total variation is 60 degrees or more; when the mean speed is above 3 kt and the wind varies less than 180 degrees, it shall be expressed as the two extreme

directions between which the wind has varied; otherwise, it shall be indicated as VRB, followed by the mean speed, with no indication of the mean wind direction. Speed variations (gusts) shall be reported only when the variation from the mean speed is 10 kt or more.

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.

11.4.3.2.3.1.2 In local meteorological routine and special reports:

- a) the averaging period for mean surface wind direction and speed shall be 2 minutes;
- b) speed variations shall be expressed as the maximum and minimum values attained;
- c) light and variable surface winds of 3 kt or less shall include a range of wind directions, whenever possible.

11.4.3.2.3.1.3 In meteorological reports disseminated beyond the aerodrome:

- a) the averaging period for mean surface wind direction and speed shall be 10 minutes;
- b) speed variations shall be expressed as the maximum value attained. Minimum wind speed shall not be included.

11.4.3.2.3.2 *Visibility, including significant directional variations*

11.4.3.2.3.2.1 When the visibility is less than 500 m, it shall be expressed in steps of 50 m; when it is 500 m or more but less than 5 000 m, in steps of 100 m; 5 000 m or more but less than 10 km, in kilometre steps; and when it is 10 km or more, only 10 km shall be given,

except when the conditions for the use of CAVOK apply.

11.4.3.2.3.2.2 In local meteorological routine and special reports, the visibility shall be representative of:

- a) the take-off/climb-out area for departing aircraft;
- b) the approach and landing area for arriving aircraft.

11.4.3.2.3.2.3 In meteorological reports disseminated beyond the aerodrome, the visibility shall be representative of the aerodrome and its immediate vicinity. In case of significant directional variations in visibility:

- a) the lowest visibility shall be reported;
- b) additional values shall be given with indications of the direction of observation.

11.4.3.2.3.3 *Runway visual range (RVR)*

11.4.3.2.3.3.1 Runway visual range values up to 400 m shall be given in increments of 25 m, values between 400 and 800 m in increments of 50 m, and values above 800 m shall be given in increments of 100 m. Runway visual range values which do not fit the reporting scale shall be rounded down to the nearest lower step in the reporting scale.

11.4.3.2.3.3.2 In local meteorological routine and special reports, the averaging period for RVR shall be 1 minute and:

- a) when the runway visual range is above the maximum value which can be determined by the system in use, it shall be reported as more than the specified distance, e.g. RVR RWY 14 ABV 1 200M where the figure 1 200 is the maximum value that can be determined by the system; or

when the runway visual range is below the minimum value which can be measured with the system in use, it shall be reported as less than the specified distance, e.g. RVR RWY 10 BLW 150M.

- b) when the runway visual range is observed from one location along the runway about 300 m from the threshold, it shall be included without any indication of location, e.g. RVR RWY 20 600M; or

when the runway visual range is observed from more than one location along the runway, the value for the touchdown zone shall be given first and shall be followed by the values representative of the mid-point and stop-end. The locations for which these values are representative shall be given in meteorological reports as TDZ, MID and END, e.g. RVR RWY 16 TDZ 600M MID 400M END 400M;

Note.— Where reports for three locations are given, the indication of these locations may be omitted, provided that the reports are passed in the order specified above, e.g. RVR RWY 16 600M 400M 400M.

- c) when there is more than one runway in use, the available runway visual range values for each runway shall be given and the runways to which the values refer shall be indicated, e.g. RVR RWY 26 800M RVR RWY 20 700M; if the runway visual range is available only for one runway, that runway shall be indicated, e.g. RVR RWY 20 600M.

11.4.3.2.3.3.3 In meteorological reports disseminated beyond the aerodrome, the averaging period for RVR shall be 10 minutes and:

- a) only the value representative of the touchdown zone shall be given, and no indication of location on the runway shall be included;

- b) when there is more than one runway available for landing, touchdown zone runway visual range values shall be included for all such runways, up to a maximum of four, and the runways to which the values refer shall be indicated, e.g. RVR RWY 26 500M RVR RWY 20 800M;
- c) when the runway visual range values during the 10-minute period immediately preceding the observation have shown a distinct tendency, such that the mean during the first 5 minutes varies by 100 m or more from the mean during the second 5 minutes of the period, this shall be indicated by the abbreviation “U” for an upward tendency and by the abbreviation “D” for the downward tendency, e.g. RVR RWY 12 300M/D;
- d) when the fluctuations of the runway visual range during the 10-minute period immediately preceding the observation have shown no distinct tendency, this shall be indicated by the abbreviation “N”;
- e) when the one-minute runway visual range values during the 10-minute period immediately preceding the observation vary from the mean value by more than 50 m or more than 20 per cent of the mean value, whichever is the greater, the one-minute mean minimum and the one-minute mean maximum values shall be included instead of the 10-minute mean value, e.g. RVR RWY 18 MNM700M MAX1100M.

