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Commission Regulation (EC) No 1032/2006

of 6 July 2006

laying down requirements for automatic systems for the exchange of flight data for the purpose of notification, coordination and transfer of flights between air traffic control units

(Text with EEA relevance)

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(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 552/2004 of the European Parliament and of the Council of 10 March 2004 on the interoperability of the European Air Traffic Management network (the interoperability Regulation)(1), and in particular Article 3(1) thereof,

Having regard to Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation)(2), and in particular Article 8(2) thereof,

Whereas:

(1) Operation of air traffic management requires safe and efficient mechanisms for the notification, coordination and transfer of flights between air traffic control units. Provision of such mechanisms within the European Air Traffic Management Network requires the automatic exchange of flight data between flight data processing systems. Examination of the current situation within the Community has revealed that in some Member States those mechanisms have not yet reached a satisfactory level, and require further improvement. It is therefore necessary to lay down requirements for flight data processing systems with regard to interoperability, performance and quality of service of their flight data exchange functions.

(2) The European Organisation for the Safety of Air Navigation (Eurocontrol) has been mandated in accordance with Article 8(1) of Regulation (EC) No 549/2004 to develop requirements for automatic systems for the exchange of flight data for the purpose of notification, coordination and transfer of flights. This Regulation is based on the resulting mandate report of 31 March 2005.

(3) The Eurocontrol standard for on-line data exchange was annexed to Commission Regulation (EC) No 2082/2000 of 6 September 2000 adopting Eurocontrol standards and amending Directive 97/15/EC, adopting Eurocontrol standards and amending Council Directive 93/65/EEC(3), making its use mandatory within the Community in the event of procurement of new flight data processing systems. As Regulation (EC) No 2082/2000 was repealed with effect from 20 October 2005, it is necessary to update Community legislation, so as to ensure the consistency of relevant regulatory provisions.

(4) This Regulation should not cover military operation and training as referred in Article 1(2) of Regulation (EC) No 549/2004.

(5) In a Statement by the Member States on military issues related to the single European sky(4), the Member States committed themselves to cooperate with each other, taking into account national military requirements, in order that the concept of flexible use of airspace is fully and uniformly applied in all Member States by all users of airspace.

(6) The application of the concept of the flexible use of airspace, as defined in Article 2(22) of Regulation (EC) No 549/2004, requires the establishment of systems for the timely exchange of flight data between air traffic service units and controlling military units.

(7) Automated processes related to notification and initial coordination should be implemented by area control centres to provide consistent flight information at both the transferring and receiving units and to support the coordination of the planned transfer of flights. They were part of the standards laid down by Regulation (EC) No 2082/2000 and should therefore be applied from the date of entry into force of this Regulation.

(8) Flight information transmitted during the initial coordination process should be kept up to date. Automated processes should therefore be implemented progressively in order to allow revision of the information related to flights previously subject to an initial coordination process or abrogation of coordination when the accepting unit is no longer concerned by the flight.

(9) Air traffic control units other than area control centres could draw benefit from the implementation of automated processes for notification, initial coordination, revision of coordination and abrogation of

coordination of flights. If they choose to do so, the need for interoperability of the European Air Traffic Management Network (hereinafter EATMN) means that they must apply the same requirements as apply to area control centres.

(10) Timely exchange of flight data between air traffic services units and controlling military units should rely on the progressive implementation of automated processes. A first step should be the introduction of transmission of basic flight data between such civil and military units, together with the possibility to update them as required.

(11) Additional automated processes have been identified which would further strengthen the coordination between air traffic control units or between air traffic services units and controlling military units. If they choose to apply additional automated processes, the need for interoperability of the EATMN means that they must apply harmonised requirements to these processes.

(12) The implementation of this Regulation should allow further developments for the achievement of higher levels of interoperability.

(13) With a view to maintaining or enhancing existing safety levels of operations Member States should be required to ensure the conduct by the parties concerned of a safety assessment including hazard identification, risk assessment and mitigation processes. Harmonised implementation of these processes to the systems covered by this Regulation requires the identification of specific safety requirements for all mandatory interoperability, performance and quality of service requirements.

(14) In accordance with Article 3(3)(d) of Regulation (EC) No 552/2004, implementing rules for interoperability should describe the specific conformity assessment procedures to be used to assess either the conformity or the suitability for use of constituents as well as the verification of systems.

(15) In accordance with Article 10(1) and (2) of Regulation (EC) No 552/2004, the dates for the application of transitional arrangements may be specified by the relevant implementing rules for interoperability.

(16) Manufacturers and air navigation service providers should be afforded a period of time to develop new constituents and systems in conformity with the new technical requirements.

(17) The measures provided for in this Regulation are in accordance with the opinion of the Single Sky Committee established by Article 5 of Regulation (EC) No 549/2004,

HAS ADOPTED THIS REGULATION:

Article 1

Subject-matter and scope

1.This Regulation lays down requirements for the automatic exchange of flight data for the purpose of notification, coordination and transfer of flights between air traffic control units and for the purposes of civil-military coordination.

