OPINION NO 04/2011

OF THE EUROPEAN AVIATION SAFETY AGENCY

of 1 June 2011

for a Commission Regulation establishing the Implementing Rules for air operations

'Air Operations – OPS'

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Executive Summary

This Opinion contains the following documents:

- Cover Regulation on Air operations;
- Annex I – Definitions for Annexes II to VIII;
- Annex II – Part-ARO, Authority requirements for air operations;
- Annex III – Part-ORO, Organisation requirements for commercial air operators and non-commercial air operators of complex motor-powered aircraft;
- Annex IV - Part-CAT(A,H), technical requirements for commercial air transport operations of aeroplanes and helicopters;
- Annex V - Part-SPA, requirements for operations requiring a specific approval.

Based on the principles set out by the Management Board together with the European Commission, the Agency's proposal transposes the contents of EU-OPS and JAR-OPS 3 and aligns the requirements with ICAO SARPs Annex 6 Part I and Part III Sections 1 and 2, as far as possible.

The development of these requirements was based on the following objectives:

- maintain a high level of safety;
- ensure proportionate rules where appropriate;
- guarantee flexibility and efficiency for operators and authorities.

This Opinion is the result of an extensive consultation process involving authorities, associations, operators and aviation experts.

The Opinion for the remaining Annexes of this Regulation, Annex VI – Part-NCC, Annex VII – Part-NCO, and Annex VIII – Part-SPO will be published at a later stage.

Introduction

I. General

1. Regulation (EC) No 216/2008[1] of the European Parliament and of the Council (hereinafter referred to as the 'Basic Regulation') as amended by Regulation (EC) No 1108/2009[2] establishes an appropriate and comprehensive framework for the definition and implementation of common technical requirements and administrative procedures in the field of civil aviation.

2. The purpose of this Opinion is to assist the European Commission in laying down Implementing Rules for air operations.

3. The Opinion has been adopted, following the procedure specified by the European Aviation Safety Agency's (the Agency) Management Board[3], in accordance with the provisions of Article 19 of the Basic Regulation.

II. Scope of the Opinion

4. This Opinion consists of the following documents:

- Cover Regulation on Air operations;
- Annex I – Definitions for Annexes II to VIII;
- Annex II – Part-ARO, Authority requirements for air operations;
- Annex III – Part-ORO, Organisation requirements for commercial air operators and non-commercial air operators with complex motor-powered aircraft;
- Annex IV - Part-CAT(A,H), technical requirements for commercial air transport operations with aeroplanes and helicopters;
- Annex V - Part-SPA, requirements for operations requiring a specific approval.

5. This Opinion does not contain:

- the commercial air transport requirements for sailplanes, balloons, and A-to-A flights with aeroplanes and helicopters in Annex III – Part-CAT;
- Annex VI - Part-NCC, technical requirements for non-commercial operations of complex motor-powered aircraft;

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1 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, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC. *OJ L 79, 19.03.2008, p. 1-49.*

2 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 2006/33/EC. *OJ L 309, 24.11.2009, pp. 51-70.*

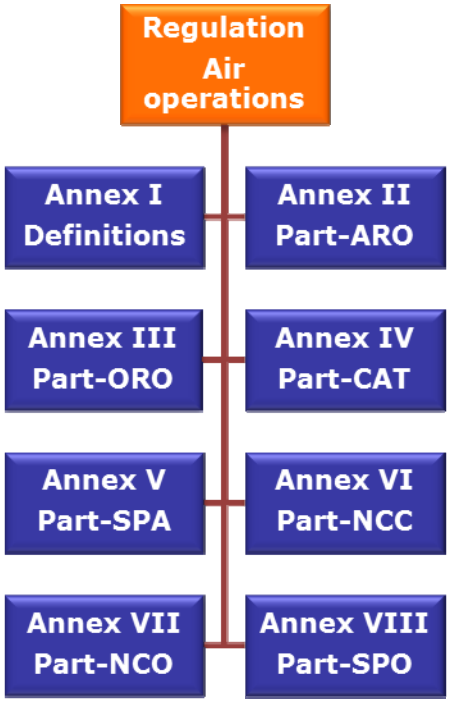
3 Decision of the Management Board concerning the procedure to be applied by the Agency for the issuing of Opinions, Certifications Specifications and Guidance Material (Rulemaking Procedure).EASA MB 08-2007, 13.06.2007.

- Annex VII - Part-NCO, technical requirements for non-commercial operations of other-than-complex motor-powered aircraft;
- Annex VIII - Part-SPO, technical requirements for specific operations, including commercial and non-commercial operations;
- the related provisions to the above-described operations in the Cover Regulation on Air operations.

The Opinion for the remaining requirements will be published at a later stage.

6. The documents of this Opinion are based on the revised rule structure as proposed by the European Commission and the Agency in April 2011. The following table provides an overview of the Annexes under the Regulation for Air operations.

Figure 1: Annexes of the Regulation for Air operations



III. Consultation

7. This Opinion is based on:
   - NPA 2008-22 containing draft proposals for Implementing Rules (IR) and related Acceptable Means of Compliance (AMC) and Guidance Material (GM) for authorities and organisations;
   - NPA 2009-02 containing draft proposals for IR and related AMC and GM for air operations.

