

CHAPTER 10

COORDINATION

10.1 GENERAL

In circumstances where an aircraft is experiencing an emergency or has declared minimum fuel, or in any other situation wherein the safety of the aircraft is not assured, the type of emergency and the circumstances experienced by the aircraft shall be included in the coordination message.

10.2 COORDINATION IN RESPECT OF THE PROVISION OF AIR TRAFFIC CONTROL SERVICE

10.2.1 General

10.2.1 The coordination and transfer of control of a flight between successive ATC units and control sectors shall be effected by a process comprising the following stages:

- a) announcement of the flight and the proposed transfer of control conditions;
- b) coordination of and agreement on the transfer of control conditions; and
- c) the transfer of control to the accepting ATC unit or control sector.

10.2.1.2 ATC units should, to the extent possible, establish and apply standardized procedures for the coordination and transfer of control of flights, in order, *inter alia*, to reduce the need for verbal coordination. Such coordination procedures shall conform to the procedures contained in the following provisions and be specified in letters of agreement and instructions contained in MATS 2 of the concerned airport, as applicable.

10.2.1.3 Such agreements and instructions shall cover the following:

- a) definition of areas of responsibility and common interest, airspace structure and airspace classification(s);

- b) any delegation of responsibility for the provision of ATS ;
- c) procedures for the exchange of flight plan and control data, including use of automated and/or verbal coordination messages;
- d) means of communication;
- e) requirements and procedures for approval requests;
- f) significant points, levels or times for transfer of control;
- g) significant points, levels or times for transfer of communication;
- h) conditions applicable to the transfer and acceptance of control, such as specified altitudes/flight levels, specific separation minima or spacing to be established at the time of transfer, and the use of automated radar handover;
- i) radar coordination procedures and SSR Code assignment procedures;
- j) procedures for departing traffic;
- k) designated holding points and procedures for arriving traffic;
- l) applicable contingency procedures; and
- m) any other provisions or information relevant to the coordination and transfer of control of flights.

10.2.2 Coordination between ATC units providing air traffic service within contiguous control areas

10.2.2.1 ATC units shall forward from unit to unit, as the flight progresses, necessary flight plan and control information.

10.2.2.2 The flight plan and control information shall be transmitted in sufficient time to permit reception and analysis of the data by the receiving unit and necessary coordination between the two units concerned.

10.2.2.2 Approval Request

10.2.2.2.1 If the flying time from the departure aerodrome of an aircraft to the boundary of an adjacent control area is less than the specified minimum required to permit transmission of the necessary flight plan and control information to the accepting ATC unit after take-off and allow adequate time for reception, analysis and coordination, the transferring ATC unit shall, prior to clearing the aircraft, forward that information to the accepting ATC unit together with a request for approval. The required time period shall be specified in letters of agreement or local instructions, as appropriate.

10.2.2.2.2 In the case of an aircraft in flight requiring an initial clearance when the flying time to the boundary of an adjacent control area is less than 30 minutes, the aircraft shall be held within the transferring ATC unit's control area until the flight plan and control information has been forwarded together with a request for approval, and coordination effected, with the adjacent ATC unit.

10.2.2.2.3 In the case of an aircraft requesting a change in its current flight plan, or of a transferring ATC unit proposing to change the current flight plan of an aircraft, and the flying time of the aircraft to the control area boundary is less than 30 minutes, the revised clearance shall be withheld pending approval of the proposal by the adjacent ATC unit. In other circumstances, revisions to previously transmitted current flight plan and control data shall be transmitted as early as possible, and no approval from the accepting ATC unit shall be required.

10.2.2.2.4 When boundary estimate data are to be transmitted for approval by the accepting unit, the time in respect of an aircraft not yet departed shall be based upon the estimated time of departure as determined by the ATC unit in whose area of responsibility the departure aerodrome is located. In respect of an aircraft in flight requiring an initial clearance, the time shall be based on the estimated elapsed time from the

holding point to the boundary plus the time expected to be needed for coordination.

