

REGULATION (EC) No 1108/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 21 October 2009

amending Regulation (EC) No 216/2008 in the field of aerodromes, air traffic management and air navigation services and repealing Directive 2006/23/EC

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 80(2) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee ⁽¹⁾,

Having regard to the opinion of the Committee of the Regions ⁽²⁾,

Acting in accordance with the procedure laid down in Article 251 of the Treaty ⁽³⁾,

Whereas:

(1) In its communication of 15 November 2005 to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions entitled 'Extending the tasks of the European Aviation Safety Agency — an agenda for 2010', the Commission announced its intention to progressively extend the tasks of the European Aviation Safety Agency (the Agency), with a view towards a 'total system approach', to aerodrome/airport safety and interoperability, air navigation services (ANS) and air traffic management (ATM).

(2) The continuous growth of aviation in Europe leads to many challenges, in particular regarding the key safety factors of aerodromes and ATM/ANS. Therefore, necessary risk mitigation measures need to be established to ensure safety through a harmonised, holistic regulatory approach across the Member States.

(3) The achievements of the single European sky initiative need to be complemented by the harmonised safety element to be applied to aerodromes and ATM/ANS. To this end, the appropriate safety regulatory framework should also be developed with regard to the deployment of new technologies in this field.

(4) The Community should lay down, in line with the Standards and Recommended Practices set by the Convention on International Civil Aviation, signed in Chicago on 7 December 1944 (the Chicago Convention), essential requirements applicable to aeronautical products, parts and appliances, aerodromes and the provision of ATM/ANS; essential requirements applicable to persons and organisations involved in the operation of aerodromes and in the provision of ATM/ANS; and essential requirements applicable to persons and products involved in the training and medical assessment of air traffic controllers. The Commission should be empowered to develop the necessary related implementing rules.

(5) Taking into account that services consisting in the origination and processing of data and formatting and delivering data for the purpose of air navigation are different from ANS services as defined in 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) ⁽⁴⁾, the Commission should develop specific requirements adapted to such services.

(6) It would not be appropriate to subject all aerodromes to common rules. In particular, aerodromes which are not open to public use and aerodromes mainly used for recreational flying or serving commercial air transport other than in accordance with instrument flight procedures and with paved runways of less than 800 metres, should remain under the regulatory control of the Member States, without any obligation under this Regulation on other Member States to recognise such national arrangements. However, proportionate measures should be taken by Member States to increase generally the level of safety of recreational aviation and of all commercial air transport. The Commission will re-examine in due time, extending the scope of application to aerodromes currently excluded in a modular manner, and taking full account of the impact this might have on such aerodromes.

⁽¹⁾ OJ C 182, 4.8.2009, p. 50.

⁽²⁾ OJ C 120, 28.5.2009, p. 52.

⁽³⁾ Opinion of the European Parliament of 25 March 2009 (not yet published in the Official Journal) and Council Decision of 7 September 2009.

⁽⁴⁾ OJ L 96, 31.3.2004, p. 1.

- (7) Taking into account the large variety of aerodromes and their highly individual infrastructures and environments, common aerodrome safety rules should provide for the necessary flexibility for customised compliance, through an adequate balance between implementing rules, certification specifications and acceptable means of compliance. These rules should be proportionate to the size, traffic, category and complexity of the aerodrome and nature and volume of operations thereon, thereby avoiding unnecessary bureaucratic and economic burdens in particular for smaller aerodromes which only involve very limited passenger traffic.
- (8) Aerodrome infrastructure and operations should be certified by means of a single certificate. However, Member States may certify aerodrome infrastructure and operations separately. In that case, certificates should be delivered by the same authority. Operators of multiple aerodromes, having established appropriate central functions, may request a single certificate, covering operations and management at all aerodromes under their responsibility.
- (9) Aeronautical products, parts and appliances, aerodromes and their equipment, operators involved in commercial air transport and in the operation of aerodromes, ATM/ANS systems and providers, as well as pilots and air traffic controllers, and persons, products and organisations involved in their training and medical assessment, should be certified or licensed once they have been found to comply with essential requirements to be laid down by the Community in line with Standards and Recommended Practices set by the Chicago Convention. The Commission should be empowered to develop the necessary implementing rules for establishing the conditions for the issue of the certificate or the conditions for its replacement by a declaration of capability, taking into account the risks associated with the different types of operations or services.
- (10) Implementing rules relating to the certification of the design, manufacture and maintenance of ATM/ANS systems and constituents as well as to organisations engaged in the design, manufacture and maintenance should only be laid down when related to safety-critical issues identified following a detailed impact assessment study.
- (11) The Commission intends to begin work, in due time, on an examination of the feasibility and the necessity of introducing accredited bodies for the certification of ATM/ANS systems and an evaluation of all possible options and impacts. The Commission could, if appropriate, make a proposal for further revision of this Regulation based on a full impact assessment.
- (12) Under the Community institutional system, implementation of Community law is primarily the responsibility of the Member States. Certification tasks required by this Regulation and its implementing rules are therefore to be executed at national level. In certain clearly defined cases, however, the Agency should also be empowered to conduct certification tasks as specified in this Regulation. The Agency should, for the same reason, be allowed to take the necessary measures related to the fields covered by this Regulation when this is the best means to ensure uniformity and facilitate the functioning of the internal market.
- (13) The implementing rules to be developed by the Agency in the domain of ATM/ANS should be prepared in accordance with the results of the consultation process of the Agency on a basis that should be adapted to new stakeholders, and build on the provisions of Regulation (EC) No 549/2004, Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation)⁽¹⁾, Regulation (EC) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organisation and use of the airspace in the single European sky (the airspace Regulation)⁽²⁾, 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)⁽³⁾, and in particular the transposed Eurocontrol Safety Regulatory Requirements. Such implementing rules should be adopted by the Commission in accordance with the regulatory procedure set out in Article 5 of Regulation (EC) No 549/2004. Transitional mechanisms should be designed in order to provide for the continuity of approvals already granted under the rules of those Regulations.
- (14) Regulations (EC) No 549/2004, (EC) No 550/2004, (EC) No 551/2004 and (EC) No 552/2004 include provisions on several regulatory functions of ATM, such as, but not limited to interoperability and the management of air traffic flows and of the airspace. All these areas involve safety aspects, which need to be properly addressed. Therefore, when regulating on these subjects, Member States and the Commission should ensure proper coverage of such safety aspects by means of appropriate coordination with the Agency.
- (15) It is a general objective that the transfer of functions and tasks from the Member States, including those resulting from their cooperation through the Safety Regulation Commission of Eurocontrol, to the Agency should be done efficiently, without any reduction in the current high levels of safety, and without any negative impact on certification schedules. Appropriate measures should be adopted to provide for the necessary transition. The Agency should have sufficient resources for its new tasks, and the timing of the allocation of these resources should be based on a defined need and schedule for the adoption and the respective applicability of the related implementing rules.

⁽¹⁾ OJ L 96, 31.3.2004, p. 10.

