EUROPEAN ORGANISATION FOR THE SAFETY OF AIR NAVIGATION

EUROCONTROL

Enclosure1

Brussels, XX.XX.2011
C(2011) XXX

Draft

COMMISSION REGULATION (EU) No …/..

DD/MM/YYYY

laying down requirements for air-ground voice channels spacing for the single European sky and repealing Regulation (EC) 1265/2007

(Text with EEA relevance)

(Draft implementing rule prepared by EUROCONTROL in response to a European Commission's mandate)

EN

Draft

COMMISSION REGULATION (EU) No …/..

of […]

laying down requirements for air-ground voice channels spacing for the single European sky and repealing Regulation (EC) 1265/2007

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the functioning of the European Union,

Having regard to the 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] amended by Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009[2] and in particular Article 3(1) thereof,

Having regard to Regulation (EC) No 549/2004 of the European Parliament and the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation)[3]amended by Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009, and in particular Article 8(1) thereof,

Having regard to Regulation (EC) No 550/2004 of the European Parliament and the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation)[4] amended by Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009,

Whereas:

(1) *Eurocontrol has been mandated in accordance with Article 8(1) of Regulation (EC) No 549/2004 amended by Regulation (EC) No 1070/2009 to develop requirements for the coordinated introduction of air-ground voice communications based on reduced 8,33 kHz channel spacing.*

(2) The first phase of the mandate lead to the publication of the Regulation (EC) No 1265/2007 laying down requirements on air-ground voice channel spacing for the single European sky. The subject matter and scope of Regulation No 1265/2007 was the deployment of 8,33 kHz radio communications in the airspace above Flight Level 195.

[1] OJ L96,31.3.2004, p.26
[2] OJ L 300, 14.11.2009, p.34
[3] OJ L 96, 31.3.2004, p.1
[4] OJ L 96, 31.3.2004, p.10

(3) Specific provisions of Regulation (EC) No 1265/2007, mainly referring to procedures, were already applicable in the airspace below Flight Level 195.

(4) Previous conversions to 8,33 kHz channel spacing have reduced frequency congestion, but not eliminated it. Many States, mainly Central European, find it increasingly difficult to satisfy the demand for new VHF assignments.

(5) The only realistic, validated option to solve the medium to long term VHF congestion problem is the further deployment of air-ground voice communications based on 8,33 kHz channel spacing.

(6) Inability to meet the future demand for frequencies will delay or make impossible airspace improvements to increase capacity, leading to increased delays with significant costs.

(7) For at least the next two decades VHF voice communications will be the main means of communication for air-ground and air-air voice communications.

(8) The investment made as a result of the existing Regulation (EC) No 1265/2007, can substantially reduce the cost of deployment of 8,33 kHz channel spacing in the airspace below Flight Level 195.

(9) Since the equipage of general aviation VFR aircraft with 8,33 kHz capable radios will have a considerable cost with limited operational benefits for those aircraft, a seven years period for the retrofit of all aircraft and the increase of the number of frequencies dedicated to sports aviation are benefits to general aviation that would increase the acceptability of the 8.33 radios equipage..

(10) The European Organisation for Civil Aviation Equipment (Eurocae) specification Eurocae 23B should be considered as sufficient means of compliance with regard to the capabilities of the airborne equipment.

(11) Airborne equipment compliant with the Eurocae 23C specification provides improved communications characteristics therefore it should be considered as a preferred option whenever possible.

(12) *This Regulation should not cover military operations and training as referred to in Article 1(2) of Regulation (EC) No 549/2004 amended by Regulation (EC) No 1070/2009.*

(13) *With a view to maintaining or enhancing existing safety levels of operations, Member States should be required to ensure that the parties concerned carry out 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 interoperability and performance requirements.*

(14) *In accordance with Article 3(3)(d) of Regulation (EC) No 552/2004 amended by Regulation (EC) No 1070/2009, implementing rules for interoperability should describe the specific conformity assessment procedures to be used to assess the conformity or suitability for use of constituents as well as the verification of systems.*

(15) *The level of maturity of the market for the constituents to which this Regulation applies is such that their conformity or suitability for use can be satisfactorily assessed through internal production control, using procedures based on Module A in the Annex II of Decision 768/2008/EC of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC.*

(16) The Directive 1999/5/EC (the R&TTE Directive) ensures the efficient use of radio spectrum, the provisions of this Regulation should ensure the fit-for-purpose elements of communication systems, their constituents and associated procedures.