2.This Regulation shall apply to:

(a) flight data processing systems serving air traffic control units providing services to general air traffic;

(b) flight data exchange systems supporting the coordination procedures between air traffic services units and controlling military units.

3.This Regulation shall not apply to the exchange of flight data between air traffic control units served by flight data processing systems identified in paragraph 2 for which the flight data covered by this Regulation are synchronised by means of a common system.

Article 2

Definitions

1.For the purpose of this Regulation the definitions set out in Regulation (EC) No 549/2004 shall apply.

2.In addition to the definitions referred to in paragraph 1 the following definitions shall apply:

1.‘notification’ means the transmission by the transferring unit of data to update the system at the receiving unit in preparation for the coordination;

2.‘coordination’ means the coordination between air traffic control units of the planned passage of flights across the common boundary, in order to ensure flight safety;

3.‘air traffic control unit’ (hereinafter ATC unit) means variously area control centre, approach control unit or aerodrome control tower;

4.‘civil-military coordination’ means the coordination between civil and military parties authorised to make decisions and agree a course of action;

5.‘flight data processing system’ means the part of an air traffic services system which receives, automatically processes and distributes to air traffic control units working positions, flight plan data and associated messages;

6.‘air traffic services unit’ (hereinafter ATS unit) means a unit, civil or military, responsible for providing air traffic services;

7.‘controlling military unit’ means any fixed or mobile military unit handling military air traffic and/or pursuing other activities that due to their specific nature may require airspace reservation or restriction;

8.‘transferring unit’ means the air traffic control unit in the process of transferring the responsibility for providing an air traffic control service to an aircraft to the next ATC unit along the route of flight;

9.‘receiving unit’ means the air traffic control unit who receives data;

10.‘boundary’ means a lateral or vertical plane delineating the airspace in which an ATC unit provides air traffic services;

11.‘area control centre’ (hereinafter ACC) means a unit established to provide air traffic control service to controlled flights in control areas under its responsibility;

12.‘working position’ means the furniture and technical equipment at which a member of the air traffic services staff undertakes task associated with their job;

13.‘flight plan’ means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;

14.‘warning’ means a message displayed at a working position when the automated coordination process has failed;

15.‘estimate data’ means the coordination point, the estimated time of an aircraft and the expected flight level of the aircraft at the coordination point;

16.‘secondary surveillance radar’ (hereinafter SSR) means a surveillance radar system which uses transmitters or receivers and transponders;

17.‘letter of agreement’ means an agreement between two adjacent ATC units that specifies how their respective ATC responsibilities are to be coordinated;

18.‘transfer of control point’ means a point on the flight path of an aircraft, at which the responsibility for providing air traffic services to the aircraft is transferred from one ATC unit to the next;

19.‘coordination data’ mean data of interest to operational staff in connection with the process of notification, coordination and transfer of flights and with the process of civil-military coordination;

20.‘transfer flight level’ means the flight level agreed during the coordination if in level flight, or the cleared flight level to which the flight is proceeding if climbing or descending at the coordination point;

21.‘accepting unit’ means the air traffic control unit next to take control of an aircraft;

22.‘coordination point’ (hereinafter COP) means a point on or adjacent to the boundary used by the ATC units and referred to in coordination processes;

23.‘notified unit’ means the ATC unit that has received the notification information;

24.‘correlation’ means the process of linking the flight plan data and the radar track of the same flight;

25.‘release’ means the authorising by the controller transferring an aircraft of a controller at the accepting unit to issue control instructions to the aircraft prior to its passing the transfer of control point;

26.‘availability’ means the degree to which a system or component is operational and accessible when required for use;

27.‘reliability’ means the probability that the ground installation operates within the specified tolerances.

Article 3

Interoperability and performance requirements

1.Air navigation service providers shall ensure that the systems referred to in Article 1(2)(a) and serving ACCs, comply with the interoperability and performance requirements specified in Annex I, Parts A and B.

2.Air navigation service providers that have specified in their letter of agreement that they will implement the notification, the initial coordination, the revision of coordination, the abrogation of coordination, the basic flight data or the change to basic flight data processes between ATC units other than ACCs, shall ensure that the systems referred to in Article 1(2)(a), comply with the interoperability and performance requirements specified in Annex I, Parts A and B.

3.Air navigation service providers that have specified in their letter of agreement that they will implement the pre-departure notification and coordination, the change of frequency or the manual assumption of communications processes, shall ensure that the systems referred in Article 1(2)(a) comply with the interoperability and performance requirements specified in Annex I, Parts A and C.

3a. Air navigation service providers providing data link services in accordance with Regulation (EC) No 29/2009 shall ensure that the systems referred to in Article 1(2)(a) and serving area control centres, comply with the interoperability and performance requirements specified in Annex I, Parts A and D.

4.Member States shall ensure that the systems referred to in Article 1(2)(b) comply with the interoperability and performance requirements specified in Annex I, Parts A and B, in respect of the basic flight data and the change of basic flight data processes.