8. NPA 2009-02 was published on the EASA website (http://www.easa.europa.eu) on 30 January 2009. The consultation period ended on 31 July 2009. The Agency had received in total 13 775 comments, of which around 8 200 comments related to the scope of this Opinion.

9. Comment summaries, related responses to summarised comments and the proposed revised rule text were discussed in detail with the following four rulemaking review groups (RGs):

   - RG01 (CAT), focusing on the rules for commercial air transport operations;
   - RG02 (SPO), focusing on the rules for specialised operations;
   - RG03 (NCC), focusing on the rules for non-commercial operations of complex motor-powered aircraft; and
   - RG04 (NCO), focusing on the rules for non-commercial operations of other-than-complex motor-powered aircraft.

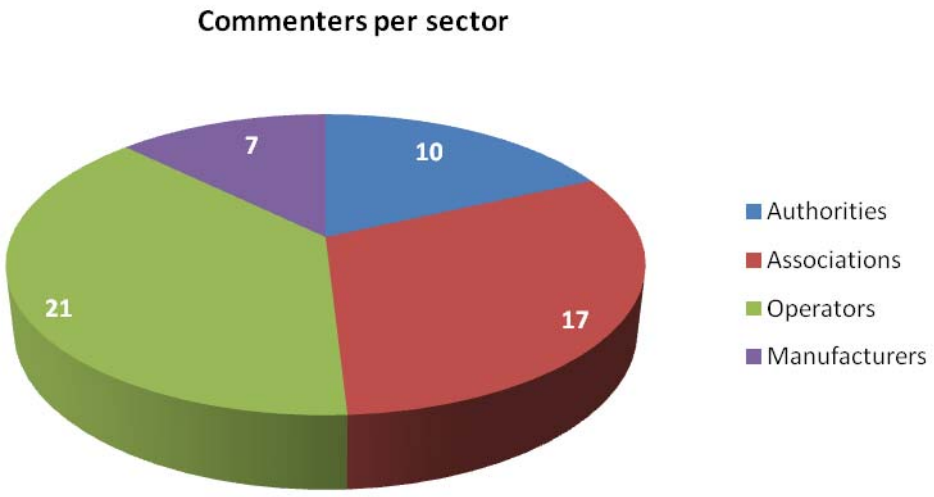
10. The draft CRD text on Part-CAT was reviewed by RG01. The draft CRD text on Part-SPA was reviewed by all four RGs.

11. The Agency also convened several meetings with helicopter specialists who advised on helicopter-specific issues, representing authorities, operators and manufacturers.

12. Based on extensive consultation with authorities, associations and operators, the Agency published the CRD OPS I on 25 November 2010. The reaction period ended on 15 February 2011. The Agency received 1 009 reactions.

13. The following figure provides an overview of commentators providing reactions, grouped under authorities, associations, operators and manufacturers.

Figure 2: Overview of commentators providing reactions



14. All reactions have been assessed and responded and were taken into account when drafting Annex I, Annex IV and Annex V of this Opinion.

15. The details of the consultation process for NPA 2008-22b, NPA 2008-22c, NPA 2009-02c, NPA 2009-02d, which relate to the requirements of Annex II Part-ARO and Annex III Part-ORO of this Opinion, are described in relevant sections of this Explanatory Note.

IV. Rule numbering convention

16. In line with the Agency's rulemaking drafting guidelines, the following rule numbering convention was applied to the IRs:

<Part>.<Subpart>.<Section>.<N>

Explanation:

<Part>: mandatory - up to four letters or digits

examples: ARO, ORO, CAT, SPA

<Subpart>: mandatory - up to four letters or digits

examples: GEN, OP, POL, IDE

<Section>: mandatory - up to five letters or digits

examples: MPA, A, H, MAB

<N>: mandatory - rule number – three digits, starting at 100, following numbers generally numbered in increments of 5.

Cover Regulation on Air operations

I. Scope

17. The Cover Regulation on 'Air operations' defines the general applicability of the Parts it covers and proposes grandfathering and transition measures in the form of opt-outs.[4]

II. Overview of reactions

18. Reactions received on the OPS Cover Regulation focused on alignment with the Cover Regulations of Part-FCL, the proposed JAR-OPS 3 grandfathering provisions, requested clarification as regards the use of certain Annex II aircraft in CAT operations and a definition of the term specialised operations.

III. Explanations

19. The Cover Regulation published in this Opinion contains, in accordance with Articles 4.1(b) and (c) and 8 of the Basic Regulation, the requirements for EU operators using EU or third country registered aircraft and the personnel involved in the operation of such aircraft.

20. It also stipulates the requirements for the Agency and competent authorities in the area of air operations, including ramp inspections of aircraft of operators under the safety oversight of another State in accordance with Article 10 of the Basic Regulation.