(17) This Regulation addresses the deployment of 8,33 kHz channel spacing in the entire European airspace. Due to its limited scope, Regulation (EC) No 1265/2007 laying down requirements on air-ground voice channel spacing for the single European sky should therefore be repealed.

(18) *The measures provided for in this Regulation are in accordance with the opinion of the Single Sky Committee established by Article 5(1) of Regulation (EC) No 549/2004* amended by Regulation (EC) No 1070/2009.

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter and scope

1. This Regulation lays down requirements for the coordinated introduction of air-ground voice communications based on 8,33 kHz channel spacing.

2. This Regulation shall apply to all communications systems operating in the aeronautical mobile radio communication service band 117,975-137 MHz, their constituents and associated procedures.

3. This Regulation shall apply to flight data processing systems serving air traffic control units providing services to general air traffic, their constituents and associated procedures.

4. This Regulation shall apply to all flights operating as general air traffic, within the airspace of the ICAO EUR region where Member States are responsible for provision of air traffic services in accordance with Regulation (EC) No 550/2004 of the European Parliament and of the Council amended by Regulation (EC) No 1070/2009.

5. In the framework of Article 4, the conversion requirements shall not apply to the following assignments that will remain in 25 kHz channel spacing:

a. The emergency Frequency (121,5 MHz);

b. The VHF data link frequencies (136.725, 136.775, 136.875, 136.975, 136.825 and 136.925);

c. the Operations Control (OPC) frequency assignments 131,525; 131,725 and 131,825 reserved for ACARS data link;

d. assignments where 25 kHz offset carrier system is utilised.

6. In the framework of Article 4, the 8.33 kHz channel capability shall not be required from radios that operate exclusively in one or more of the assignments that will remain in 25 kHz channel spacing as identified in paragraph 5.

Article 2

Definitions

1. For the purpose of this Regulation, the definitions set out in Regulation (EC) No 549/2004 amended by Regulation (EC) No 1070/2009 shall apply.

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

(1) *'8,33 kHz channel spacing' means a separation of 8,33 kHz between adjacent channels;*

(2) *'channel' means a numerical designator used in conjunction with voice communication equipment tuning, which allows unique identification of the applicable radio communication frequency and channel spacing;*

(3) *'air traffic control unit' (hereinafter ATC unit) means variously area control centre, approach control unit or aerodrome control tower;*

(4) *'flights operated under visual flight rules' (VFR flights) means any flights operated under visual flight rules as defined in Annex 2 to the 1944 Chicago Convention on International Civil Aviation;*

(5) 'VHF assignments' means the assignment of a VHF frequency to an aeronautical service for the purpose of operating communication equipment;

(6) 'offset-carrier system' means a system used in situations where the desired radio coverage cannot be ensured by a single ground transmitter and receiver and where, in order to minimise the interference problems, the signals from two or more ground transmitters are offset from the main carrier frequency;

(7) 'designated operational coverage' means the area in which a particular service is provided and in which the service is afforded frequency protection;

(8) *'operator' means a person, organisation or enterprise engaged in or offering to engage in an aircraft operation;*

(9) 'working position' means the furniture and technical equipment at which a member of the air traffic services staff under takes the tasks associated with their operational responsibilities;

(10) 'radio' means any electronic device designed to transmit and/or receive transmissions in the aeronautical mobile communications band.

(11) *'radio-telephony' means a form of radio-communication primarily intended for the exchange of information in the form of speech;*

(12) 'radio upgrade' means the replacement of a radio by a radio of a different model or part number

(13) 'user of voice communication systems' means a person, organisation or enterprise that operates a radio that can receive or transmit in the frequencies

within the aeronautical mobile radio communication service band 117,975-137 MHz

(14) 'letter of agreement' means an agreement between two adjacent ATC units that specifies how their respective ATC responsibilities are to be coordinated;

(15) 'State aircraft' means any aircraft used by military, customs or police organisation;

(16) 'transport-type State aircraft' means fixed wing State aircraft that are designed for the purpose of transporting persons and/or cargo.