10.2.2.2.5 Procedure and the conditions including specified flying times, under which approval requests are to be forwarded for approval, shall be as specified in letters of agreement / MATS 2.

10.2.2.3 Transfer of control

10.2.2.3.1 When relevant, the accepting ATC unit shall notify the transferring ATC unit which changes to the current flight plan are required so that the aircraft can be accepted. Where so specified in letters of agreement between the ATC units concerned, the accepting ATC unit shall also be required to notify the transferring unit when it is able to accept the aircraft concerned under the conditions specified.

10.2.2.3.2 The responsibility for the control of air traffic remains with the ATC unit in whose control area the aircraft is operating until the time the aircraft is estimated to cross the boundary of that control area, even when control of one or more aircraft is exercised under delegation by other ATC units. The accepting unit which is in communication with an aircraft not yet having reached the incoming transfer of control point shall not alter the clearance of such aircraft without the prior approval of the transferring unit.

Note.— When so agreed between the ATC units concerned, the transfer of control point may be a point other than the control area boundary.

10.2.2.3.3 Where specified in LOA (letters of agreement) between the ATC units concerned, the transferring unit shall notify the accepting unit that the aircraft is in position to be transferred and that the responsibility for control should be assumed by the accepting unit, either forthwith or, if a specified transfer of control point has been established, at the time when the aircraft passes that point. When an SSR Mode and Code is assigned to the aircraft or is otherwise known, and the accepting unit is

able to make use of these data, they shall be included in such notification.

10.2.2.3.4 In the event that transfer of control will be effected prior to the aircraft passing a designated transfer of control point, the transferring ATC unit shall notify the accepting unit accordingly. Any release restrictions that apply shall be specified by the transferring ATC unit.

10.2.2.4 *Transfer of communication*

10.2.2.4.1 Where non-radar separation minima are being applied, the transfer of air-ground communications of an aircraft from the transferring to the accepting ATC unit shall be made five minutes before the time at which the aircraft is estimated to reach the common control area boundary, unless otherwise agreed between the two units or as specified in LOA.

10.2.2.4.2 When radar or ADS separation minima are being applied at the time of transfer of control, the transfer of air-ground voice and/or data communications of an aircraft from the transferring to the accepting ATC unit shall be made immediately after the accepting ATC unit has agreed to assume control.

10.2.2.4.3 A notification from the transferring ATC unit that the aircraft will be instructed or has already been instructed to establish radio and/or data communications with the accepting unit is required in those cases where this has been agreed between the two ATC units concerned.

10.2.2.4.4 The accepting ATC unit shall normally not be required to notify the transferring unit that radio and/or data communication has been established with the aircraft being transferred and that control of the aircraft has been assumed, unless otherwise specified in LOA.. The accepting ATC unit shall notify the transferring unit in the event that communication with the aircraft is not established as expected.

10.2.2.4.5 In cases where a portion of a control area is so situated that the time taken by aircraft to traverse it is of a limited duration, agreement should be reached to provide for direct transfer of communication between the units responsible for the adjacent control areas, provided that the intermediate unit is fully informed of such traffic. The intermediate unit shall retain responsibility for coordination and for ensuring that separation is maintained between all traffic within its area of responsibility.

10.2.2.4 *Termination of controlled flight*

In the case where a flight ceases to be operated as a controlled flight, i.e. by leaving controlled airspace or by canceling its IFR flight and proceeding on VFR in airspace where VFR flights are not controlled, the ATC unit concerned shall ensure that appropriate information on the flight is forwarded to ATS unit(s) responsible for the provision of flight information and alerting services for the remaining portion of the flight, in order to ensure that such services will be provided to the aircraft.

10.2.3 **Coordination between a unit providing area control service and a unit providing approach control service**

10.2.3.1 *Division of Control*

10.2.3.1.1 Except when otherwise specified in letters of agreement or local instructions, or by the ACC concerned in individual cases, a unit providing approach control service may issue clearances to any aircraft released to it by an ACC without reference to the ACC. However, when an approach has been missed the ACC shall, if affected by the missed approach, be advised immediately and subsequent action coordinated between the ACC and the unit providing approach control service as necessary.