5.When air traffic services units and controlling military units have implemented between their systems referred to in Article 1(2)(b) the crossing intention notification, the crossing clearance request, the crossing counter-proposal or the crossing cancellation processes, Member States shall ensure that these systems comply with the interoperability and performance requirements specified in Annex I, Parts A and C.

Article 4

Quality of service requirements

1.Air navigation service providers shall ensure that the systems referred to in Article 1(2)(a) comply with the requirements concerning quality of service, specified in Annex II.

2.Member States shall ensure that the systems referred to in Article 1(2)(b) comply with the requirements concerning quality of service, specified in Annex II.

Article 5

Associated procedures

1.For a flight subject to initial coordination, the agreed transfer conditions of a flight shall be operationally binding for both ATC units unless the coordination is abrogated or revised.

2.For a flight subject to revision of coordination, the agreed transfer conditions of a flight shall be operationally binding for both ATC units unless the coordination is abrogated or the conditions are further revised.

3.Where completion of the revision or abrogation of coordination process is not confirmed in accordance with the applicable quality of service requirements, the transferring unit shall initiate verbal coordination.

Article 6

Safety requirements

Member States shall take the necessary measures to ensure that any changes to the existing automatic systems for the exchange of flight data covered by this Regulation or the introduction of new systems are preceded by a safety assessment, including hazard identification, risk assessment and mitigation, conducted by the parties concerned.

During this safety assessment, the safety requirements specified in Annex III shall be taken into consideration as a minimum.

Article 7

Conformity or suitability for use of constituents

Before issuing an EC declaration of conformity or suitability for use referred to in Article 5 of Regulation (EC) No 552/2004, manufacturers of constituents of the systems referred to in Article 1(2)(a) and (b) shall assess the conformity or suitability for use of these constituents in compliance with the requirements set out in Annex IV, Part A.

Article 8

Verification of systems

1.Air navigation service providers which can demonstrate that they fulfil the conditions set out in Annex V shall conduct a verification of the systems referred to in Article 1(2)(a) in compliance with the requirements set out in Annex IV, Part B.

2.Air navigation service providers which cannot demonstrate that they fulfil the conditions set out in Annex V shall subcontract to a notified body a verification of the systems referred to in Article 1(2)(a). This verification shall be conducted in compliance with the requirements set out in Annex IV, Part C.

3.Member States shall ensure that the verification of the systems referred in Article 1(2)(b) demonstrates the conformity of these systems with the interoperability and performance, quality of service and safety requirements of this Regulation.

Article 9

Compliance

Member States shall take the necessary measures to ensure compliance with this Regulation.

Article 10

Transitional arrangements

1.The transitional arrangements provided for in Article 10(1) of Regulation (EC) No 552/2004 shall apply to the European air traffic management network (hereinafter EATMN) systems referred in Article 1(2), as from the entry into force of this Regulation in respect of the notification and the initial coordination processes.

They shall apply to the EATMN systems from 1 January 2009 in respect of the revision of coordination, the abrogation of coordination, the basic flight data and the change to the basic flight data processes.

2.The transitional arrangements provided for in Article 10(2) of Regulation (EC) No 552/2004 shall apply to the systems referred in Article 1(2), from 31 December 2012.

Article 11

Entry into force

This Regulation shall enter into force on the 20th day following its publication in the Official Journal of the European Union.

It shall apply from 1 January 2009 to all EATMN systems referred to in Article 1(2) in respect of the revision of coordination, the abrogation of coordination, the basic flight data and the change to the basic flight data processes.

It shall apply from 31 December 2012 to all EATMN systems referred to in Article 1(2) in operation by that date.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

ANNEX I

Interoperability and performance requirements(referred to in Article 3)

PART A:

GENERAL REQUIREMENTS

1.SYSTEM REQUIREMENTS

1.1.The system shall provide all the information required for the display, processing and compilation of the system information exchanged in the processes specified.

1.2.The system shall be able to automatically receive, store, process, extract and deliver for display, and transmit flight information relevant to notification, coordination and transfer and civil-military coordination processes.

1.3.The system shall issue a warning when information exchange facility failures or anomalies are detected.

1.4.The system shall be able to provide warnings related to system information exchange to the relevant working positions.

1.5.The system shall provide the ATC staff the means to modify the flight information relevant to the processes.

1.6.The system shall be capable of providing the ATC staff information about the status of relevant system information exchange processes.

2.RECORDING OF SYSTEM INFORMATION EXCHANGE DATA

2.1.System information exchange data shall be recorded by the air navigation service provider in a manner which permits the retrieval and display of the recorded data.

PART B:

REQUIREMENTS FOR MANDATORY PROCESSES SUPPORTED BY SYSTEM INFORMATION EXCHANGES

1.NOTIFICATION

1.1.Flight information concerned

1.1.1.The information subject to the Notification process shall include as a minimum:

- aircraft identification,
- SSR mode and code (if available),
- departure aerodrome,
- estimate data,
- destination aerodrome,
- number and type of aircraft,

- type of flight,
- equipment capability and status.