(17) '8,33 conversion' means the replacement in the ICAO COM2 table of a VHF assignment using 25 kHz channel spacing by another one using 8,33 kHz channel spacing.

Article 3

Interoperability and Performance requirements

1. Without prejudice to Article 5, operators shall ensure that their aircraft operating flights above FL 195 are equipped with radio equipment with 8,33 kHz channel spacing capability.

2. In the framework of the first paragraph of Article 4 of Commission Regulation (EC) No 730/2006, Member States may issue derogations from airborne carriage obligations laid down in paragraph 1 for flights operated under visual flight rules.

3. Member States shall ensure that for sectors with a lower level at or above FL 195 all voice VHF assignments are converted to 8,33 kHz channel spacing.

4. If under exceptional circumstances it is not possible to comply with paragraph 3, Member States shall communicate the reasons to the Commission.

5. Manufacturers of VHF radios, or their authorised representatives established in the Community, shall ensure that after (12 months after the date of publication of the rule) all radios placed on the market on the market, are 8,33 kHz channel spacing capable.

Comment: The final text will have a specific date based on the publication date.

6. Member States shall ensure that all radio equipment put into service after (12 months after the date of publication of the rule), includes the 8,33 kHz channel spacing capability.

7. Without prejudice to Article 5, all users of voice communication systems shall ensure that after (12 months after the date of publication of the rule) if their radios are upgraded, the new radios have the 8,33 kHz channel spacing capability.

8. Without prejudice to Article 5, operators of aircraft flying under Instrument Flight Rules in airspace class A, B or C of the Member States identified in Annex I shall ensure that, by 1 January 2014, these aircraft are equipped with radio equipment with 8,33 kHz channel spacing capability.

9. Member States identified in Annex I shall implement by 31 December 2014 a number of new 8,33 kHz conversions equivalent to at least 25% of the total State 25 kHz ACC

assignments as identified in the Supplement-2 COM of the European Region Air Navigation Plan, Volume II, FASID, Part IV-CNS (ICAO Doc 7754) of December 2010.

10. The total number of State 25 kHz ACC assignments identified in Paragraph 9 shall not take into account:

(a) assignments where 25 kHz offset carrier system is utilised,

(b) assignments that stay in 25 kHz as a result of a safety requirement,

(c) 25 kHz assignments used to accommodate State Aircraft,

11. Member States identified in Annex I shall communicate to the Commission, by 31 December 2012, the number of conversions achievable according with paragraph 9.

12. If the 25% target identified in paragraph 10 can not be achieved, in the communication to the Commission, the Member States shall provide the justification for the impossibility to achieve the 25% target and propose an alternative date by when those conversions can be performed.

13. The communication to the Commission shall also contain the assignments for which conversion is not feasible with the justification for the unfeasibility of the conversion.

14. Member States identified in Annex I shall ensure that after 31 December 2014, all Operations Control (OPC) frequency assignments published in the COM 2 table are 8,33 kHz channel spacing assignments.

15. Without prejudice to Article 5, Member States shall ensure that by 1 January 2018 all radios have the 8,33 kHz channel spacing capability with the exception of radios operated by Air Navigation Service Providers.

16. Member States shall ensure that, by 31 December 2018, all frequency assignments are converted to 8,33 kHz channel spacing.

17. Paragraph 16 shall not apply for:

(a) assignments that stay in 25 kHz as a result of a safety requirement,

(b) 25 kHz assignments used to accommodate State Aircraft,

18. Without prejudice to paragraph 17, when particular circumstances prevent Member States to comply with paragraph 16, they shall communicate to the Commission, by 1 July 2018, detailed information justifying the need for exemptions.

19. The Commission shall examine the request for exemption referred to in paragraph 18 and, following consultation with the parties concerned, shall adopt a decision in accordance with the procedure referred to in Article 5(3) of Regulation (EC) No 549/2004 amended by Regulation (EC) 1070/2009.