21. Article 2 contains definitions of terms used in the Cover Regulation. The definition of CAT operations is derived from ICAO Annex 6 and slightly amended to take into account the definition of 'commercial operation' contained in Article 3(i) of the Basic Regulation. It is highlighted that the scope of the definition of commercial operation is wider than that of CAT operations. The definition of specialised operation will be further complemented by a non-exhaustive list of specialised services or tasks in the future Part-SPO. Furthermore, Article 6.6 specifies how many persons can be carried on an aircraft used for specialised operations in order to clearly distinguish between CAT operations and commercial operations other-than CAT.

22. The Cover Regulation also includes two articles addressed to Member States. Article 3 requires Member States and the Agency to establish aviation safety plans aimed at continuous safety improvement. It also outlines the need for Member States to coordinate their safety plans, since aviation safety has now to be managed jointly by the EASA States. In particular, the current sharing of competences within the European Union does not allow for a safety plan to be implemented by a Member State in isolation. In the future, further material will be provided to enrich the common implementation of ICAO State Safety Programme (SSP) requirements in the European framework. This will be based on the work

[4] An opt-out is a type of transition measure that leaves to the Member States the choice to postpone the implementation date of a certain provision, up to a certain time limit defined by law.

being coordinated by the European Aviation Safety Advisory Committee (EASAC), in particular regarding the EASP manual.

23. Article 4 proposes requirements on oversight capabilities. These provisions, while being fully consistent with the relevant ICAO critical elements of a safety oversight system, additionally mandate Member States to ensure their oversight personnel are duly empowered to carry out certification and oversight tasks and not exposed to any conflict of interest.

24. Articles 3 and 4 were already published with Opinion 03-11 for the air crew Cover Regulation. Changes stemming from discussions at the EASA Committee on the related text are already included.

25. Article 5 on ramp inspections includes a transitional provision on minimum annual quota that is adjusted pro rata to the April applicability date of the Regulation, resulting in 65% for 2012.

26. Article 6 establishes the scope and applicability of the Annexes as follows:

Annex	**Applicability**	**Article in CR**
Annex II - Part-ARO	Authority requirements, including ramp inspections	1.1 and 5
Annex III - Part-ORO Annex IV - Part-CAT	Commercial air transport operations of aeroplanes and helicopters, except A-A flights	1.2 and 6.1
Annex V - Part-SPA	Any operation of aeroplanes, helicopters, balloons or sailplanes	6.3

27. Article 6.4 excludes from the scope of this Regulation certain categories of aircraft or types of operations until the related rulemaking activity will be finalised. These are:

- certain Annex II aircraft when used in CAT operations. They should be operated in accordance with the conditions contained in a Commission Decision adopted under EU-OPS;
- airships, tilt-rotor aircraft, tethered balloons and unmanned aerial systems; and
- flights conducted by design or production organisations that related to such activity.

28. Excluded from the applicability of Part-ORO and Part-CAT are, for the time being, CAT aeroplane and helicopter A-to-A operations (Article 6.2) as well as CAT operations of balloons and sailplanes. The related IRs will be published at a later stage and the Cover Regulation amended accordingly.

29. Also, for the time being, excluded from the applicability of Part-ORO are commercial operations other than CAT and non-commercial operations of complex motor-powered aircraft. The Cover Regulation will be amended once Part-NCC, Part-NCO and Part-SPO become available with the related Agency Opinions.

30. Several reactions requested clarification on CAT operations of certain Annex II aircraft in accordance with Article 8.5.g of the Basic Regulation. The following clarification is provided in coordination with the European Commission:

31. Commission Decisions issued by virtue of Article 8(3) of Regulation 3922/91[5] may remain valid after the repeal of Annex III to Regulation (EEC) No 3922/91 if this validity is explicitly mentioned in the IRs. In particular, Commission Decision C(2009) 7633[6] of 14.10.2009 will remain in force as a transitional measure. The Decision was notified for information to all Member States and is available on the internet.

32. The European Commission's Decision is linked to certain operators, type of Annex II aircraft, evidence and conditions. If one of these operators plans to use a different type of Annex II aircraft, a new safety assessment and request for derogation would need to be lodged with the European Commission. The proposed Cover Regulation includes provisions to better explain how a Member State shall proceed when confronted with changes to the operation as adopted within the said Commission Decision.

33. All Member States are entitled to apply Commission Decision C(2009) 7633 under the same conditions stipulated therein and related to the same type of aircraft. Any subsequent authorisation by another Member State under the same conditions and serving the same purpose may be covered by Commission Decision C(2009) 7633.

34. With the objective of ensuring proper and harmonised understanding of the Commission's Decision, the Cover Regulation clarifies that any Member State wishing to use an already granted derogation is required to inform the European Commission of its intention before implementing it. This allows the European Commission to assess whether the intended derogation fulfils the conditions and safety assessment performed in the context of the Commission Decision. If this is not the case, a new derogation in accordance with Article 14(6) of the Basic Regulation is required.

35. Article 7.1 contains the grandfathering provisions for AOCs issued in compliance with EU-OPS. A period of 2 years is proposed to allow for the adaptation of the management system, training programmes, procedures and manuals, as necessary. Since the proposed IRs contain a new AOC format in accordance with a recent ICAO amendment, a time limit of 2 years is set within which the AOC document should be exchanged against an AOC in compliance with the new format.