⁽²⁾ OJ L 96, 31.3.2004, p. 20.

⁽³⁾ OJ L 96, 31.3.2004, p. 26.

- (16) Regulation (EC) No 216/2008 of the European Parliament and of the Council ⁽¹⁾ establishes an appropriate and comprehensive framework for the definition and implementation of common technical requirements and administrative procedures in the field of civil aviation. Directive 2006/23/EC of the European Parliament and of the Council of 5 April 2006 on a Community air traffic controller licence ⁽²⁾ should therefore be repealed, without prejudice to the certification or licensing of products, persons and organisations already carried out in accordance with that Directive.
- (17) With regard to the regulation of professions which are not covered by this Regulation, the competence of Member States should be retained to establish or maintain at their own discretion, inter alia, certification or licensing requirements of the personnel.
- (18) The implementing rules to be developed by the Agency in the domain of ATM/ANS should be developed in the context of a comprehensive review of the safety requirements in the single European sky legislation, namely, Regulations (EC) No 549/2004, (EC) No 550/2004, (EC) No 551/2004 and (EC) No 552/2004. In order to avoid duplication of safety requirements applicable to ATM/ANS services on the one hand, and to avoid a legal void without applicable safety requirements on the other hand, the date of entry into force of the amendments to the single European sky legislation should be in line with those of the new safety measures made under this Regulation.
- (19) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ⁽³⁾.
- (20) In particular the Commission should be empowered to adopt implementing rules for air traffic controller licensing and associated approvals, aerodromes and aerodrome operations, air traffic management and air navigation services, and associated certificates, oversight and enforcement, as well as to adopt a regulation on the fees and charges of the Agency. Since those measures are of general scope and are designed to amend non-essential elements of Regulation (EC) No 216/2008, inter alia, by supplementing it with new non-essential elements, they must be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of Decision 1999/468/EC.
- (21) Without prejudice to the competences of the Member States, the Commission, if necessary, could make recom-

mendations to the Council to establish a framework of coordination between the Community and the International Civil Aviation Organization (ICAO) on safety audits, with the aim of avoiding duplication and in the interests of the efficient use of resources.

- (22) When drafting safety rules, the Agency should ensure the involvement of all interested parties. Rule-making opinions should be based on a full scale consultation of all stakeholders, including the smaller industry operators, as well as on a proper assessment of their potential impact in the applicable fields. As provided for in Regulation (EC) No 216/2008, the advisory body of interested parties should be consulted by the Agency prior to making decisions,

HAVE ADOPTED THIS REGULATION:

Article 1

Regulation (EC) No 216/2008 is hereby amended as follows:

1. Article 1 is replaced by the following:

'Article 1

Scope

1. This Regulation shall apply to:
- the design, production, maintenance and operation of aeronautical products, parts and appliances, as well as personnel and organisations involved in the design, production and maintenance of such products, parts and appliances;
 - personnel and organisations involved in the operation of aircraft;
 - the design, maintenance and operation of aerodromes, as well as personnel and organisations involved therein and, without prejudice to Community and national legislation on environment and land-use planning, the safeguarding of surroundings of aerodromes;
 - the design, production and maintenance of aerodrome equipment, as well as personnel and organisations involved therein;
 - the design, production and maintenance of systems and constituents for air traffic management and air navigation services (ATM/ANS), as well as personnel and organisations involved therein;
 - ATM/ANS, as well as personnel and organisations involved therein.

⁽¹⁾ OJ L 79, 19.3.2008, p. 1.

⁽²⁾ OJ L 114, 27.4.2006, p. 22.

⁽³⁾ OJ L 184, 17.7.1999, p. 23.

2. This Regulation shall not apply to:

- (a) products, parts, appliances, personnel and organisations referred to in paragraph 1(a) and (b) while carrying out military, customs, police, search and rescue, firefighting, coastguard or similar activities or services. The Member States shall undertake to ensure that such activities or services have due regard as far as practicable to the objectives of this Regulation;
- (b) aerodromes or part thereof, as well as equipment, personnel and organisations, referred to in paragraph 1(c) and (d), that are controlled and operated by the military;
- (c) ATM/ANS, including systems and constituents, personnel and organisations, referred to in paragraph 1(e) and (f), that are provided or made available by the military. The Member States shall undertake to ensure that aircraft referred to in point (a) of this paragraph are separated, where appropriate, from other aircraft.

3. Member States shall, as far as practicable, ensure that any military facilities open to public use referred to in paragraph 2(b) or services provided by military personnel to the public referred to in paragraph 2(c), offer a level of safety that is at least as effective as that required by the essential requirements as defined in Annexes Va and Vb.;

2. Article 3 is amended as follows:

(a) point (d) is replaced by the following:

‘(d) “parts and appliances” shall mean any instrument, equipment, mechanism, part, apparatus, appurtenance, software or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight; it shall include parts of an airframe, engine or propeller, or equipment used to manoeuvre the aircraft from the ground.’;

(b) the following point is inserted:

‘(da) “ATM/ANS constituents” shall mean any constituent as defined in Article 2(19) of 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) (*);

(*) OJ L 96, 31.3.2004, p. 1.’;

(c) point (h) is replaced by the following:

‘(h) “operator” shall mean any legal or natural person, operating or proposing to operate one or more aircraft or one or more aerodromes.’;

(d) the following points are added:

‘(m) “aerodrome” shall mean a defined area (including any buildings, installations and equipment) on land or water or on a fixed, fixed offshore or floating structure intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft;

(n) “aerodrome equipment” shall mean any equipment, apparatus, appurtenance, software or accessory, that is used or intended to be used to contribute to the operation of aircraft at an aerodrome;

(o) “apron” shall mean a defined area intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance;

(p) “apron management service” shall mean a service provided to manage the activities and the movement of aircraft and vehicles on an apron;

(q) “ATM/ANS” shall mean the air traffic management functions as defined in Article 2(10) of Regulation (EC) No 549/2004, air navigation services defined in Article 2(4) of that Regulation, and services consisting in the origination and processing of data and formatting and delivering data to general air traffic for the purpose of safety-critical air navigation;

(r) “ATM/ANS system” shall mean any combination of safety-related equipment and systems as defined in Article 2(39) of Regulation (EC) No 549/2004;

(s) “flight information service” shall mean a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.’;

3. in Article 4, the following paragraphs are inserted:

‘3a. Aerodromes, including equipment, located in the territory subject to the provisions of the Treaty, open to public use and which serve commercial air transport and where operations using instrument approach or departure procedures are provided, and:

(a) have a paved runway of 800 metres or above; or

(b) exclusively serve helicopters;

shall comply with this Regulation. Personnel and organisations involved in the operation of these aerodromes shall comply with this Regulation.

3b. By way of derogation from paragraph 3a, Member States may decide to exempt from the provisions of this Regulation an aerodrome which:

— handles no more than 10 000 passengers per year, and

— handles no more than 850 movements related to cargo operations per year.