1.1.2.The content of the ‘equipment capability and status’ information shall include reduced vertical separation minima (hereinafter ‘RVSM’) and 8.33 KHz capability as a minimum.

1.1.3.The ‘equipment capability and status’ information may contain other items in accordance with the letters of agreement.

1.2.Rules of application

1.2.1.The notification process shall be performed at least once for each eligible flight planned to cross the boundary unless the flight is the subject of pre-departure notification and coordination process.

1.2.2.The eligibility criteria for cross boundary notification of flights shall be in accordance with the letters of agreement.

1.2.3.When the notification process cannot be performed by a bilateral agreed time prior to the initial coordination process it shall be subsumed by the initial coordination process.

1.2.4.When performed, the notification process shall precede the initial coordination process.

1.2.5.The notification process shall take place again each time there is a change to any of the following data prior to the initial coordination process:

- COP,
- expected SSR code at the transfer of control point,
- aerodrome of destination,
- type of aircraft,
- equipment capability and status.

1.2.6.If a discrepancy is identified between the transmitted data and corresponding data in the receiving system, or no such information is available, that would result in the need for corrective action on receipt of the following initial coordination data, the discrepancy shall be referred to an appropriate position for resolution.

1.3.Time criteria for the initiation of the notification process

1.3.1.The notification process shall be initiated a parameter number of minutes before the estimated time at the COP.

1.3.2.The notification parameter(s) shall be included in the letters of agreement between the ATC units concerned.

1.3.3.The notification parameter(s) may be defined separately for each of the coordination points.

2.INITIAL COORDINATION

2.1.Flight information concerned

2.1.1.The information subject to the initial coordination process shall include as a minimum:

- aircraft identification,
- SSR mode and code,
- departure aerodrome,
- estimate data,

- destination aerodrome,
- number and type of aircraft,
- type of flight,
- equipment capability and status.

2.1.2.The content of the ‘equipment capability and status’ information shall include RVSM and 8.33 KHz capability as a minimum.

2.1.3.The ‘equipment capability and status’ information may contain other items as bilaterally agreed by the letters of agreement.

2.2.Rules of application

2.2.1.The initial coordination process shall be performed for all eligible flights planned to cross the boundaries.

2.2.2.Eligibility criteria for cross boundary initial coordination of flights shall be in accordance with the letters of agreement.

2.2.3.Unless already manually initiated, the initial coordination process shall be automatically initiated at:

- a bilaterally agreed parameter time period before the estimated time at the coordination point, or
- the time at which the flight is at a bilaterally agreed distance from the coordination point,

in accordance with the letters of agreement.

2.2.4.The initial coordination process for a flight shall only be performed once unless the abrogation of coordination process is initiated.

2.2.5.Following an abrogation of coordination process, the initial coordination process may be initiated again with the same unit.

2.2.6.Completion of the initial coordination process including confirmation from the receiving unit shall be provided to the transferring unit — the flight is then considered ‘coordinated’.

2.2.7.Failure of the initial coordination process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the working position responsible for the coordination of the flight within the transferring unit.

2.2.8.The initial coordination information shall be made available at the appropriate working position in the receiving unit.

3.REVISION OF COORDINATION

3.1.Flight information concerned

3.1.1.The revision of coordination process shall ensure association with the flight previously coordinated.

3.1.2.Revision of coordination shall provide the following flight information if they have changed:

- SSR mode and code,
- estimated time and flight level,
- equipment capability and status.

3.1.3.If bilaterally agreed, the revision of coordination data shall provide the following if they have changed:

- coordination point,
- route.

3.2.Rules of application

3.2.1.The revision of coordination process may take place one or more times with the unit with which a flight is currently coordinated.

3.2.2.Revision of coordination process shall take place when:

- the estimated time over at the coordination point differs from that previously provided by more than a value bilaterally agreed,
- the transfer level(s), SSR code or equipment capability and status is different from that previously provided.

3.2.3.Where bilaterally agreed, revision of coordination process shall take place when there is any change in the following:

- coordination point,
- route.

3.2.4.Completion of the revision of coordination process including confirmation from the receiving unit shall be provided at the transferring unit.

3.2.5.Failure of the revision of coordination process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the working position responsible for the coordination of the flight within the transferring unit.

3.2.6.The revision of coordination process shall take place immediately following the relevant input or update.

3.2.7.The revision of coordination process shall be inhibited after the flight is at a bilaterally agreed time/distance from the transfer of control point in accordance with the letters of agreement.

3.2.8.The Revision of coordination information shall be made available at the appropriate working position in the receiving unit.

4.THE ABROGATION OF COORDINATION

4.1.Flight information concerned

4.1.1.The abrogation of coordination process shall ensure association with the previous notification or coordination process that is being cancelled.