10.2.3.1.2 An ACC may, after coordination with the unit providing approach control service, release aircraft directly to aerodrome

control towers if the entire approach will be made under visual meteorological conditions.

10.2.3.2 Take-off and Clearance Expiry Times

10.2.3.2.1 Time of take-off shall be specified by the ACC when it is necessary to:

- a) coordinate the departure with traffic not released to the unit providing approach control service; and
- b) provide en-route separation between departing aircraft following the same route.

10.2.3.2.2 If time of take-off is not specified, the unit providing approach control service shall determine the take-off time when necessary to coordinate the departure with traffic released to it.

10.2.3.2.3 A clearance expiry time shall be specified by the ACC if a delayed departure would conflict with traffic not released to the unit providing approach control service. If, for traffic reasons of its own, a unit providing approach control service has to specify in addition its own clearance expiry time, this shall not be later than that specified by the ACC.

10.2.4 Exchange of movement and control data

10.2.4.1 The unit providing approach control service shall keep the ACC promptly advised of pertinent data on controlled traffic such as:

- a) runway(s)-in-use and expected type of instrument approach procedure;
- b) lowest vacant level at the holding point available for use by the ACC;
- c) average time interval or distance between successive arrivals as determined by the unit providing approach control service;
- d) revision of the expected approach time issued by the ACC when the calculation

of the expected approach time by the unit providing approach control service indicates a variation of five minutes or such other time as has been agreed between the two ATC units concerned;

- e) arrival times over the holding point when these vary by three minutes, or such other time as has been agreed between the two ATC units concerned, from those previously estimated;
- f) cancellations by aircraft of IFR flight, if these will affect levels at the holding point or expected approach times of other aircraft;
- g) aircraft departure times;
- h) all available information relating to overdue or unreported aircraft;
- i) missed approaches which may affect the ACC.

10.2.4.2 The ACC shall keep the unit providing approach control service promptly advised of pertinent data on controlled traffic such as:

- a) identification, type and point of departure of arriving aircraft;
- b) estimated time and proposed level of arriving aircraft over holding point or actual time if aircraft is released to the unit providing approach control service after arrival over the holding point;
- c) requested type of IFR approach procedure if different to that specified by the approach control unit;
- d) expected approach time issued;
- e) when required, statement that aircraft has been instructed to contact the unit providing approach control service;
- f) when required, statement that an aircraft has been released to the unit providing approach control service including, if necessary, the time and conditions of release;
- g) anticipated delay to departing traffic due to congestion.

10.2.4.3 Information on arriving aircraft shall be forwarded not less than fifteen minutes before estimated time of arrival and

such information shall be revised as necessary.

10.2.5 Coordination between a unit providing approach control service and a unit providing aerodrome control service

10.2.5.1 Division of Control

10.2.5.1.1 A unit providing approach control service shall retain control of arriving aircraft until such aircraft have been transferred to the aerodrome control tower and are in communication with the aerodrome control tower. Except when otherwise prescribed in letters of agreement or local instructions, not more than one arrival shall be transferred to a unit providing aerodrome control service during IMC.

10.2.5.1.2 A unit providing approach control service may authorize an aerodrome control tower to release an aircraft for take-off subject to the discretion of the aerodrome control tower with respect to arriving aircraft.

10.2.5.1.3 Aerodrome control towers shall, when so prescribed in letters of agreement or local instructions, obtain approval from the unit providing approach control service prior to authorizing operation of special VFR flights.

10.2.5.2 Exchange of movement and control data

10.2.5.2.1 An aerodrome control tower shall keep the unit providing approach control service promptly advised of pertinent data on relevant controlled traffic such as:

- a) arrival and departure times;
- b) when required, statement that the first aircraft in an approach sequence is in communication with and is sighted by the aerodrome control tower, and that reasonable assurance exists that a landing can be accomplished;
- c) all available information relating to overdue or unreported aircraft;

- d) information concerning missed approaches;
- e) information concerning aircraft that constitute essential local traffic to aircraft under the control of the unit providing approach control service.