If such exemption by a Member State does not comply with the general safety objectives of this Regulation or any other rule of Community law, the Commission shall take a decision in accordance with the safeguard procedure referred to in Article 65(7) not to permit the exemption in question. In such a case, the Member State concerned shall revoke the exemption.

3c. ATM/ANS provided in the airspace of the territory to which the Treaty applies, as well as in any other airspace where Member States apply Regulation (EC) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organisation and use of the airspace in the single European sky (the airspace Regulation) (*) in accordance with Article 1(3) of that Regulation, shall comply with this Regulation. Systems and constituents, personnel and organisations involved in the provision of these ATM/ANS shall comply with this Regulation.

(*) OJ L 96, 31.3.2004, p. 20.;

4. in Article 5, paragraph 2, points (b) and (c) are replaced by the following:

‘(b) the measures referred to in paragraph 5 may lay down a requirement for certification in respect of parts and appliances. The certificates for parts and appliances shall be issued when the applicant has shown that the parts and appliances comply with the detailed airworthiness specifications established to ensure compliance with the essential requirements referred to in paragraph 1;

(c) no aircraft shall be operated, unless it has a valid certificate of airworthiness. The certificate shall be issued when the applicant has shown that the aircraft conforms to the type design approved in its type-certificate and that relevant documentation, inspections and tests demonstrate that the aircraft is in condition for safe operation. This certificate of airworthiness shall remain valid as long as it is not suspended, revoked or terminated and as long as the aircraft is maintained in accordance with the essential requirements related to continuing airworthiness set out in point 1.d of Annex I and the measures adopted pursuant to paragraph 5;’;

5. in Article 7, paragraph 4 is replaced by the following:

‘4. A certificate shall be required in respect of each flight simulation training device used for the training of pilots. The certificate shall be issued when the applicant has shown that the device complies with the rules established to ensure compliance with the relevant essential requirements as set out in Annex III.’;

6. Article 8 is amended as follows:

(a) paragraph 1 is replaced by the following:

‘1. The operation of aircraft referred to in Article 4(1)(b) and (c) shall comply with the essential requirements set out in Annex IV and, if applicable, Annex Vb.’;

(b) paragraph 5 is amended as follows:

(i) point (a) is replaced by the following:

‘(a) conditions to operate an aircraft in compliance with the essential requirements set out in Annex IV and, if applicable, Annex Vb.’;

(ii) point (g) is replaced by the following:

‘(g) how operations of aircraft referred to in point (a)(ii) and points (d) and (h) of Annex II, when used for commercial air transportation, comply with the relevant essential requirements set out in Annex IV and, if applicable, Annex Vb.’;

(c) in paragraph 6, the following indent is added:

‘— take into account the safety aspects related to ATM/ANS.’;

7. the following Articles are inserted:

'Article 8a

Aerodromes

1. Aerodromes and aerodrome equipment as well as the operation of aerodromes shall comply with the essential requirements set out in Annex Va and, if applicable, Annex Vb.

2. The compliance of aerodromes, aerodrome equipment and operation of aerodromes with the essential requirements shall be established in accordance with the following:

- (a) a certificate shall be required in respect of each aerodrome. The certificate and certification of changes to that certificate shall be issued when the applicant has shown that the aerodrome complies with the aerodrome certification basis set out in point (b), and that the aerodrome has no feature or characteristic making it unsafe for operation. The certificate shall cover the aerodrome, its operation and its safety-related equipment;
- (b) the certification basis for an aerodrome shall consist of the following:
 - (i) the applicable certification specifications related to the type of aerodromes;
 - (ii) the provisions for which an equivalent level of safety has been accepted; and
 - (iii) the special detailed technical specifications necessary when the design features of a particular aerodrome or the experience in operation render any of the specifications referred to in point (i) inadequate or inappropriate to ensure conformity with the essential requirements set out in Annex Va;
- (c) the measures referred to in paragraph 5 may lay down a requirement of certification in respect of safety-critical aerodrome equipment. The certificate for such equipment shall be issued when the applicant has shown that the equipment complies with the detailed specifications established to ensure compliance with the essential requirements referred to in paragraph 1;
- (d) organisations responsible for the operation of aerodromes shall demonstrate their capability and means to discharge the responsibilities associated with their privileges. These capabilities and means shall be recognised through the issuance of the certificate

referred to in point (a). They may also be recognised through the issuance of a separate certificate if the Member State where the aerodrome is located so decides. The privileges granted to the certified organisation and the scope of the certificate, including a list of aerodromes to be operated, shall be specified in the certificate;

(e) by way of derogation from point (d), Member States may decide that providers of apron management services shall be allowed to declare their capability and means of discharging the responsibilities associated with the services provided.

3. Member States shall ensure that provisions are in place to safeguard aerodromes against activities and developments in their surroundings which may cause unacceptable risks to aircraft using the aerodrome.

4. Aerodrome operators shall monitor activities and developments which may cause unacceptable safety risks to aviation in the aerodrome surroundings and take, within their competence, mitigating measures as appropriate.

5. The measures designed to amend non-essential elements of the requirements referred to in this Article, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 65(4).

Those measures shall specify in particular:

- (a) the conditions for establishing and notifying to an applicant the certification basis applicable to an aerodrome;
- (b) the conditions for establishing and notifying to an applicant the detailed specifications applicable to aerodrome equipment;
- (c) the conditions for issuing, maintaining, amending, suspending or revoking certificates for aerodromes and certificates for aerodrome equipment, including operating limitations related to the specific design of the aerodrome;
- (d) the conditions for operating an aerodrome in compliance with the essential requirements set out in Annex Va and, if applicable, Annex Vb;
- (e) the conditions for issuing, maintaining, amending, suspending or revoking the certificates referred to in paragraph 2(d);

- (f) the responsibilities of the holders of certificates;
 - (g) the conditions for the acceptance and for the conversion of aerodrome certificates issued by Member States, including measures which are already authorised by the Member State concerned on the basis of notified deviations from Annex 14 of the Chicago Convention before the entry into force of this Regulation;
 - (h) the conditions for the decision not to permit exemptions referred to in Article 4(3b), including criteria for cargo aerodromes, the notification of exempted aerodromes and for the review of granted exemptions;
 - (i) the conditions under which operations shall be prohibited, limited or subject to certain conditions in the interest of safety;
 - (j) the conditions and procedures for the declaration by and for the oversight of service providers referred to in paragraph 2(e).
6. The measures referred to in paragraph 5 shall:
- (a) reflect the state of the art and the best practices in the field of aerodromes and take into account the applicable ICAO Standards and Recommended Practices;
 - (b) be proportionate to the size, traffic, category and complexity of the aerodrome and nature and volume of operations thereon;
 - (c) take into account worldwide aerodrome operation experience, and scientific and technical progress;
 - (d) allow for immediate reaction to established causes of accidents and serious incidents;
 - (e) provide for the necessary flexibility for customised compliance.

Article 8b

ATM/ANS

1. Provision of ATM/ANS shall comply with the essential requirements set out in Annex Vb and, as far as practicable, Annex Va.
2. ATM/ANS providers shall be required to hold a certificate. The certificate shall be issued when the

provider has demonstrated its capability and means of discharging the responsibilities associated with the provider's privileges. The privileges granted and the scope of the services provided shall be specified in the certificate.