4.2.Rules of application

4.2.1.The abrogation of coordination process shall take place with a unit for a coordinated flight when:

- the unit is no longer the next unit in the coordination sequence,
- the flight plan is cancelled in the sending unit and the coordination is no longer relevant,
- abrogation of coordination information is received from the previous unit in respect of the flight.

4.2.2.The abrogation of coordination process may take place with a unit for a notified flight when:

- the unit is no longer the next unit in the coordination sequence,
- the flight plan is cancelled in the sending unit and the coordination is no longer relevant,

- an abrogation of coordination is received from the previous unit in respect of the flight,
- the flight is delayed en-route and a revised estimate cannot be determined automatically.

4.2.3.Completion of the abrogation of coordination process including confirmation from the receiving unit shall be provided at the transferring unit.

4.2.4.Failure of the abrogation of coordination process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the working position responsible for the coordination of the flight within the transferring unit.

4.2.5.The abrogation of coordination information shall be made available at the appropriate working position in the notified unit or in the unit with which the coordination is cancelled.

5.BASIC FLIGHT DATA

5.1.Flight information concerned

5.1.1.The information subject to the basic flight data process shall provide as a minimum:

- aircraft identification,
- SSR mode and code.

5.1.2.Any additional information provided by the basic flight data process shall be subject to bilateral agreement.

5.2.Rules of application

5.2.1.The basic flight data process shall be performed automatically for each eligible flight.

5.2.2.The eligibility criteria for basic flight data shall be in accordance with the letters of agreement.

5.2.3.Completion of the basic flight data process including confirmation from the receiving unit shall be provided to the supplying unit.

5.2.4.Failure of the basic flight data process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the appropriate working position within the supplying unit.

6.CHANGE TO BASIC FLIGHT DATA

6.1.Flight information concerned

6.1.1.The Change to basic flight data process shall ensure association with the flight previously subject to a basic flight data process.

6.1.2.Any other information subject to the change to basic flight data process and the associated criteria for its provision shall be subject to bilateral agreement.

6.2.Rules of application

6.2.1.A change to basic flight data process shall only take place for a flight which has previously been notified by a basic flight data process.

6.2.2.A change to basic flight data process shall be initiated automatically in accordance with the bilaterally agreed criteria.

6.2.3.Completion of the change to basic flight data process including confirmation from the receiving unit shall be provided to the supplying unit.

6.2.4.Failure of the change to basic flight data process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the appropriate working position within the supplying unit.

6.2.5.The change to basic flight data information shall be made available at the appropriate working position in the receiving unit.

PART C:

REQUIREMENTS FOR OPTIONAL PROCESSES SUPPORTED BY SYSTEM INFORMATION EXCHANGES

1.PRE-DEPARTURE NOTIFICATION AND COORDINATION

1.1.Flight information concerned

1.1.1.The information subject to the pre-departure notification and coordination process shall include as a minimum:

- aircraft identification,
- SSR mode and code (if available),
- departure aerodrome,
- estimated take-off time or estimate data, as bilaterally agreed,
- destination aerodrome,
- number and type of aircraft.

1.1.2.The information subject to the pre-departure notification and coordination process from a terminal manoeuvring area (TMA) control unit or an ACC shall contain the following:

- type of flight,
- equipment capability and status.

1.1.3.The content of the ‘equipment capability and status’ information shall include RVSM and 8.33 KHz capability as a minimum.

1.1.4.The ‘equipment capability and status’ information may contain other items as bilaterally agreed by the letters of agreement.

1.2.Rules of Application

1.2.1.Pre-departure notification and coordination process shall take place one or more times for each eligible flight planned to cross the boundaries where the flight time from departure to the coordination point would not allow sufficient time for the initial coordination or notification processes to be executed.

1.2.2.Eligibility criteria for cross boundary pre-departure notification and coordination of flights shall be in accordance with the letters of agreement.

1.2.3.The pre-departure notification and coordination process shall take place again each time there is a change to any item of the data subject to the previous pre-departure notification and coordination process before departure.

1.2.4.Completion of the pre-departure notification and coordination process including confirmation from the receiving unit shall be provided at the transferring unit.

1.2.5.Failure of the pre-departure notification and coordination process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the working position responsible for the notification/coordination of the flight within the transferring unit.

1.2.6.The pre-departure notification and coordination information shall be made available at the appropriate working position in the notified unit.

2.CHANGE OF FREQUENCY

2.1.Flight information concerned

2.1.1.The information subject to the change of frequency process shall include as a minimum:

- aircraft identification.

2.1.2.The information subject to the change of frequency process shall include any of the following, if available:

- release indication,
- cleared flight level,
- assigned heading/track or direct clearance,
- assigned speed,
- assigned rate of climb/descent.

2.1.3.If bilaterally agreed, change of frequency data shall contain the following:

- current track position,
- instructed frequency.

2.2.Rules of application

2.2.1.The change of frequency process shall be manually initiated by the transferring controller.

2.2.2.Completion of the change of frequency process including confirmation from the receiving unit shall be provided at the transferring ATC unit.