36. Article 7.3-6 contains particular conversion provisions for CAT operations by helicopter. It is proposed that national helicopter AOC are converted into IR compliant AOC within a period of 2 years. The Member State shall establish a conversion report within 1 year of the applicability date of the Regulation. It shall

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[5] Council Regulation (EEC) No 3922/1991 of 16 December 991 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation. OJ L 373, 31.12.1991, p. 4.

[6] Commission Decision C(2009) 7633 of 14.10.2009 authorising Austria, Germany, the United Kingdom and Malta to issue Air Operator's Certificates by way of derogation from Council Regulation (EEC) No. 3922/1991 on the harmonization of technical requirements and administrative procedures in the field of civil aviation.

contain descriptions of the national requirements on the basis of which the AOC was issued and the scope of the privileges that were given to the operator, provide indications for which requirements in Part-ORO, Part-CAT and Part-SPA credit is to be given, any limitations that need to be included on the IR compliant AOC and any requirements the operator has to comply with in order to remove those limitations.

37. Article 8 specifies that Subpart Q of EU-OPS and the provisions adopted by Member States under Article 8.4 of Regulation 3922/91 remain in force until the related implementing rules are adopted.

38. Article 9 grandfathers existing minimum equipment lists (MELs) that may not be based on a master minimum equipment list (MMEL) established in accordance with Part-21. Any subsequent change of such MEL needs to comply with the applicable MMEL grandfathered or established in accordance with Part-21.

39. Article 10 addresses flight and cabin crew member training related to elements stemming from mandatory operational suitability data. While the operator is granted 2 years to adapt the relevant training programmes (Article 7.1(b)), a transition provision is necessary to allow for the delivery of the training to the crew members. The proposal takes account of the operators' training cycles.

40. Article 11 contains the entry into force and opt-out provisions. The definition of a maximum applicability date for the IRs in Article 70 of the Basic Regulation limits the periods available for transition by establishing that the IRs shall be applicable no later than 8 April 2012. On request of the European Commission, the method of opt-outs was chosen to cater for the transitional period where it extends beyond 8 April 2012.

41. Subparagraph 2(a) provides an opt-out for authorities on parts of the management system. Similar to operators, authorities need time to adapt their management system, procedures and manuals. The proposal foresees an opt-out of 1 year and takes into account previous discussions in the EASA Committee on the related air crew authority requirements.

42. As regards CAT helicopter operators, an opt-out of 2 years is provided to allow for the conversion of AOC described above.

43. Part-SPA contains specific approvals accessible to all operators, except for helicopter emergency medical service (HEMS), helicopter hoist operations (HHO), night vision imaging system (NVIS) operations and extended range operations with two-engined aeroplanes (ETOPS), which are accessible to AOC holders only. As regards CAT operations by aeroplane and helicopter, the principles regarding grandfathering and transitioning apply as described above. Concerning CAT operations with balloons and sailplanes, although applications for the specific approval for transporting dangerous goods might be rare, a transition period of 3 years is proposed. The same period is proposed for specialised operations. For non-commercial operations not carrying out specialised operations a transition period of 2 years is proposed.

44. The opt-outs are summarised in the table below:

Operation	Part	Aircraft	Opt-out
CAT, except A-A	Part-ORO Part-CAT Part-SPA	Aeroplanes	n/a
	Part-ORO Part-CAT Part-SPA	Helicopters	2 years
CAT A-A	Part-ORO Part-CAT	Aeroplanes Helicopters	Not yet applicable; to be delivered later
	Part-SPA	Aeroplanes Helicopters	3 years
CAT Balloons and Sailplanes	Part-ORO Part-CAT	Balloons Sailplanes	Not yet applicable; to be delivered later
	Part-SPA	Balloons Sailplanes	3 years
Specialised operations	Part-ORO* Part-SPO	Aeroplanes Helicopters Balloons Sailplanes	Not yet applicable; to be delivered later
	Part-SPA	Aeroplanes Helicopters Balloons Sailplanes	3 years
Non-commercial operations with CMPA	Part-ORO Part-NCC	Aeroplanes Helicopters	Not yet applicable; to be delivered later
	Part-SPA	Aeroplanes Helicopters	2 years
Non-commercial operations with otCMPA	Part-NCO	Aeroplanes Helicopters Balloons Sailplanes	Not yet applicable; to be delivered later
	Part-SPA	Aeroplanes Helicopters Balloons Sailplanes	2 years

*applicable to commercial activities other-than CAT and non-commercial specialised operations with complex motor-powered aircraft

Annex I - Definitions

I Scope

45. Annex I contains definitions for terms used in Annexes II-VIII of this Regulation.

II. Overview of reactions

46. Annex I received 53 reactions from 18 commentators (representing national aviation authorities, industry associations, manufacturers, airlines, an aerodrome association and an individual). In general, the collection of definitions into Annex I was supported, though the split between IR, AMC and GM was not. The item that attracted most comments was 'maximum passenger seating configuration', where the unanimous request was to transpose the intent of the EU-OPS/JAR-OPS 3 definition. The remaining comments were distributed across 30 terms, suggesting editorial corrections, changes to improve clarity or better alignment with the rules, and alignment with variously EU-OPS, JAR-OPS 3, CS-Definitions and ICAO Annex 6.