3. By way of derogation from paragraph 2, Member States may decide that providers of flight information services shall be allowed to declare their capability and means of discharging the responsibilities associated with the services provided.

4. The measures referred to in paragraph 6 may lay down a requirement for certification in respect of organisations engaged in the design, manufacture and maintenance of safety-critical ATM/ANS systems and constituents. The certificate for those organisations shall be issued when they have demonstrated their capability and means of discharging the responsibilities associated with their privileges. The privileges granted shall be specified in the certificate.

5. The measures referred to in paragraph 6 may lay down a requirement for certification, or alternatively, validation by the ATM/ANS provider, in respect of safety-critical ATM/ANS systems and constituents. The certificate for those systems and constituents shall be issued, or validation shall be given, when the applicant has shown that the systems and constituents comply with the detailed specifications established to ensure compliance with the essential requirements referred to in paragraph 1.

6. The measures necessary for the implementation of this Article shall be adopted in accordance with the regulatory procedure referred to in Article 5(3) of Regulation (EC) No 549/2004.

Those measures shall specify in particular:

- (a) the conditions for the provision of ATM/ANS in compliance with the essential requirements set out in Annex Vb and, if applicable, in Annex Va;
- (b) the conditions for establishing and notifying to an applicant the detailed specifications applicable to ATM/ANS systems and constituents;
- (c) the conditions for issuing, maintaining, amending, suspending or revoking the certificates referred to in paragraphs 2 and 4;
- (d) the responsibilities of the holders of certificates;

- (e) the conditions and procedures for the declaration by, and for the oversight of service providers referred to in paragraph 3;
 - (f) the conditions under which operations shall be prohibited, limited or subject to certain conditions in the interest of safety.
7. The measures referred to in paragraph 6 shall:
- (a) reflect the state of the art and the best practices in the field of ATM/ANS;
 - (b) be proportionate to the type and complexity of the services provided;
 - (c) take into account worldwide ATM/ANS experience, and scientific and technical progress;
 - (d) be developed using as far as practicable the relevant provisions of Regulation (EC) No 549/2004 and of Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation) (*), Regulation (EC) No 551/2004 and 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) (**) and provide for transitional mechanisms to ensure the continuity of certificates already granted under those Regulations; initially they shall include the safety provisions of those Regulations and, where appropriate, in case of future amendments, take into account latest scientific and technical progress;
 - (e) allow for immediate reaction to established causes of accidents and serious incidents.

Article 8c

Air traffic controllers

1. Air traffic controllers as well as persons and organisations involved in the training, testing, checking or medical assessment of air traffic controllers, shall comply with the relevant essential requirements set out in Annex Vb.
2. Air traffic controllers shall be required to hold a licence and a medical certificate appropriate to the service provided.
3. The licence referred to in paragraph 2 shall only be issued when the applicant for the licence demonstrates that

he or she complies with the rules established to ensure compliance with the essential requirements regarding theoretical knowledge, practical skill, language proficiency and experience as set out in Annex Vb.

4. The medical certificate referred to in paragraph 2 shall only be issued when the air traffic controller complies with the rules established to ensure compliance with the essential requirements on medical fitness as set out in Annex Vb. The medical certificate may be issued by aero medical examiners or by aero medical centres.

5. The privileges granted to the air traffic controller and the scope of the licence and the medical certificate shall be specified in such licence and certificate.

6. The capability of air traffic controller training organisations, aero medical examiners and aero medical centres to discharge the responsibilities associated with their privileges in relation to the issuance of licences and medical certificates shall be recognised by the issuance of a certificate.

7. A certificate shall be issued to training organisations, aero medical examiners and aero medical centres for air traffic controllers that have demonstrated that they comply with the rules established to ensure compliance with the relevant essential requirements as set out in Annex Vb. The privileges granted by the certificate shall be specified therein.

8. Persons responsible for providing practical training or for assessing air traffic controllers' skill shall hold a certificate. The certificate shall be issued when the person concerned has demonstrated that he or she complies with the rules established to ensure compliance with the relevant essential requirements as set out in Annex Vb. The privileges granted by the certificate shall be specified therein.

9. Synthetic training devices shall comply with the relevant essential requirements set out in Annex Vb.

10. The measures designed to amend non-essential elements of this Article by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 65(4).

Those measures shall specify in particular:

- (a) the different ratings and endorsements for air traffic controllers' licences;

- (b) the conditions for issuing, maintaining, amending, limiting, suspending or revoking licences, ratings and endorsements for licences, medical certificates, approvals and certificates, and the conditions under which such certificates and approvals need not be requested, while providing for transitional mechanisms to ensure the continuity of approvals and certificates already granted;
- (c) the privileges and responsibilities of the holders of licences, ratings and endorsements for licences, medical certificates, approvals and certificates;
- (d) the conditions for the acceptance and for the conversion of air traffic controllers' licences as well as the conditions for the acceptance and for the conversion of national medical certificates into commonly recognised medical certificates.

11. The measures referred to in paragraph 10 shall reflect the state of the art, including best practices and scientific and technical progress, in the field of air traffic controller training. They shall initially be developed on the basis of the provisions of Directive 2006/23/EC of the European Parliament and of the Council of 5 April 2006 on a Community air traffic controller licence (**).

(*) OJ L 96, 31.3.2004, p. 10.

(**) OJ L 96, 31.3.2004, p. 26.

(***) OJ L 114, 27.4.2006, p. 22.;

8. Article 9 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. Aircraft referred to in Article 4(1)(d), as well as their crew and their operations, shall comply with applicable ICAO standards. To the extent that there are no such standards, these aircraft and their operations shall comply with the requirements set out in Annexes I, III, IV and, if applicable, Annex Vb, provided these requirements are not in conflict with the rights of third countries under international conventions.;

(b) in paragraph 5, the following point is added:

'(e) safety aspects related to ATM/ANS are taken into account.;

9. in Article 10, paragraph 1 is replaced by the following:

'1. The Member States, the Commission and the Agency shall cooperate with a view to ensuring compliance with this Regulation and its implementing rules.;

10. Article 11 is amended as follows:

(a) paragraphs 4 and 5 are replaced by the following:

'4. Pending the entry into effect of the measures referred to in Articles 5(5), 7(6) and 9(4) and the expiry of any transition periods provided for by those measures, and without prejudice to Article 69(4), certificates which cannot be issued in accordance with this Regulation may be issued on the basis of the applicable national regulations.

5. Pending the entry into effect of the measures referred to in Article 8(5) and the expiry of any transition periods provided for by those measures, and without prejudice to Article 69(4), certificates which cannot be issued in accordance with this Regulation may be issued on the basis of the applicable national regulations.;

(b) the following paragraphs are inserted:

'5a. Pending the entry into effect of the measures referred to in Articles 8a(5) and 8c(10) and the expiry of any transition periods provided for by those measures, and without prejudice to Article 69(4), certificates which cannot be issued in accordance with this Regulation may be issued on the basis of the applicable national regulations.