11.4.3.2.3.4 Present weather

11.4.3.2.3.4.1 The types of the present weather phenomena shall be given in meteorological reports in terms of drizzle, rain, snow, snow grains, ice pellets, ice crystals (diamond dust), hail, small hail and/or snow pellets, fog, mist, sand, dust (widespread), haze, smoke, volcanic ash, dust/sand whirls (dust devils), squall, funnel

cloud (tornado or waterspout), dust storm and sand storm.

11.4.3.2.3.4.2 The following characteristics of the present weather phenomena shall be given, as appropriate, in connection with the types listed in 11.4.3.2.3.4.1: thunderstorm, shower, freezing, blowing, low drifting, shallow, patches and partial.

11.4.3.2.3.4.3 The relevant intensity (light, moderate, heavy) or, as appropriate, the proximity to the aerodrome (vicinity) of the reported present weather phenomena shall be given.

11.4.3.2.3.5 *Amount and height of base of low cloud*

Cloud amount using FEW (1-2 oktas), SCT (3-4 oktas), BKN (5-7 oktas) or OVC (8 oktas), type (only if cumulonimbus (CB) or towering cumulus (TCU)) and height of base in metres (feet) shall be given in that order. If the base of the lowest cloud is diffuse or ragged or fluctuating rapidly, the minimum height of the cloud or cloud fragments shall be given together with an appropriate description of the characteristics thereof. If there are no clouds and no restriction on vertical visibility, and the abbreviation CAVOK is not appropriate, SKC shall be used. If there are no clouds below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater, no cumulonimbus and no restriction on vertical visibility and the abbreviations “CAVOK” and “SKC” are not appropriate, the abbreviation “NSC” shall be used. When the sky is obscured, the vertical visibility shall be given, if available.

11.4.3.2.3.6 *Air temperature and dew point*

Air temperature and dew point temperature shall be given rounded to the nearest whole degree Celsius, with observed values involving 0.5°C rounded to the next higher whole degree Celsius.

11.4.3.2.3.7 *Altimeter setting(s)*

The QNH altimeter setting shall be given. The QFE altimeter setting shall also be available and passed either on a regular basis in accordance with local arrangements or if requested by the pilot. Altimeter settings shall be given in hectopascals in four digits together with the unit of measurement used and shall be rounded down to the nearest lower whole hectopascal.

11.4.3.2.3.8 *Other significant information*

11.4.3.2.3.8.1 This shall include any available information on meteorological conditions in the area of the aerodrome, and in the approach, missed approach or climb-out areas relating to the location of cumulonimbus or thunderstorm, moderate or severe turbulence, wind shear, hail, severe squall line, moderate or severe icing, freezing precipitation, severe mountain waves, sand storm, dust storm, blowing snow, tornado or waterspout, as well as any information on recent weather of operational significance (i.e. freezing precipitation; moderate or heavy precipitation; moderate or heavy blowing snow; duststorm or sandstorm; thunderstorm; tornado or waterspout; volcanic ash) observed during the period since the last issued routine report or last hour, whichever is shorter, but not at the time of observation.

11.4.3.2.3.8.2 In meteorological reports disseminated beyond the aerodrome, only information on wind shear and on recent weather of operational significance as given in 11.4.3.2.3.8.1 shall be included.

11.4.3.2.3.9 When the visibility is 10 km or more, there is no cloud below 1 500 m (5 000 ft), or below the highest minimum sector altitude, whichever is greater, and no cumulonimbus, and there is no weather of significance as given in 11.4.3.2.3.4.1 and 11.4.3.2.3.4.2, information on visibility, runway visual range, present weather and cloud amount, type and height shall be replaced by the term “CAVOK”.

11.4.3.3 Messages concerning the operation of aeronautical facilities

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

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. It 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.