III. Overview of differences

Differences to EU-OPS / JAR-OPS 3

47. The majority of definitions align with those in EU-OPS and JAR-OPS 3. For those terms used in more than one IR, the definition has been placed in Annex I. Minor editorial changes were made to clearly identify where certain terms applied to a type of operation or aircraft and to ensure consistency with the drafting guidelines. Additional changes were made to the following terms:

- '3% en-route alternate aerodrome' was presented in the CRD in place of the EU-OPS term 'fuel en-route alternate aerodrome' - the requirement for 3% is contained in the AMC to CAT.OP.MPA.150 Fuel policy;
- 'adequate aerodrome': the EU-OPS definition stated what such an aerodrome should be and provided a non-exhaustive list of necessary ancillary services for such an aerodrome. Feedback from stakeholders identified the list of necessary ancillary services of the EU-OPS definition as difficult to comply with for aircraft operating under Part-NCC and Part-NCO, though other stakeholders requested that the full EU-OPS definition be transposed for CAT operations. In order to address this issue of proportionality, the Agency decided to transpose the list of necessary ancillary services into the appropriate IR in Part-CAT. Therefore the full intent of the EU-OPS definition has been retained for CAT operations;
- 'Category I (CAT I) approach operation' includes GNSS/SBAS (satellite-based augmented global navigation satellite system) to clarify that operations using localiser precision with vertical guidance (LPV) with a decision height below 250 ft (and not lower than 200 ft) are treated as CAT I operations;

- 'GNSS landing system (GLS)' has been renamed 'GBAS landing system (GLS)' and edited to align with ICAO PANS ATM and PANS ABC;
- 'heliport': the Agency considers this term to be covered by 'aerodrome' (as defined in the Basic Regulation) and 'operating site', and has not transposed this term in the new Regulation;
- 'hold-over time (HoT)': the definition remains unchanged from the CRD and is aligned with ICAO Annex 14;
- 'maximum operational passenger seating configuration (MOPSC)' is introduced in place of the term 'maximum approved passenger seating configuration' of EU-OPS / JAR-OPS 3. Stakeholder feedback indicated that the EU-OPS MAPSC is treated as an operational approval and that the NPA and CRD definitions for the maximum passenger seating configuration did not reflect this. The Agency therefore drafted the definition for the new term MOPSC with these reactions in mind. MOPSC is clearly an item established for operational purposes and must be specified in the operations manual. The definition also clarifies that the MOPSC should use as a baseline the maximum passenger seating configuration established during the certification process;
- 'Standard Category I' has been renamed 'Category I (CAT I) approach operation' and was redrafted to align better with that in EU-OPS/JAR-OPS 3 (the editorial change is that acronyms of the EU-OPS definition have been written out in full in Annex I).

Differences to ICAO Annex 6

48. While the majority of definitions are aligned with ICAO, as this Regulation transposes EU-OPS and JAR-OPS 3, there are some differences to ICAO:
    - 'CAT II, IIIA, IIIB approach operations' currently align with EU-OPS, though rulemaking task OPS.083 'Review of SPA.LVO' will consider alignment with the latest amendment to ICAO Annex 6;
    - 'Category A / B with respect to helicopters' – following reactions to the CRD, these have been aligned with the definitions for 'Category A' and 'Category B' for rotorcraft in CS-Definitions, which are considered to match the intent of JAR-OPS 3. Stakeholder feedback requested either to extend the alleviations for certain operations (in particular HEMS operations) so as to permit helicopters that do not fully comply with the required Certification Specifications to nevertheless be eligible for performance class 1 and 2 operations. Other stakeholders requested that the alleviations be withdrawn. The Agency does not see a safety case for changing the intent of the definitions;
    - 'en-route alternate (ERA) aerodrome': the definition remains aligned with EU-OPS, and differs to ICAO in that it is linked to 'adequate aerodrome' and may be required at the planning stage.
    - 'head-up display' is currently aligned with EU-OPS and future rulemaking task OPS.084 'HUD/EVS' will consider alignment with the latest amendment to ICAO Annex 6;

- 'operation in performance class 1 / 2 / 3' for helicopters: the CRD explained that the definitions remain aligned with those in JAR-OPS 3 as the Agency considers these to be most appropriate. No reactions on these items were received to the CRD, and no further changes were made. For performance class 1, the ICAO definition specifies that one-engine-inoperative (OEI) performance should be considered prior to reaching the take-off decision point (TDP) or after passing the landing decision point (LDP). The chosen definition in Annex I does not clearly define at which point the performance should be considered, though the IR states that this should be at or before the TDP (CAT.POL.H.205) and at or before the LDP (CAT.POL.H.220). For performance class 3, the chosen definition distinguishes between multi-engined and single-engined helicopters, in contrast to the ICAO definition.
- 'runway surface condition' likewise aligns with EU-OPS, and the definitions will be reviewed to align with the latest amendments to ICAO Annex 6 in rulemaking task OPS.005 'First editorial review of the OPS Implementing Rules', due to start in 2013. This will provide opportunities for stakeholder feedback.