5b. Pending the entry into effect of the measures referred to in Article 8b(6) and the expiry of any transition periods provided for by those measures, and without prejudice to Article 69(4), certificates which cannot be issued in accordance with this Regulation may be issued on the basis of the applicable national regulations or, where applicable, on the basis of the relevant requirements of Commission Regulation (EC) No 2096/2005 of 20 December 2005 laying down common requirements for the provision of air navigation services (*).

(*) OJ L 335, 21.12.2005, p. 13.;

11. in Article 13, the following paragraph is added:

'Qualified entities shall not issue certificates.;

12. in Article 18, points (c) and (d) are replaced by the following:

'(c) issue certification specifications and acceptable means of compliance, as well as any guidance material for the application of this Regulation and its implementing rules;

(d) take the appropriate decisions for the application of Articles 20, 21, 22, 22a, 22b, 23, 54 and 55 including the granting of exemptions to holders of certificates it has issued, from the substantive requirements laid down in this Regulation and its implementing rules in the event of unforeseen urgent operational circumstances or operational needs of a limited duration, provided that the level of safety is not affected, that they are granted for a period not exceeding two months, that they are notified to the Commission and that they are not renewed;'

13. in Article 19(2), point (a) is replaced by the following:

'(a) certification specifications and acceptable means of compliance; and';

14. the following Articles are inserted:

'Article 22a

ATM/ANS

With regard to ATM/ANS referred to in Article 4(3c) the Agency shall:

- (a) conduct, itself or through national aviation authorities or qualified entities, inspections, and audits of the organisations it certifies;
- (b) issue and renew certificates of organisations located outside the territory subject to the provisions of the Treaty, responsible for providing services in the airspace of the territory to which the Treaty applies;
- (c) issue and renew certificates of organisations providing pan-European services;
- (d) amend, suspend or revoke the relevant certificate, when the conditions according to which it was issued are no longer fulfilled or if the holder of the certificate fails to fulfil the obligations imposed on it by this Regulation or by its implementing rules.

Article 22b

Air traffic controller certification

With regard to the persons and organisations referred to in Article 8c(1), the Agency shall:

- (a) conduct, itself or through national aviation authorities or qualified entities, investigations and audits of the

organisations it certifies and, where relevant, their personnel;

- (b) issue and renew the certificates of air traffic controller training organisations located outside the territory of the Member States and, where relevant, their personnel;
- (c) amend, suspend or revoke the relevant certificate when the conditions according to which it was issued by it are no longer fulfilled, or if the legal or natural person holding the certificate fails to fulfil the obligations imposed on it by this Regulation or its implementing rules.;

15. in Article 33(2)(c), the date '30 September' is replaced by '30 November';

16. in Article 44, paragraph 1 is replaced by the following:

'1. An appeal may be brought against decisions of the Agency taken pursuant to Articles 20, 21, 22, 22a, 22b, 23, 55 or 64.;

17. in Article 50, paragraph 2 is replaced by the following:

'2. Actions for the annulment of decisions of the Agency taken pursuant to Articles 20, 21, 22, 22a, 22b, 23, 55 or 64 may be brought before the Court of Justice of the European Communities only after all appeal procedures within the Agency have been exhausted.;

18. Article 52 is amended as follows:

- (a) in paragraph 1, the first subparagraph is replaced by the following:

'As soon as possible after the entry into force of this Regulation, the Management Board shall establish transparent procedures for issuing opinions, certification specifications, acceptable means of compliance and guidance material referred to in Article 18(a) and(c).;

- (b) paragraph 2 is replaced by the following:

'2. When the Agency, pursuant to Article 19, develops opinions, certification specifications, acceptable means of compliance and guidance material to be applied by Member States, it shall establish a procedure for consulting the Member States. To this effect, it may create a working group in which each Member State is entitled to designate an expert.;

19. in Article 55, paragraph 1, the first sentence is replaced by the following:

‘The Agency may itself conduct or assign to national aviation authorities or qualified entities all necessary investigations of undertakings in accordance with Articles 7, 20 21, 22, 22a, 22b 23 and 24(2).’;

20. the following Article is inserted:

‘Article 65a

Amendments

In accordance with the provisions of the Treaty, the Commission shall propose to amend Regulations (EC) No 549/2004, (EC) No 550/2004, (EC) No 551/2004 and (EC) No 552/2004 in order to take into account the requirements of this Regulation.’;

21. the title of Annex V is replaced by the following:

‘Criteria for qualified entities referred to in Article 13 (“qualified entity” or “entity”);’

22. Annexes Va and Vb as set out in the Annex to this Regulation are inserted.

Article 2

Directive 2006/23/EC is hereby repealed.

The provisions of Directive 2006/23/EC shall continue to apply, on a transitional basis, until the date of application of the measures referred to in Article 8c(10) of Regulation (EC) No 216/2008 as amended by this Regulation.

Article 3

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

The Commission shall adopt the measures referred to in Article 8a(5) of Regulation (EC) No 216/2008 as amended by this Regulation before 31 December 2013. Article 8a shall apply as from the dates specified in those measures.

The Commission shall adopt the measures referred to in Article 8b(6) and Article 8c(10) of Regulation (EC) No 216/2008 as amended by this Regulation before 31 December 2012. Articles 8b and 8c shall apply as from the dates specified in those measures.

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

Done at Strasbourg, 21 October 2009.

For the European Parliament
The President
J. BUZEK

For the Council
The President
C. MALMSTRÖM

ANNEX

'ANNEX Va

ESSENTIAL REQUIREMENTS FOR AERODROMES**A — Physical characteristics, infrastructure and equipment**1. *Movement area*

- (a) Aerodromes shall have a designated area for the landing and take-off of aircraft, which satisfies the following conditions:
- (i) the landing and take-off area shall have dimensions and characteristics suitable for the aircraft intended to use the facility;
 - (ii) the landing and take-off area, where applicable, shall have a bearing strength sufficient to support repetitive operations of the intended aircraft. Those areas not intended for repetitive operations only need to be capable of supporting the aircraft;
 - (iii) the landing and take-off area shall be designed to drain water and to prevent standing water becoming an unacceptable risk to aircraft operations;
 - (iv) the slope and slope changes of the landing and take-off area shall not create an unacceptable risk to aircraft operations;
 - (v) the surface characteristics of the landing and take-off area shall be adequate for use by the intended aircraft; and
 - (vi) the landing and take-off area shall be free from objects which might create an unacceptable risk to aircraft operations.
- (b) Where there are several designated landing and take-off areas, they shall be such that they do not create an unacceptable risk to aircraft operations.
- (c) The designated landing and take-off area shall be surrounded by defined areas. These areas are intended to protect aircraft flying over them during take-off or landing operations or to mitigate the consequences of undershooting, running off the side or overrunning the take-off and landing area, and shall satisfy the following conditions:
- (i) these areas shall have dimensions appropriate to the aircraft operations anticipated;
 - (ii) the slope and slope changes of these areas shall not create an unacceptable risk to aircraft operations;
 - (iii) these areas shall be free from objects which might create an unacceptable risk to aircraft operations. This should not preclude frangible equipment to be located in those areas, if required to assist aircraft operations; and
 - (iv) each of these areas shall have a bearing strength sufficient to serve its purpose.
- (d) Those areas of an aerodrome, with their associated immediate surroundings, that are to be used for taxiing or parking aircraft, shall be designed to permit safe operation of the aircraft expected to use the particular facility under all the conditions planned for, and shall satisfy the following conditions:
- (i) these areas shall have a bearing strength sufficient to support repetitive operations of the intended aircraft, except for areas which are expected for only occasional use which only need to be capable of supporting the aircraft;
 - (ii) these areas shall be designed to drain water and to prevent standing water becoming an unacceptable risk to aircraft operations;