10.2.5.2.2 The unit providing approach control service shall keep the aerodrome control tower promptly advised of pertinent data on controlled traffic such as:

- a) estimated time and proposed level of arriving aircraft over the aerodrome, at least fifteen minutes prior to estimated arrival;
- b) when required, a statement that an aircraft has been instructed to contact the aerodrome control tower and that control shall be assumed by that unit;
- c) anticipated delay to departing traffic due to congestion.

10.2.6 Coordination between control positions within the same unit

10.2.6.1 Appropriate flight plan and control information shall be exchanged between control positions within the same air traffic control unit, in respect of:

- a) all aircraft for which responsibility for control will be transferred from one control position to another;
- b) aircraft operating in such close proximity to the boundary between control sectors that control of traffic within an adjacent sector may be affected;
- c) all aircraft for which responsibility for control has been delegated by a procedural controller to a radar controller, as well as other aircraft affected.

10.2.6.2 Procedures for coordination and transfer of control between control sectors within the same ATC unit shall conform to the procedures applicable to ATC units.

10.3 COORDINATION IN RESPECT OF THE PROVISION OF FLIGHT



INFORMATION SERVICE AND ALERTING SERVICE

10.3.1 Coordination between ATS units providing flight information service in adjacent FIRs shall be effected in respect of IFR and VFR flights, in order to ensure continued flight information service to such aircraft in specified areas or along specified routes. Such coordination shall be effected in accordance with an agreement between the ATS units concerned.

10.3.2 Where coordination of flights is effected in accordance with 10.3.1, this shall include transmission of the following information on the flight concerned:

- a) appropriate items of the current flight plan; and
- b) the time at which last contact was made with the aircraft concerned.

10.3.3 This information shall be forwarded to the air traffic services unit in charge of the next FIR in which the aircraft will operate prior to the aircraft entering such FIR.

10.3.4 When so required by agreement between the appropriate ATS authorities to assist in the identification of strayed or unidentified aircraft and thereby eliminate or reduce the need for interception, flight plan and flight progress information for flights along specified routes or portions of routes in close proximity to FIR boundaries shall also be provided to the air traffic services units in charge of the FIRs adjacent to such routes or portions of routes.

10.4 COORDINATION IN RESPECT OF THE PROVISION OF AIR TRAFFIC ADVISORY SERVICE

ATS units providing air traffic advisory service shall apply the coordination procedures specified in Section 10.2 with respect to such aircraft having elected to use this type of service.

10.5 COORDINATION BETWEEN THE OPERATOR AND AIR TRAFFIC SERVICES

10.5.1 Air traffic services units, in carrying out their objectives, shall have due regard for the requirements of the operators and, if so required by the operators, shall make available to them or their designated representatives such information as may be available to enable them or their designated representatives to carry out their responsibilities

10.5.2 When so requested by an operator, messages received by air traffic services units and relating to the operation of the aircraft for which operational control service is provided by that operator shall, so far as practicable, be made available immediately to the operator or a designated representative in accordance with locally agreed procedures contained in MATS 2.

10.6 COORDINATION BETWEEN MILITARY AUTHORITIES AND AIR TRAFFIC SERVICES

10.6.1 Air traffic services units shall establish and maintain close cooperation with military authorities responsible for activities that may affect flights of civil aircraft.

10.6.2 Coordination of activities potentially hazardous to civil aircraft shall be effected in accordance with 10.8

10.6.3 Arrangements shall be made to permit information relevant to the safe and expeditious conduct of flights of civil aircraft to be promptly exchanged between air traffic services units and appropriate military units.

10.6.3 Air traffic services units shall, either routinely or on request, in accordance with locally agreed procedures, provide appropriate military units with pertinent flight plan and other data concerning flights of civil aircraft.