IV. Explanations

49. As the main drafting principle was to transpose EU-OPS and JAR-OPS 3, this has resulted in some differences to ICAO Annex 6 (listed above). For a few terms, the EU-OPS and/or JAR-OPS 3 definition has been split into a main definition in Annex I and the other material placed in GM and/or IR or AMC. Therefore GM for the following have been drafted: head-up guidance landing system, hostile environment, offshore operations, night vision imaging system and V_1, which contain material that is open to interpretation or purely illustrative and therefore not appropriate within the main definition. This splitting of EU-OPS/JAR-OPS 3 definitions was also to address proportionality, to ensure that, for a few key terms, the definition could apply to several Parts. The case of 'adequate aerodrome' has been described above.

50. Some stakeholders requested that the definitions in the AMC to Annex I be placed within the Annex itself. The Agency maintains that AMC to Annex I is suitable for those terms that are used in other AMC or GM but not in the IRs themselves and the Decision will contain an AMC to Annex I. Following changes to the rule structure and placing of authority and organisation requirements in this Regulation, certain definitions previously published in the CRD to Parts AR and OR were added to this Regulation's Annex I: acceptable means of compliance, alternative means of compliance, code share, dry lease agreement, flight simulation training device (FSTD), grounding, operational control, principal place of business, prioritisation of ramp inspections, ramp inspection, rectification interval and wet lease agreement. These definitions were reviewed by stakeholders during the NPA and CRD phases of Parts AR and OR.

51. In response to specific reactions received to CRD OPS I, changes were made to a few definitions:

- 'anti-icing' and 'de-icing' have been clearly identified as ground procedures, and anti-icing as applicable to aeroplanes;

- ‘enhanced vision system (EVS)’ has been edited to align with amendment 34 to ICAO Annex 6 – this can be considered as an editorial change only.

52. Finally, the definition of ‘commercial air transport operation’ was transferred to the Cover Regulation, as this is key to understanding the scope of the various Annexes of this Regulation.

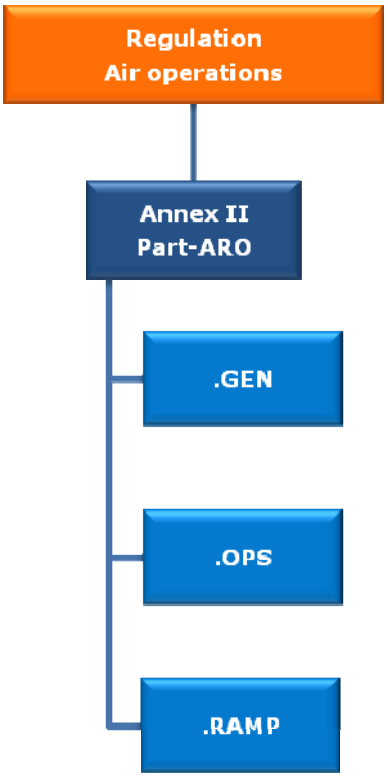
Annex II – Part-ARO

I. General

53. Part-ARO, as proposed with this Opinion, is composed of three Subparts:

- Part-ARO Subpart GEN, general requirements;
- Part-ARO Subpart OPS, specific requirements related to air operations;
- Part-ARO Subpart RAMP, requirements for ramp inspections of aircraft of operators under the regulatory oversight of another state.

Figure 3: Annex II Part-ARO



54. The text proposed in the Opinion reflects the changes made to the initial proposals of the Agency (as published in NPAs 2008-22b and 2009-02d) as a result of public consultation, as well as further changes made following the analysis and assessment of reactions made to the CRD. Subpart GEN of Part-ARO is largely aligned with Subpart GEN of Part-ARA (authority requirements on aircrew). The provisions for operators required to declare their activity are only relevant for air operations and have not been included in the draft Regulation on aircrew (Part-ARA). All rule references have been amended to reflect the naming convention proposed following the decision to amend the rule structure:

a. The former Part-AR provisions are now included as “Part-ARO” provisions, (“O” standing for “operations”, as opposed to ARA, with “A” standing for “aircrew”).

b. The former Section IV of AR.GEN is now included as a separate Subpart “ARO.RAMP”.

c. The former Subpart AR.OPS is renamed “ARO.OPS”.

Except for Part-ARO Subpart RAMP, the rule numbers (last three digits) remain unchanged.