20. In addition to 8,33 kHz channel spacing capability, the equipment referred to in paragraphs 1, 5, 6, 7, 8 and 15 shall be able to tune to 25 kHz spaced channels and to operate in an environment which uses offset-carrier frequencies.

21. Users of installations, portable and handheld 8,33 kHz voice communication systems used on the ground shall ensure that the performance of these installations, portable and handheld systems comply with the ICAO standards specified in Annex II(1).

22. Users of ground installations, portable and handheld 8,33 kHz voice communication systems used on the ground shall ensure that the performance of the transmitter/receiver ground constituent installed within these installations, portable and handheld systems comply with the ICAO standards specified in Annex II(1) with regard to the modulation and effective acceptance bandwidth.

23. Users of airborne installations, portable or handheld 8,33 kHz voice communication systems shall ensure that the performance of these installations, portable and handheld systems comply with the ICAO standards specified in Annex II(2).

24. Air navigation service providers shall ensure that their 8,33 kHz voice communication systems allow an operationally acceptable voice communication between controllers and pilots within the designated operational coverage.

25. Member States shall take all the necessary measures to ensure that appropriate VHF assignments are notified to air navigation service providers.

26. Air navigation service providers shall implement the VHF assignments referred to in paragraph 25.

27. Air navigation service providers shall implement the notification and initial co-ordination processes in their flight data processing systems in accordance with Commission Regulation (EC) No 1032/2006 as follows:

(a) the information about the 8,33 kHz capability of a flight shall be transmitted between ATC units;

(b) the information about the 8,33 kHz capability of a flight shall be made available at the appropriate working position;

(c) the controller shall have the means to modify the information about the 8,33 kHz capability of a flight.

Article 4

Associated procedures

1 Air navigation service providers and operators shall ensure that all six digits of the numerical designator are used to identify the transmitting channel in VHF radio-telephony communications, except in the case of both the fifth and sixth digits being zeros, in which case only the first four digits shall be used.

2 Air navigation service providers and operators shall ensure that their air-ground voice communication procedures are in accordance with the ICAO provisions specified in Annex II (3).

3 Air navigation service providers shall ensure that the procedures applicable to aircraft equipped with radio equipment with 8,33 kHz channel spacing capability and aircraft which are not equipped with such equipment are specified in the letters of agreement between Air Traffic Control units.

4 All Operators and agents acting on their behalf shall ensure that the letter Y is inserted in item 10 of the flight plan for aircraft equipped with radio equipment with 8,33 kHz channel spacing capability.

5 Until 15 November 2012, all Operators and agents acting on their behalf shall ensure that when planning to fly in airspace requiring the carriage of radios with the 8,33 kHz channel spacing capability, the indicator STS/EXM833 is included in item 18 of the flight plan for aircraft not equipped but which have been granted exemption from the mandatory carriage equipment.

6 From 15 November 2012 all Operators and agents acting on their behalf shall ensure that when planning to fly in airspace requiring the carriage of radios with the 8,33 kHz channel spacing capability, the indicator EUR/EXM833 is included in item 18 of the flight plan for aircraft not equipped but which have been granted exemption from the mandatory carriage equipment.

7 In the case of a change in the 8,33 kHz capability status for a flight, the operators or the agents acting on their behalf shall send a modification message to IFPS with the appropriate indicator inserted in the relevant item.

8 Member States shall take the necessary measures to ensure that IFPS processes and distributes the information on the 8,33 kHz capability received in the flight plans.

Article 5

State aircraft

1 Member States shall ensure that transport-type State aircraft operating flights above FL 195 are equipped with radio equipment with 8,33 kHz channel spacing capability.

2 When procurement constraints prevent compliance with paragraph 1, Member States shall ensure that transport-type State aircraft operating flights above FL 195 are equipped with radio equipment with 8,33 kHz channel spacing capability not later than 31 December 2012.

3 Member States shall ensure that non-transport-type State aircraft operating flights above FL 195 are equipped with radio equipment with 8,33 kHz channel spacing capability.

4 Member States may allow non-compliance with paragraph 3 due to:

(a) Compelling technical or budgetary constraints;

(b) Procurement constraints.