- (iii) the slope and slope changes of these areas shall not create an unacceptable risk to aircraft operations;
 - (iv) the surface characteristics of these areas shall be adequate for use by the intended aircraft; and
 - (v) these areas shall be free from objects which might create an unacceptable risk to aircraft. This should not preclude parking equipment required for that area in specifically identified positions or zones.
- (e) Other infrastructure intended for use by aircraft shall be so designed that use of that infrastructure does not create an unacceptable risk to aircraft using it.
- (f) Constructions, buildings, equipment or storage areas shall be located and designed so as not to create an unacceptable risk for aircraft operations.
- (g) Suitable means shall be provided to prevent unauthorised persons, unauthorised vehicles or animals large enough to create an unacceptable risk to aircraft operations from entering the movement area, without prejudice to national and international animal protection provisions.

2. *Obstacle clearances*

- (a) To protect aircraft proceeding to an aerodrome for landing, or for their departure from an aerodrome, arrival and departure routes or areas shall be established. Such routes or areas shall provide aircraft with the required clearance from obstacles located in the area surrounding the aerodrome taking due account of the local physical characteristics.
- (b) Such obstacle clearance shall be appropriate to the phase of flight and type of operation being conducted. It shall also take into account the equipment being used for determining the position of the aircraft.

3. *Visual and non-visual aids and aerodrome equipment*

- (a) AIDS shall be fit for purpose, recognisable and provide unambiguous information to users under all intended operational conditions.
- (b) Aerodrome equipment shall function as intended under the foreseen operating conditions. Under operating conditions or in case of failure, aerodrome equipment shall not cause an unacceptable risk to aviation safety.
- (c) The aids and their electrical power supply system shall be so designed that failures do not result in inappropriate, misleading or insufficient information being given to users or in interruption of an essential service.
- (d) Suitable means of protection shall be provided to avoid damage or disturbance to such aids.
- (e) Sources of radiation or the presence of moving or fixed objects shall not interfere with or adversely affect the performance of aeronautical communications, navigation and surveillance systems.
- (f) Information on operation and use of aerodrome equipment shall be made available to relevant staff, including clear indications of the conditions which may create unacceptable risks to aviation safety.

4. *Aerodrome data*

- (a) Data relevant to the aerodrome and the available services shall be established and kept up to date.
- (b) The data shall be accurate, readable, complete and unambiguous. Appropriate integrity levels shall be maintained.
- (c) The data shall be made available to the users and the relevant ANS providers in a timely manner, using a sufficiently secure and expeditious method of communication.

B — Operations and management

1. *The aerodrome operator is responsible for operation of the aerodrome. The responsibilities of the aerodrome operator are as follows:*

- (a) the aerodrome operator shall have, directly or under contracts, all the means necessary to ensure safe operation of aircraft at the aerodrome. These means shall include, but are not limited to, facilities, personnel, equipment and material, documentation of tasks, responsibilities and procedures, access to relevant data and record-keeping;

- (b) the aerodrome operator shall verify that the requirements of Section A are complied with at all times or take appropriate measures to mitigate the risks associated with non-compliance. Procedures shall be established and applied to make all users aware of such measures in a timely manner;
- (c) the aerodrome operator shall establish and implement an appropriate aerodrome wildlife risk management programme;
- (d) the aerodrome operator shall ensure that movements of vehicles and persons in the movement area and other operational areas are coordinated with movements of aircraft in order to avoid collisions and damage to aircraft;
- (e) the aerodrome operator shall ensure that procedures to mitigate risks related to aerodrome operations in winter operation, adverse weather conditions, reduced visibility or at night, if applicable, are established and implemented;
- (f) the aerodrome operator shall establish arrangements with other relevant organisations to ensure continuing compliance with these essential requirements for aerodromes. These organisations include, but are not limited to, aircraft operators, air navigation service providers, ground handling service providers and other organisations whose activities or products may have an effect on aircraft safety;
- (g) the aerodrome operator, either by itself or by means of contracts with third parties, shall ensure that procedures exist to provide aircraft with fuel which is uncontaminated and of the correct specification;
- (h) manuals for maintenance of aerodrome equipment shall be available, applied in practice and cover maintenance and repair instructions, servicing information, troubleshooting and inspection procedures;
- (i) the aerodrome operator shall establish and implement an aerodrome emergency plan, covering emergency scenarios that may occur at the aerodrome or in its surroundings. This plan shall be coordinated, as appropriate, with the local community emergency plan;
- (j) the aerodrome operator shall ensure that adequate aerodrome rescue and firefighting services are provided. Such services shall respond to an incident or accident with due urgency and shall include at least equipment, extinguishing agents and a sufficient number of personnel;
- (k) the aerodrome operator shall use only trained and qualified personnel for aerodrome operations and maintenance and shall implement and maintain training and check programmes to ensure the continuing competence of all relevant personnel;
- (l) the aerodrome operator shall ensure that any person permitted unescorted access to the movement area or other operational areas is adequately trained and qualified for such access;
- (m) the rescue and firefighting personnel shall be properly trained and qualified to operate in the aerodrome environment. The aerodrome operator shall implement and maintain training and check programmes to ensure the continuing competence of this personnel; and
- (n) all rescue and firefighting personnel potentially required to act in aviation emergencies shall periodically demonstrate their medical fitness to execute their functions satisfactorily, taking into account the type of activity. In this context, medical fitness, comprising both physical and mental fitness, means not suffering from any disease or disability which could make this personnel unable:
 - (i) to execute the tasks necessary to operate in aviation emergencies;
 - (ii) to perform their assigned duties at any time; or
 - (iii) to perceive their environment correctly.

2. Management systems

- (a) The aerodrome operator shall implement and maintain a management system to ensure compliance with these essential requirements for aerodromes and to aim for continuous and proactive improvement of safety. The management system shall include organisational structures, accountability, responsibilities, policies and procedures.

- (b) The management system shall include an accident and incident prevention programme, including an occurrence-reporting and analysis scheme. The analysis shall involve the parties listed in point 1(f) above, as appropriate.
- (c) The aerodrome operator shall develop an aerodrome manual and operate in accordance with that manual. Such manuals shall contain all necessary instructions, information and procedures for the aerodrome, the management system and for operations personnel to perform their duties.