55. The table below shows the rule references as per CRD and as per this Opinion, in the order of the Opinion:

CRD rule reference	CRD rule title	Opinion rule reference	Opinion rule title
AR.GEN	**General Requirements**	**ARO.GEN**	**ARO Subpart “General Requirements”**
---	---	ARO.GEN.005	Scope
AR.GEN.115	Oversight documentation	ARO.GEN.115	Oversight documentation
AR.GEN.120	Means of compliance	ARO.GEN.120	Means of compliance
AR.GEN.125	Information to the Agency	ARO.GEN.125	Information to the Agency
AR.GEN.135	Immediate reaction to a safety problem	ARO.GEN.135	Immediate reaction to a safety problem
AR.GEN.200	Management system	ARO.GEN.200	Management system
AR.GEN.205	Use of qualified entities	ARO.GEN.205	Allocation of tasks
AR.GEN.210	Changes in the management system	ARO.GEN.210	Changes in the management system
AR.GEN.220	Record-keeping	ARO.GEN.220	Record-keeping
AR.GEN.300	Continuing oversight	ARO.GEN.300	Oversight
AR.GEN.305	Oversight programme	ARO.GEN.305	Oversight programme
AR.GEN.310	Initial certification procedure - organisations	ARO.GEN.310	Initial certification procedure – organisations
AR.GEN.315	Procedure for the issue, revalidation, renewal or change of licences, ratings or certificates - persons	ARO.GEN.315	Procedure for the issue, revalidation, renewal or change of licences, ratings or certificates - persons
AR.GEN.330	Changes - organisations	ARO.GEN.330	Changes - organisations
AR.GEN.345	Declaration – organisations	ARO.GEN.345	Declaration – organisations
AR.GEN.350	Findings and corrective actions – organisations	ARO.GEN.350	Findings and corrective actions - organisations
AR.GEN.355	Enforcement measures - persons	ARO.GEN.355	Findings and enforcement measures - persons
AR.OPS	**Air Operations**	**ARO.OPS**	**ARO Subpart “Air Operations”**
AR.OPS.100	Issue of the air operator certificate	ARO.OPS.100	Issue of the air operator certificate

CRD rule reference	CRD rule title	Opinion rule reference	Opinion rule title
AR.OPS.105	Code-share arrangements	ARO.OPS.105	Code-share arrangements
AR.OPS.110	Lease agreements	ARO.OPS.110	Lease agreements
AR.OPS.200	Specific approval procedure	ARO.OPS.200	Specific approval procedure
AR.OPS.205	Minimum Equipment List approval	ARO.OPS.205	Minimum Equipment List approval
AR.OPS.210	Local area	ARO.OPS.210	Determination of local area
---	---	ARO.OPS.215	Approval of helicopter operations over a hostile environment outside a congested area
---	---	ARO.OPS.220	Approval of helicopter operations to or from a public interest site
---	---	ARO.OPS.225	Approval for operations to an isolated aerodrome
AR.GEN	**AR.GEN Section IV**	**ARO.RAMP**	**ARO Subpart "Ramp Inspections"**
AR.GEN.405	Scope	ARO.RAMP.005	Scope
AR.GEN.415	General	ARO.RAMP.100	General
AR.GEN.420	Prioritisation criteria	ARO.RAMP.105	Prioritisation criteria
AR.GEN.425	Collection of information	ARO.RAMP.110	Collection of information
AR.GEN.430	Qualification of ramp inspectors	ARO.RAMP.115	Qualification of ramp inspectors
---	---	ARO.RAMP.120	Approval of training organisations
AR.GEN.435	Conduct of ramp inspections	ARO.RAMP.125	Conduct of ramp inspections
AR.GEN.440	Categorisation of findings	ARO.RAMP.130	Categorisation of findings
AR.GEN.445	Follow up actions on findings	ARO.RAMP.135	Follow up actions on findings
AR.GEN.450	Grounding of aircraft	ARO.RAMP.140	Grounding of aircraft
AR.GEN.455	Reporting	ARO.RAMP.145	Reporting
AR.GEN.460	Agency coordination tasks	ARO.RAMP.150	Agency coordination tasks
AR.GEN.465	Annual report	ARO.RAMP.155	Annual report
AR.GEN.470	Information to the public	ARO.RAMP.160	Information to the public
Part-AR	**Appendices**	**Part-ARO**	**Appendices**
Appendix IV	Air Operator Certificate	Appendix I	Air Operator Certificate
Appendix V	Operations Specifications	Appendix II	Operations Specifications
Appendix VI	List of Specific Approvals	Appendix III	List of Specific Approvals
Appendix I	Standard report form	Appendix IV	Standard report form
Appendix II	Proof of ramp inspection form	Appendix V	Proof of ramp inspection form
Appendix III	Ramp inspection report	Appendix VI	Ramp inspection report

Table 1: Cross-reference CRD-Opinion for Part-ARO

II. Consultation

56. NPA 2008-22 was published on the EASA website (http://www.easa.europa.eu) on 31 October 2008. NPA 2009-02 was published on 30 January 2009.The consultation period for these NPAs was extended in accordance with Article 6(6) of the Rulemaking Procedure[7], at the request of stakeholders, to ensure an overlap of the consultation periods of the first extension NPAs[8]. By the closing dates of 28 May 2009 (NPA 2008-22) and 31 July 2009 (NPA 2009-02), the Agency had received 9 405 comments relevant to Parts-AR and OR from over 400 commentators, including national aviation authorities, professional organisations, private companies and individuals. The total number of comments for both NPAs amounted to 18 243.

57. The comment review was carried out in accordance with the joint approach for the extension of the EU competence set by the Agency and the European Commission, and as endorsed by the Management Board and EASA Committee.[9]

58. The amended rule texts were discussed in detail with the Rulemaking review groups established for NPAs 2008-22 and 2009-02. The composition of the review groups was based on that of the initial drafting groups established for rulemaking tasks OPS.001 and FCL.001. Membership of these initial drafting groups was extended to include additional stakeholder representatives, as well as one representative of the Agency's Standardisation department, in line with the rules of procedures for the membership of rulemaking groups. Part-AR was processed together with Part-OR to ensure consistency in outputs and efficiency in the review process. The review process also involved close coordination with the review groups established for the technical air operations (OPS) requirements (NPA 2009-02b) and consultation of the drafting groups established for the second extension (aerodromes, air traffic management, air navigation services).