2.2.3.Failure of the change of frequency process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the appropriate working position within the transferring ATC unit.

2.2.4.The change of frequency information shall be made available to the accepting controller without delay.

3.MANUAL ASSUMPTION OF COMMUNICATIONS

3.1.Flight information concerned

3.1.1.The information subject to the manual assumption of communications process shall include as a minimum the aircraft identification.

3.2.Rules of application

3.2.1.The manual assumption of communications process shall be initiated by the accepting unit when communication is established.

3.2.2.Completion of the manual assumption of communications process including confirmation from the transferring unit shall be provided at the accepting ATC unit.

3.2.3.Failure of the manual assumption of communication process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the appropriate working position within the accepting ATC unit.

3.2.4.The manual assumption of communications information shall be presented immediately to the controller in the transferring unit.

4.CROSSING INTENTION NOTIFICATION

4.1.Flight information concerned

4.1.1.The information subject to the crossing intention notification process shall include as a minimum:

- aircraft identification,
- SSR mode and code,
- number and type of aircraft,
- sector in charge identifier,
- crossing route including estimated times and flight levels for each point on the route.

4.2.Rules of application

4.2.1.The crossing intention notification process shall be initiated manually by the controller, or automatically as described in the letters of agreement.

4.2.2.Completion of the crossing intention notification process including confirmation from the notified unit shall be provided to the notifying unit.

4.2.3.Failure of the crossing intention notification process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the notifying unit.

4.2.4.The crossing intention notification information shall be made available at the appropriate working position in the notified unit.

5.CROSSING CLEARANCE REQUEST

5.1.Flight information concerned

5.1.1.The information subject to the crossing clearance request process shall include as a minimum:

- aircraft identification,
- SSR mode and code,
- number and type of aircraft,
- sector in charge identifier,
- crossing route including estimated times and flight levels for each point on the route.

5.1.2.If bilaterally agreed, a crossing clearance request shall contain the equipment capability and status.

5.1.3.The content of the ‘equipment capability and status’ information shall include RVSM capability as a minimum.

5.1.4.The ‘equipment capability and status’ information may contain other items as bilaterally agreed.

5.2.Rules of application

5.2.1.The crossing clearance request shall be initiated at the controller's discretion, in accordance with the conditions specified in the letters of agreement.

5.2.2.Completion of the crossing clearance request process including confirmation from the unit receiving the request shall be provided to the requesting unit.

5.2.3.Failure of the crossing clearance request process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the appropriate working position within the requesting unit.

5.2.4.The crossing clearance request information shall be made available at the appropriate working position in the unit receiving the request.

5.3.Operational reply

5.3.1.A crossing clearance request process shall be replied to by:

- an acceptance of the proposed route/airspace crossing details, or,
- a counter-proposal including different route/airspace crossing details as specified in section 6 below, or
- a rejection of the proposed route/airspace crossing details.

5.3.2.If an operational reply is not received within a bilaterally agreed time interval a warning shall be issued at the appropriate working position within the requesting unit.

6.CROSSING COUNTER-PROPOSAL

6.1.Flight information concerned

6.1.1.The crossing counter-proposal process shall ensure association with the flight previously subject to coordination.

6.1.2.The information subject to the crossing counter-proposal process shall include as a minimum:

- aircraft identification,
- crossing route including estimated times and flight levels for each point on the route.

6.2.Rules of application

6.2.1.The counter-proposal shall include a proposed new flight level and/or route.

6.2.2.Completion of the crossing counter-proposal process including confirmation from the original requesting unit shall be provided to the counter proposing unit.

6.2.3.Failure of the crossing counter-proposal process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the appropriate working position within the counter proposing unit.

6.2.4.The crossing counter-proposal information shall be made available at the appropriate working position in the original requesting unit.

6.3.Operational reply

6.3.1.The confirmation of the successful processing of the crossing counter-proposal information in the original requesting unit shall be followed by an operational reply from the original requesting unit.

6.3.2.The operational reply to a crossing counter-proposal shall be an acceptance or rejection as appropriate.

6.3.3.If an operational reply is not received within a bilaterally agreed time interval a warning shall be issued at the appropriate working position within the counter proposing unit.

7.CROSSING CANCELLATION

7.1.Flight information concerned

7.1.1.The crossing cancellation process shall ensure association with the previous notification or coordination process that is canceled.

7.2.Rules of application

7.2.1.A crossing cancellation process shall be initiated by the unit responsible for the flight when one of the following occurs:

- the flight previously notified by a basic flight data process will now not enter the airspace of the notified unit or is no longer of interest to the notified unit,
- the crossing will not be executed on the route expressed in the crossing notification information,
- the crossing will not be executed according to the conditions under negotiation or according to the conditions agreed after an airspace crossing dialogue.

7.2.2.A crossing cancellation process shall be triggered automatically or manually by a controller input in accordance with the letters of agreement.

7.2.3.Completion of the crossing cancellation process including confirmation from the notified/requested unit shall be provided at the cancelling unit.