5 When procurement constraints prevent compliance with paragraph 3, Member States shall ensure that non-transport-type State aircraft operating flights above FL 195 are equipped with radio equipment with 8,33 kHz channel spacing capability not later than 31 December 2015.

6 Member States shall ensure that new State aircraft entering into service after 1 January 2014 are equipped with radio equipment with 8,33 kHz channel spacing capability.

7 Member States shall ensure that after 1 January 2014, when the radios installed on-board the State aircraft are upgraded, the new radios have the 8,33 kHz channel spacing capability.

8 Member States shall ensure that all State aircraft are equipped with radio equipment with 8,33 kHz channel spacing capability by 31 December 2018 at the latest.

9 Without prejudice to national procedures for the communication of information on State aircraft, Member States shall communicate to the Commission by 30 June 2017 the list of State aircraft that cannot be equipped with 8.33 kHz channel spacing capable radio equipment according with paragraph 8, together with the justification for non-equipage, in the cases of:

(a) compelling technical reasons or budgetary constraints;

(b) procurement constraints.

10 When procurement constraints prevent compliance with paragraph 8, Member States shall also communicate to the Commission by 30 June 2017 at the latest the date by which the aircraft concerned will be equipped with radio equipment with 8.33 kHz channel spacing capability. This date shall not be later than 31 December 2020.

11 Paragraph 8 shall not apply for State aircraft that will be withdrawn from the operational service by 31 December 2025.

12 Air traffic service providers shall ensure that the State aircraft not equipped with radio equipment with 8,33 kHz channel spacing capability can be accommodated, provided that they can be safely handled within the capacity limits of the air traffic management system on UHF or 25 kHz VHF assignments.

13 Member States shall publish the procedures for the handling of State aircraft which are not equipped with radio equipment with 8,33 kHz channel spacing capability in national aeronautical information publications.

14 Air traffic service providers shall communicate on an annual basis to the Member State that has designated them, their plans for the handling of State aircraft which are not equipped with radio equipment with 8,33 kHz channel spacing capability defined taking into account the capacity limits associated with the procedures referred to in paragraph 14.

Article 6

Safety requirements

1. Member States shall take the necessary measures to ensure that any changes to the existing systems referred to in Article 1(2) 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 requirements specified in Annex III shall be taken into consideration as a minimum.

Article 7

Conformity or suitability for use of constituents

1. Without prejudice to paragraph 2, before issuing an EC declaration of conformity or suitability for use referred to in Article 5 of Regulation (EC) No 552/2004 amended by Regulation (EC) No 1070/2009, manufacturers of constituents of the systems referred to in Article 1(2) shall assess the conformity or suitability for use of these constituents in compliance with the requirements set out in Annex IV, Part A, to this Regulation.

2. A certificate issued in accordance with Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, where it applies to constituents, shall be considered, as an EC declaration of conformity or suitability for use, if it includes a demonstration of compliance with the applicable interoperability, performance and safety requirements of this Regulation.

Article 8

Verification of systems

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

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). This verification shall be conducted in compliance with the requirements set out in Annex IV, Part D.

3. A certificate issued in accordance with Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, where it applies to systems, shall be considered, as an EC declaration of verification, if it includes a demonstration of compliance with the applicable interoperability, performance and safety requirements of this Regulation.

Article 9

Additional requirements

1. Air navigation service providers shall ensure that all related personnel are made duly aware of the requirements laid down in this Regulation and that they are adequately trained for their job functions.

2. Member States shall take the necessary measures to ensure that the personnel operating the IFPS involved in flight planning are made duly aware of the requirements laid down in this Regulation and that they are adequately trained for their job functions.

3. Air navigation service providers shall:

(a) develop and maintain operations manuals containing the necessary instructions and information to enable all related personnel to apply this Regulation;

(b) ensure that the manuals referred to in point (a) are accessible and kept up to date and that their update and distribution are subject to appropriate quality and documentation configuration management;

(c) ensure that the working methods and operating procedures comply with this Regulation.

4. Member States shall take the necessary measures to ensure that the centralised flight planning processing and distribution service:

(a) develops and maintains operations manuals containing the necessary instructions and information to enable all related personnel to apply this Regulation;

(b) ensures that the manuals referred to in point (a) are accessible and kept up to date and that their update and distribution are subject to appropriate quality and documentation configuration management;

(c) ensures that the working methods and operating procedures comply with this Regulation.