10.6.4 Special procedures shall be established in order to ensure that:

- a) air traffic services units are notified if a military unit observes that an aircraft

which is, or might be, a civil aircraft is approaching, or has entered, any area in which interception might become necessary;

- b) all possible efforts are made to confirm the identity of the aircraft and to provide it with the navigational guidance necessary to avoid the need for interception.

10.7 COORDINATION OF ACTIVITIES POTENTIALLY HAZARDOUS TO CIVIL AIRCRAFT

10.7.1 The arrangements for activities potentially hazardous to civil aircraft shall be coordinated by the organization conducting such activities with the AAI CHQ and / or local air traffic services unit(s) as appropriate. The coordination shall be effected early enough to permit timely promulgation of information regarding the activities.

10.8.2 The objective of the coordination shall be to achieve the best arrangements which will avoid hazards to civil aircraft and minimize interference with the normal operations of such aircraft.

10.9.3 In determining arrangements the following should be applied:

- a) the locations or areas, times and durations for the activities should be selected to avoid closure or realignment of established ATS routes, blocking of the most economic flight levels, or delays of scheduled aircraft operations, unless no other options exist;
- b) the size of the airspace designated for the conduct of the activities should be kept as small as possible;
- c) direct communication between the appropriate air traffic services unit and the organization or unit conducting the activities should be provided for use in the event that civil aircraft emergencies or other unforeseen circumstances require discontinuation of the activities.

10.7.4 The AAI CHQ and / or local air traffic services unit(s) as appropriate. shall be

responsible for initiating the promulgation of information regarding such activities.

10.7.5 Information regarding activities potentially hazardous to civil aircraft taking place on a regular or continuing basis are published in AIP ENR 5. If required, special committees should be established to ensure that the requirements of all parties concerned are adequately coordinated.

10.7.6 Information regarding flexible use of airspace along some of the ATS routes reserved for military or other special activities is published in AIP ENR 3. Appropriate ATS unit shall affect necessary coordination with military / other concerned authorities permit all airspace users to have safe access to such reserved airspace.

10.8 COORDINATION BETWEEN METEOROLOGICAL & ATS AUTHORITIRS

10.8.1 To ensure that aircraft receive the most up-to-date meteorological information for aircraft operations, air traffic services personnel to report as soon as possible to the associated meteorological office:

- a) meteorological phenomena of operational significance, if observed by them or communicated by aircraft, which have not been included in the aerodrome meteorological report;
- b) pertinent information concerning pre-eruption volcanic activity, volcanic eruptions and information concerning volcanic ash cloud. In addition, area control centres and flight information centres shall report the information to the associated meteorological

10.8.2 Close coordination shall be maintained between area control centres, flight information centres and associated meteorological watch offices to ensure that information on volcanic ash included in NOTAM and SIGMET messages is consistent

10.9 COORDINATION BETWEEN AERONAUTICAL INFORMATION

SERVICE (AIS) AND AIR TRAFFIC SERVICES (ATS) UNITS

10.9.1 To ensure that aeronautical information services units obtain information to enable them to provide up to-date pre-flight information and to meet the need for in-flight information, arrangements shall be made locally between aeronautical information services and ATS units responsible for AIS to report to the responsible AIS unit, with a minimum of delay:

- a) information on aerodrome conditions;
- b) the operational status of associated facilities, services and navigation aids within their area of responsibility;
- c) the occurrence of volcanic activity observed by air traffic services personnel or reported by aircraft; and
- d) any other information considered to be of operational significance.

10.9.2 Before introducing changes to the air navigation system, due account shall be taken by the services responsible for such changes of the time needed by the aeronautical information service for the preparation, production and issuance of relevant material for promulgation. To ensure timely provision of the information to the aeronautical information service, close coordination between those services concerned is therefore required.

10.9.3 Of particular importance are changes to aeronautical information that affect charts and/or computer-based navigation systems which qualify to be notified by the Aeronautical Information Regulation and Control (AIRAC) system. The predetermined, internationally agreed AIRAC effective dates in addition to 14 days postage time shall be observed by the responsible air traffic services when submitting the raw information/data to aeronautical information services.