C — Aerodrome surroundings

1. The airspace around aerodrome movement areas shall be safeguarded from obstacles so as to permit the intended aircraft operations at the aerodromes without creating an unacceptable risk caused by the development of obstacles around the aerodrome. Obstacle monitoring surfaces shall therefore be developed, implemented and continuously monitored to identify any infringing penetration.
 - (a) Any infringement of these surfaces will require an assessment to identify whether or not the object creates an unacceptable risk. Any object posing an unacceptable risk shall be removed or appropriate mitigating action shall be taken to protect aircraft using the aerodrome.
 - (b) Any remaining such obstacles shall be published and, depending on the need, shall be marked and, where necessary, made visible by means of lights.
2. Hazards related to human activities and land use, such as, but not limited to, items on the following list, shall be monitored. The risk caused by them shall be assessed and mitigated as appropriate:
 - (a) any development or change in land use in the aerodrome area;
 - (b) the possibility of obstacle-induced turbulence;
 - (c) the use of hazardous, confusing and misleading lights;
 - (d) the dazzling caused by large and highly reflective surfaces;
 - (e) the creation of areas that might encourage wildlife activity in the surroundings of the aerodrome movement area;
 - (f) sources of non-visible radiation or the presence of moving or fixed objects which may interfere with, or adversely affect, the performance of aeronautical communications, navigation and surveillance systems.
3. A local community emergency plan shall be established for aviation emergency situations occurring in the aerodrome local area.

D — Others

Except for aircraft emergency situations, when diverting to an alternate aerodrome, or under other conditions specified in each case, an aerodrome or parts thereof shall not be used by aircraft for which the aerodrome design and operating procedures are not normally intended.

ANNEX Vb

ESSENTIAL REQUIREMENTS FOR ATM/ANS AND AIR TRAFFIC CONTROLLERS

1. Use of the airspace

- (a) All aircraft, excluding those engaged in the activities referred to in Article 1(2)(a), in all phases of flight or on the movement area of an aerodrome, shall be operated in accordance with common general operating rules and any applicable procedure specified for use of that airspace.
- (b) All aircraft, excluding those engaged in the activities referred to in Article 1(2)(a), shall be equipped with the required constituents and operated accordingly. Constituents used in the ATM/ANS system shall also comply with the requirements in point 3.

2. Services

- (a) Aeronautical information and data for airspace users for the purpose of air navigation
- (i) The data used as a source for aeronautical information shall be of sufficient quality, complete, current and provided in a timely manner.
 - (ii) Aeronautical information shall be accurate, complete, current, unambiguous and be of adequate integrity in a suitable format for users.
 - (iii) The dissemination of such aeronautical information to airspace users shall be timely and use sufficiently reliable and expeditious means of communication protected from interference and corruption.
- (b) Meteorological information
- (i) The data used as a source for aeronautical meteorological information shall be of sufficient quality, complete and current.
 - (ii) To the extent possible, aeronautical meteorological information shall be precise, complete, current, be of adequate integrity and unambiguous in order to meet the needs of airspace users.
 - (iii) The dissemination of such aeronautical meteorological information to airspace users shall be timely and use sufficiently reliable and expeditious means of communication protected from interference and corruption.
- (c) Air traffic services
- (i) The data used as a source for the provision of air traffic services shall be correct, complete and current.
 - (ii) Air traffic services shall be sufficiently precise, complete, current, and unambiguous to meet the safety needs of users.
 - (iii) Automated tools providing information or advice to users shall be properly designed, manufactured and maintained to ensure that they are fit for their intended purpose.
 - (iv) Air traffic control services and related processes shall provide for adequate separation between aircraft and, where appropriate, assist in protection from obstacles and other airborne hazards and shall ensure prompt and timely coordination with all relevant users and adjacent volumes of airspace.
 - (v) Communication between air traffic services and aircraft and between relevant air traffic services units shall be timely, clear, correct and unambiguous, protected from interference and commonly understood and, if applicable, acknowledged by all actors involved.
 - (vi) Means shall be in place to detect possible emergencies and, when appropriate, to initiate effective search and rescue action. Such means shall, as a minimum, comprise appropriate alerting mechanisms, coordination measures and procedures, means and personnel to cover the area of responsibility efficiently.
- (d) Communication services
- Communication services shall achieve and maintain sufficient performance with regard to their availability, integrity, continuity and timeliness. They shall be expeditious and protected from corruption.
- (e) Navigation service
- Navigation services shall achieve and maintain a sufficient level of performance with regard to guidance, positioning and, when provided, timing information. The performance criteria include accuracy, integrity, availability and continuity of the service.
- (f) Surveillance service
- Surveillance services shall determine the respective position of aircraft in the air and of other aircraft and ground vehicles on the aerodrome surface, with sufficient performance with regard to their accuracy, integrity, continuity and probability of detection.

(g) Air traffic flow management

The tactical management of air traffic flows at Community level shall use and provide sufficiently precise and current information of the volume and nature of the planned air traffic affecting service provision and shall coordinate and negotiate re-routing or delaying traffic flows in order to reduce the risk of overloading situations occurring in the air or at the aerodromes.

(h) Airspace management

The designation of specific volumes of airspace for a certain use shall be monitored, coordinated and promulgated in a timely manner in order to reduce the risk of loss of separation between aircraft in all circumstances.

(i) Airspace design

Airspace structures and flight procedures shall be properly designed, surveyed and validated before they can be deployed and used by aircraft.

3. Systems and constituents

(a) General

ATM/ANS systems and constituents providing related information to and from the aircraft and on the ground shall be properly designed, manufactured, installed, maintained and operated to ensure that they are fit for their intended purpose.

(b) System and constituent integrity, performance and reliability

The integrity and safety-related performance of systems and constituents whether on aircraft, on the ground or in space, shall be fit for their intended purpose. They shall meet the required level of operational performance for all their foreseeable operating conditions and for their whole operational life.

(c) Design of systems and constituents

(i) Systems and constituents shall be designed to meet applicable safety requirements.

(ii) Systems and constituents, considered collectively, separately and in relation to each other, shall be designed in such a way that an inverse relationship exists between the probability that any failure can result in a total system failure and the severity of its effect on the safety of services.

(iii) Systems and constituents, considered individually and in combination with each other, shall be designed taking into account limitations related to human capabilities and performance.

(iv) Systems and constituents shall be designed in a manner that protects them from unintended harmful interactions with external elements.

(v) Information needed for manufacturing installation, operation and maintenance of the systems and constituents as well as information concerning unsafe conditions shall be provided to personnel in a clear, consistent and unambiguous manner.

(d) Continuing level of service

Safety levels of systems and constituents shall be maintained during service and any modifications to service.

4. Qualification of air traffic controllers

(a) General

A person undertaking training as an air traffic controller or as a student air traffic controller, shall be sufficiently mature educationally, physically and mentally to acquire, retain and demonstrate the relevant theoretical knowledge and practical skill.