5. Operators identified in Article 3 shall take the necessary measures to ensure that the personnel operating radio equipment are made duly aware of this Regulation, that they are adequately trained to use this equipment and that instructions are available in the cockpit where feasible.

6. *Member States shall take the necessary measures to ensure compliance with this Regulation including the publication of relevant information in the national aeronautical publications.*

Article10

Repeals

1. Regulation (EC) No 1265/2007 is hereby repealed.

Article11

Entry into force and application

1. This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

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

ANNEX I

Member States referred to in Article 3

1. The Member States referred to in Article 3(8), 3(9), 3(11) and 3(14) shall include the following States:
   (a) Austria;
   (b) France;
   (c) Germany;
   (d) Hungary;
   (e) Ireland;
   (f) Italy;
   (g) Luxembourg
   (h) The Netherlands;
   (i) United Kingdom;

ANNEX II

Standards and provisions referred to in Article 3

1. Chapter 2 ‘Aeronautical Mobile Service’, Section 2.1 ‘Air-ground VHF communication system characteristics’ and Section 2.2 ‘System characteristics of the ground installations’ of ICAO Annex 10, Volume III, Part 2 (Second Edition — July 2007 incorporating Amendment No 85).
2. Chapter 2 ‘Aeronautical Mobile Service’, Section 2.1 ‘Air-ground VHF communication system characteristics’, Section 2.3.1 ‘Transmitting function’ and Section 2.3.2 ‘Receiving function’ excluding sub-section 2.3.2.8 ‘VDL — Interference Immunity Performance’ of ICAO Annex 10, Volume III, Part 2 (Second Edition — July 2007 incorporating Amendment No 85).
3. Section 12.3.1.4 ‘8,33 kHz channel spacing’ of ICAO PANS-ATM Doc. 4444 (15th Edition – 2007 incorporating Amendment No 2).

ANNEX III

Requirements referred to in Article 6

1. The interoperability and performance requirements specified in Articles 3(20), (21), (22), (23), (24), (25), (26) and (27).
2. The associated procedures' requirements specified in Articles 4(1), (2), (3), (4), (5), (6), (7) and (8).
3. The State aircraft requirements specified in Articles 5(11) and (12).
4. The requirements supporting compliance specified in Articles 9(1), (2), (5) and (6).
5. Member States shall ensure that 25 to 8,33 kHz conversions are operated for a trial period of an appropriate duration, during which time safe operation is verified, prior to coordination in the Table COM2 of ICAO Doc 7754.
6. Member States shall ensure that 25 to 8,33 kHz conversions are made respecting the ICAO frequency planning criteria described in Part II — 'VHF Air-Ground Communications Frequency Assignment Planning Criteria' of the EUR Frequency Management Manual — ICAO EUR Doc 011.
7. Air navigation service providers shall ensure that procedures for handling non-8.33 kHz equipped aircraft through 8.33 kHz airspaces are published and applied as appropriate.
8. Air navigation service providers and/or Airport Authorities shall ensure that procedures for handling non-8.33 kHz equipped vehicles through airport areas using 8.33 kHz are published and applied as appropriate
9. Member States which convert frequency assignments to 8.33 kHz in <u>any</u> part of their airspace shall:
    I. ensure that operators of aircraft flying in such airspace are informed that these aircraft must be equipped with radio equipment with 8.33 kHz channel spacing,
    II. perform a local safety assessment prior to the conversion that takes into account all the traffic expected to cross that airspace and the potential issues arising from the VCS in operation in all surrounding airspace.