7.2.4.Failure of the crossing cancellation process to confirm completion, within the applicable quality of service requirements, shall result in a warning at the appropriate working position within the cancelling unit.

7.2.5.The crossing cancellation information shall be made available at the appropriate working position in the notified/requested unit.

PART D:

REQUIREMENTS FOR PROCESSES SUPPORTING DATA LINK SERVICES

1. LOGON FORWARD

1.1. Flight information concerned

1.1.1. The information subject to the logon forward process shall include as a minimum:

- aircraft identification,
- departure aerodrome,

- destination aerodrome,
- logon type,
- logon parameters.

1.2. Rules of application

1.2.1. One logon forward process shall be performed for each data-link logged-on flight planned to cross the boundary.

1.2.2. The logon forward process shall be initiated at or as soon as possible after the earlier of the times determined from the following:

- a parameter number of minutes before the estimated time at the coordination point,
- the time at which the flight is at a bilaterally agreed distance from the coordination point,

in accordance with the letters of agreement.

1.2.3. Eligibility criteria for the logon forward process shall be in accordance with the letters of agreement.

1.2.4. The logon forward information shall be included with the corresponding flight information in the receiving unit.

1.2.5. The logged-on status of the flight may be displayed at the appropriate working position within the receiving unit.

1.2.6. Completion of the logon forward process, including confirmation from the receiving unit shall be provided to the transferring unit.

1.2.7. Failure of the logon forward process to confirm completion, within the applicable quality of service requirements, shall result in the initiation of an air-ground data link contact request to the aircraft.

2. NEXT AUTHORITY NOTIFIED

2.1. Flight information concerned

2.1.1. The information subject to the next authority notified process shall include as a minimum:

- aircraft identification,
- departure aerodrome,
- destination aerodrome.

2.2. Rules of application

2.2.1. One next authority notified process shall be performed for each eligible flight crossing the boundary.

2.2.2. The next authority notified process shall be initiated after the next data authority request with the aircraft has been acknowledged by the airborne system.

2.2.3. Following the successful processing of the next authority notified information the receiving unit shall initiate a controller pilot data link communication (CPDLC) start request with the aircraft.

2.2.4. If the next authority notified information has not been received within a bilaterally agreed parameter time, local procedures shall be applied by the receiving unit for the initiation of data link communications with the aircraft.

2.2.5. Completion of the next authority notified process, including confirmation from the receiving unit shall be provided to the transferring unit.

2.2.6. Failure of the next authority notified process to confirm completion, within the applicable quality of service requirements shall result in the initiation of local procedures in the transferring unit.

ANNEX II

Requirements concerning quality of service(referred to in Article 4)

1.Availability, reliability, data security and data integrity

1.1.The system information exchange facilities shall be available during the operational hours of the unit.

1.2.Any scheduled down-time periods shall be bilaterally agreed between the two units concerned.

1.3.The reliability for a system information exchange link shall be at least 99,86 %.

1.4.The integrity and security of information exchanged using system information exchange facilities shall be assured at the appropriate level in accordance with recognised practices.

2.Process times

2.1.The process times shall represent the interval between initiation of the process and the time when the required confirmation is available in the initiating unit.

2.2.The process times shall not include the operational replies where these are required.

2.3.The maximum process time before a warning is generated shall be bilaterally agreed.

ANNEX III

Safety requirements(referred to in Article 6)

1.The implementation of system information exchanges and the ground-ground voice communication links shall exclude as far as reasonably practicable the possibility of simultaneous failure.

2. The interoperability and performance requirements specified in paragraphs 3.2.4, 3.2.5, 4.2.3, 4.2.4, 5.2.3, 5.2.4, 6.2.3 and 6.2.4 of Annex I, Part B and 1.2.6, 1.2.7, 2.2.5 and 2.2.6 of Annex I, Part D shall also be considered as safety requirements.

3. For the revision of coordination, abrogation of coordination, basic flight data, change to basic flight data, logon forward and next authority notified processes, the quality of service requirements specified in Annex II shall also be considered as safety requirements.

ANNEX IV

PART A:

REQUIREMENTS FOR THE ASSESSMENT OF THE CONFORMITY OR SUITABILITY FOR USE OF CONSTITUENTS REFERRED TO IN ARTICLE 7

1.The verification activities shall demonstrate the conformity of constituents with the interoperability and performance, quality of service and safety requirements of this Regulation or their suitability for use whilst these constituents are in operation in the test environment.

2.The manufacturer shall manage the conformity assessment activities and shall in particular:

- determine the appropriate test environment,
- verify that the test plan describes the constituents in the test environment,
- verify that the test plan provides full coverage of applicable requirements,
- ensure the consistency and quality of the technical documentation and the test plan,
- plan the test organisation, staff, installation and configuration of test platform,
- perform the inspections and tests as specified in the test plan,
- write the report presenting the results of inspections and tests.