(b) Theoretical knowledge

- (i) An air traffic controller shall acquire and maintain a level of knowledge appropriate to the functions exercised and proportionate to the risks associated with the type of service.
- (ii) Acquisition and retention of theoretical knowledge shall be demonstrated by continuous assessment during training, or by appropriate examinations.
- (iii) An appropriate level of theoretical knowledge shall be maintained. Compliance shall be demonstrated by regular assessments or examinations. The frequency of examinations shall be proportionate to the level of risk associated with the type of service.

(c) Practical skill

- (i) An air traffic controller shall acquire and maintain the practical skills appropriate to exercise his/her functions. Such skills shall be proportionate to the risks associated with the type of service and shall cover at least, if appropriate to the functions exercised, the following items:
 - i. operational procedures;
 - ii. task specific aspects;
 - iii. abnormal and emergency situations; and
 - iv. human factors.
- (ii) An air traffic controller shall demonstrate the ability to perform the associated procedures and tasks with a level of competence appropriate to the functions exercised.
- (iii) A satisfactory level of competence in practical skill shall be maintained. Compliance shall be verified by regular assessments. The frequency of these assessments shall be proportionate to the complexity and the level of risk associated with the type of service and the tasks performed.

(d) Language proficiency

- (i) An air traffic controller shall demonstrate proficiency to speak and understand English to the extent he/she is able to communicate effectively in voice-only (telephone/radiotelephone) and in face-to-face situations on concrete and work-related topics, including in emergency situations.
- (ii) Whenever necessary in a defined volume of airspace for ATS service provision purposes, an air traffic controller shall also have proficiency to speak and understand the national language(s) to the extent described above.

(e) Synthetic training devices (STD)

When an STD is used for practical training on situational awareness and human factors or to demonstrate that skills are acquired or maintained, it shall have a level of performance that allows adequate simulation of the working environment and operational situations appropriate to the training provided.

(f) Training course

- (i) Training shall be given by a training course, which may comprise theoretical and practical instruction, including training on an STD, if applicable.
- (ii) A course shall be defined and approved for each type of training.

(g) Instructors

- (i) Theoretical instruction shall be given by appropriately qualified instructors. They shall:
 - i. have appropriate knowledge in the field where instruction is to be given; and

- ii. have demonstrated the ability to use appropriate instructional techniques.
- (ii) Instruction on practical skills shall be given by appropriately qualified instructors, who have the following qualifications:
- i. meet the theoretical knowledge and the experience requirements appropriate to the instruction being given;
 - ii. have demonstrated the ability to instruct and to use appropriate instructional techniques;
 - iii. have practised instructional techniques in those procedures in which it is intended to provide instruction; and
 - iv. receive regular refresher training to ensure that the instructional competences are maintained.
- (iii) Instructors on practical skills shall also be or have been entitled to act as an air traffic controller.
- (h) Assessors
- (i) Persons responsible for assessing the skill of air traffic controllers shall:
- i. have demonstrated the ability to assess the performance of, and conduct tests and checks on air traffic controllers; and
 - ii. receive regular refresher training to ensure that the assessment standards are maintained up to date.
- (ii) Assessors on practical skills shall also be or have been entitled to act as an air traffic controller in those areas in which assessment is to be made.
- (i) Medical fitness of an air traffic controller
- (i) Medical criteria
- i. All air traffic controllers shall periodically demonstrate medical fitness to satisfactorily execute their functions. Compliance shall be shown by appropriate assessment taking into account the possible mental and physical degradation due to age;
 - ii. Demonstration of medical fitness, comprising physical and mental fitness, shall include the demonstrated absence of any disease or disability, which makes the person providing an air traffic control (ATC) service unable:
 - to execute properly the tasks necessary to provide an ATC service,
 - to perform assigned duties at any time, or
 - to perceive correctly his/her environment.
- (ii) Where medical fitness cannot be fully demonstrated, mitigation measures that provide equivalent safety may be implemented.

5. Service providers and training organisations

- (a) Service provision shall not be undertaken unless the following conditions are met:
- (i) the service provider shall have directly or indirectly through contracts the means necessary for the scale and scope of the service. These means shall comprise but are not limited to the following: systems, facilities, including power supply, management structure, personnel, equipment and its maintenance, documentation of tasks, responsibilities and procedures, access to relevant data and record-keeping;

- (ii) the service provider shall develop and keep up-to-date management and operations manuals relating to the provision of its services and operate in accordance with those manuals. Such manuals shall contain all necessary instructions, information and procedures for the operations, the management system and for operations personnel to perform their duties;
 - (iii) the service provider shall implement and maintain a risk-based management system to ensure compliance with the essential requirements in this Annex and aim for continuous proactive improvement of this system;
 - (iv) the service provider shall use only suitably qualified and trained personnel and implement and maintain training and checking programmes for the personnel;
 - (v) the service provider shall establish formal interfaces with all the other contributors to the service provision to ensure compliance with these essential requirements;
 - (vi) the service provider shall establish and implement a contingency plan covering emergency and abnormal situations that may occur in relation to its services;
 - (vii) the service provider shall establish and maintain an accident and incident prevention and safety programme including an occurrence reporting and analysis programme, which shall be used by the management system in order to contribute to the aim of continuous improvement of safety; and
 - (viii) the service provider shall make arrangements to verify that the safety performance requirements of any system and constituent they operate are met at any time.
- (b) ATC service provision shall not be undertaken unless the following conditions are met:
- (i) the prevention of fatigue of personnel providing an ATC service shall be managed through a rostering system. Such a rostering system needs to address duty periods, duty time and adapted rest periods. Limitations established within the rostering system shall take into account relevant factors contributing to fatigue such as, in particular, sleep deprivation, disruption of circadian cycles, night hours, cumulative duty time for given periods of time and also the sharing of allocated tasks between personnel;
 - (ii) the prevention of stress of personnel providing an ATC service shall be managed through education and prevention programmes;
 - (iii) the ATC service provider shall have in place procedures to verify that the cognitive judgement of personnel providing ATC services is not impaired or their medical fitness insufficient;
 - (iv) the ATC service provider shall take into account operational and technical constraints as well as human factor principles in its planning and operations.
- (c) Communication, navigation and/or surveillance service provision shall not be undertaken unless the following condition is met:
- The service provider shall keep relevant airspace users and ATS units informed on a timely basis of the operational status (and changes thereof) of their services provided for ATS purposes.
- (d) Training organisations
- A training organisation providing training for personnel providing an ATC service shall meet the following requirements:
- (i) have all the means necessary for the scope of responsibilities associated with their activity. These means comprise, but are not limited to, the following: facilities, personnel, equipment, methodology, documentation of tasks, responsibilities and procedures, access to relevant data and record-keeping;
 - (ii) implement and maintain a management system relating to safety and the standard of training, and aim for continuous improvement of this system; and
 - (iii) establish arrangements with other relevant organisations, as necessary, to ensure continuing compliance with these essential requirements.'
-