ANNEX IV

PART A

REQUIREMENTS FOR THE ASSESSMENT OF THE CONFORMITY OR SUITABILITY FOR USE OF CONSTITUENTS REFERRED TO IN ARTICLE 7.1

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

2. *The application by the manufacturer of the module described in Part B shall be considered as an appropriate conformity assessment procedure to ensure and declare the compliance of constituents. Equivalent or more stringent procedures are also authorised.*

PART B

INTERNAL PRODUCTION CONTROL MODULE

1. *This module describes the procedure whereby the manufacturer or his authorised representative established within the Community who carries out the obligations laid down in paragraph 2, ensures, and declares that the constituents concerned satisfy the requirements of this Regulation. The manufacturer or his authorised representative established within the Community must draw up a written declaration of conformity or suitability for use in accordance with Annex III(3) to Regulation (EC) No 552/2004 amended by Regulation (EC) No 1070/2009.*

2. *The manufacturer must establish the technical documentation described in paragraph 4 and he or his authorised representative established within the Community must keep it for a period ending at least 10 years after the last constituents has been manufactured at the disposal of the relevant national supervisory authorities for inspection purposes and at the disposal of the air navigation service providers that integrate these constituents in their systems. The manufacturer or its authorised representative established within the Community shall inform the Member States where and how the above technical documentation can be made available.*

3. *Where the manufacturer is not established within the Community, he shall designate the person(s) who place(s) the constituents on the Community market. These person(s) shall inform the Member States where and how the technical documentation can be made available.*

4. *Technical documentation must enable the conformity of the constituents with the requirements of this Regulation to be assessed. It must, as far as relevant for such assessment, cover the design, manufacture and operation of the constituents.*

5. *The manufacturer or his authorised representative must keep a copy of the declaration of conformity or suitability for use with the technical documentation.*

PART C

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

1. *The verification of systems identified in Article 1(2) shall demonstrate the conformity of these systems with the interoperability, performance and safety requirements of this Regulation in an assessment environment that reflects the operational context of these systems. In particular:*

   – *the verification of communication systems shall demonstrate that 8,33 kHz channel spacing is in use for the VHF voice communications in accordance with Article 3 and that the performance of the 8,33 kHz voice communication systems complies with Article 3(21),*

   – *the verification of systems for flight data processing shall demonstrate that the functionality described in Article 3(27) is properly implemented.*

2. *The verification of systems identified in Article 1(2) shall be conducted in accordance with appropriate and recognised testing practices.*

3. *Test tools used for the verification of systems identified in Article 1(2) shall have appropriate functionalities.*

4. *The verification of systems identified in Article 1(2) shall produce the elements of the technical file required by Annex IV(3) to Regulation (EC) No 552/2004 amended by Regulation (EC) No 1070/2009 including 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 operational and technical assessment environment reflecting the operational environment,*

   – *verify that the test plan describes the integration of systems identified in Article 1(2) in an operational and technical assessment environment,*

   – *verify that the test plan provides full coverage of the applicable interoperability, performance 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 systems identified in Article 1(2) operated in an operational assessment environment meet the interoperability, performance 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 required by Article 6 of Regulation (EC) No 552/2004 amended by Regulation (EC) No 1070/2009.*

PART D

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

1. *The verification of systems identified in Article 1(2) shall demonstrate the conformity of these systems with the interoperability, performance and safety requirements of this Regulation in an assessment environment that reflects the operational context of these systems. In particular:*

   – *the verification of communication systems shall demonstrate that 8,33 kHz channel spacing is in use for the VHF voice communications in accordance with Article 3 and that the performance of the 8,33 kHz voice communication systems complies with Article 3(21),*

   – *the verification of systems for flight data processing shall demonstrate that the functionality described in Article 3(28) is properly implemented.*

2. *The verification of systems identified in Article 1(2) shall be conducted in accordance with appropriate and recognised testing practices.*

3. *Test tools used for the verification of systems identified in Article 1(2) shall have appropriate functionalities.*

4. *The verification of systems identified in Article 1(2) shall produce the elements of the technical file required by Annex IV(3) to Regulation (EC) No 552/2004 amended by Regulation (EC) No 1070/2009 including 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 operational and technical assessment 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 systems identified in Article 1(2) in an operational and technical assessment environment,*

- *verify that the test plan provides full coverage of the applicable interoperability, performance 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 systems identified in Article 1(2) operated in an operational assessment environment meet the interoperability, performance 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 required by Article 6 of Regulation (EC) No 552/2004 amended by Regulation (EC) No 1070/2009.*

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 judgement 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 of such checks.*