3.The manufacturer shall ensure that the constituents implementing information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination, integrated in the test environment meet the interoperability and performance, quality of service and safety requirements of this Regulation.

4.Upon satisfying completion of verification of conformity or suitability for use, the manufacturer shall under its responsibility draw up the EC declaration of conformity or suitability for use, specifying notably the requirements of this Regulation met by the constituent and its associated conditions of use in accordance with Annex III(3) of the interoperability Regulation.

PART B:

REQUIREMENTS FOR THE VERIFICATION OF SYSTEMS REFERRED TO IN ARTICLE 8(1)

1.The verification of systems shall demonstrate the conformity of these systems with the interoperability and performance, quality of service and safety requirements of this Regulation in a simulated environment that reflects the operational context of these systems.

2.The verification of systems implementing information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination shall be conducted in accordance with appropriate and recognised testing practices.

3.Test tools used for the verification of systems implementing information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination shall have appropriate functionalities.

4.The verification of systems implementing information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination shall produce the elements

of the technical file required by Annex IV(3) of the interoperability Regulation and the following elements:

- description of the implementation,
- the report of inspections and tests achieved before putting the system into service.

5.The air navigation service provider shall manage the verification activities and shall in particular:

- determine the appropriate simulated operational and technical environment reflecting the operational environment,
- verify that the test plan describes the integration of information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination in the system tested in a simulated operational and technical environment,
- verify that the test plan provides full coverage of the interoperability and performance, quality of service and safety requirements of this Regulation,
- ensure the consistency and quality of the technical documentation and the test plan,
- plan the test organisation, staff, installation and configuration of the test platform,
- perform the inspections and tests as specified in the test plan,
- write the report presenting the results of inspections and tests.

6.The air navigation service provider shall ensure that the implementation of information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination, integrated in systems operated in a simulated operational environment meets the interoperability and performance, quality of service and safety requirements of this Regulation.

7.Upon satisfying completion of verification of compliance, air navigation service providers shall draw up the EC declaration of verification of system and submit it to the national supervisory authority together with the technical file as requested by Article 6 of the interoperability Regulation.

PART C:

REQUIREMENTS FOR THE VERIFICATION OF SYSTEMS REFERRED TO IN ARTICLE 8(2)

1.The verification of systems shall demonstrate the conformity of these systems with the interoperability and performance, quality of service and safety requirements of this Regulation in a simulated environment that reflects the operational context of these systems.

2.The verification of systems implementing information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination shall be conducted in accordance with appropriate and recognised testing practices.

3.Test tools used for the verification of systems implementing information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination shall have appropriate functionalities.

4.The verification of systems implementing information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination shall produce the elements of the technical file required by Annex IV(3) of the interoperability Regulation and the following elements:

- description of the implementation,
- the report of inspections and tests achieved before putting the system into service.

5.The air navigation service provider shall determine the appropriate simulated operational and technical environment reflecting the operational environment and shall have verification activities performed by a notified body.

6.The notified body shall manage the verification activities and shall in particular:

- verify that the test plan describes the integration of information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination in the system tested in a simulated operational and technical environment,
- verify that the test plan provides full coverage of the interoperability and performance, quality of service and safety requirements of this Regulation,
- ensure the consistency and quality of the technical documentation and the test plan,
- plan the test organisation, staff, installation and configuration of the test platform,
- perform the inspections and tests as specified in the test plan,
- write the report presenting the results of inspections and tests.

7.The notified body shall ensure that the implementation of information exchanges supporting the process of notification, coordination and transfer of flights and the process of civil-military coordination, integrated in systems operated in a simulated operational environment meets the interoperability and performance, quality of service and safety requirements of this Regulation.

8.Upon satisfying completion of verification tasks, the notified body shall draw up a certificate of conformity in relation to the tasks it carried out.

9.Then, the air navigation service provider shall draw up the EC declaration of verification of system and submit it to the national supervisory authority together with the technical file as requested by Article 6 of the interoperability Regulation.

ANNEX V

Conditions referred to in Article 8

1.The air navigation service provider must have in place reporting methods within the organisation which ensure and demonstrate impartiality and independence of judgement in relation to the verification activities.

2.The air navigation service provider must ensure that the personnel involved in verification processes, carry out the checks with the greatest possible professional integrity and the greatest possible technical competence and are free of any pressure and incentive, in particular of a financial type, which could affect their judgment or the results of their checks, in particular from persons or groups of persons affected by the results of the checks.

3.The air navigation service provider must ensure that the personnel involved in verification processes, have access to the equipment that enables them to properly perform the required checks.

4.The air navigation service provider must ensure that the personnel involved in verification processes, have sound technical and vocational training, satisfactory knowledge of the requirements of the verifications they have to carry out, adequate experience of such operations, and the ability required to draw up the declarations, records and reports to demonstrate that the verifications have been carried out.

5.The air navigation service provider must ensure that the personnel involved in verification processes, are able to perform their checks with impartiality. Their remuneration shall not depend on the number of checks carried out, or on the results.