59. The CRDs for Part-AR and Part-OR providing comment summaries and related Agency responses and the amended text were published on the Agency's website on 4 October 2010. The CRDs contained a list of all persons and/or organisations that had commented. By the closing date of 6 December 2010 the Agency had received 1 020 reactions for Part-AR and Part-OR from over 70 commentators, including aviation authorities from Austria, Belgium, Germany, France, Finland, Italy, Ireland, The Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, as well as professional organisations, non-profit organisations, private companies and a few individuals. The US Federal Aviation Administration (FAA) also reviewed the CRDs and had no comments. Of all the reactions received, 530 relate to Part-AR and 490 to Part-OR. The majority of reactions were made to Subparts GEN. Around 20% of the 1 020 reactions were made on the AMCs and GM to Part-AR and Part-OR.

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7 EASA Management Board Decision 08-2007, amending and replacing the Rulemaking Procedure, adopted at the Management Board meeting 03-2007 of 13 June 2007 (http://www.easa.eu.int/ws_prod/g/management-board-decisions-and-minutes.php).

8 More specifically, NPA 2008-22, on Authority and Organisation Requirements, and NPA 2009-02, on Implementing Rules for Air Operations of EU Operators (http://www.easa.eu.int/ws_prod/r/r_archives.php).

9 http://easa.europa.eu/ws_prod/g/doc/COMMS/Commission%20EASA%20joint%20position%20MB.%2015%2009%2009.pdf.

The graph below shows the distributions of the reactions to Part-AR only for the various Subparts.

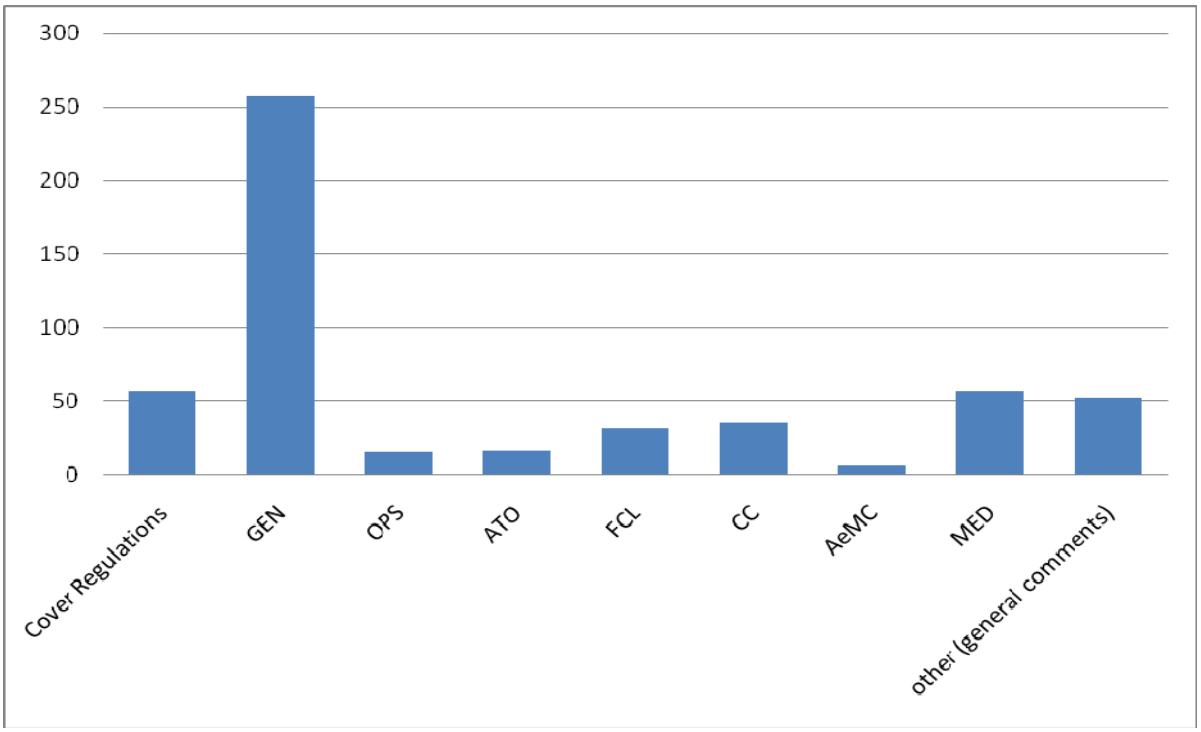

Figure 4: Reactions to Part-AR – distribution

60. An indication of the origin of reactions is provided below. Taking into account that reactions originating from industry representative associations are usually sent on behalf of their individual members, it can be assumed that the share of industry associations is under-represented in this graph. That the majority of reactions originated from national aviation authorities is not, however, surprising.

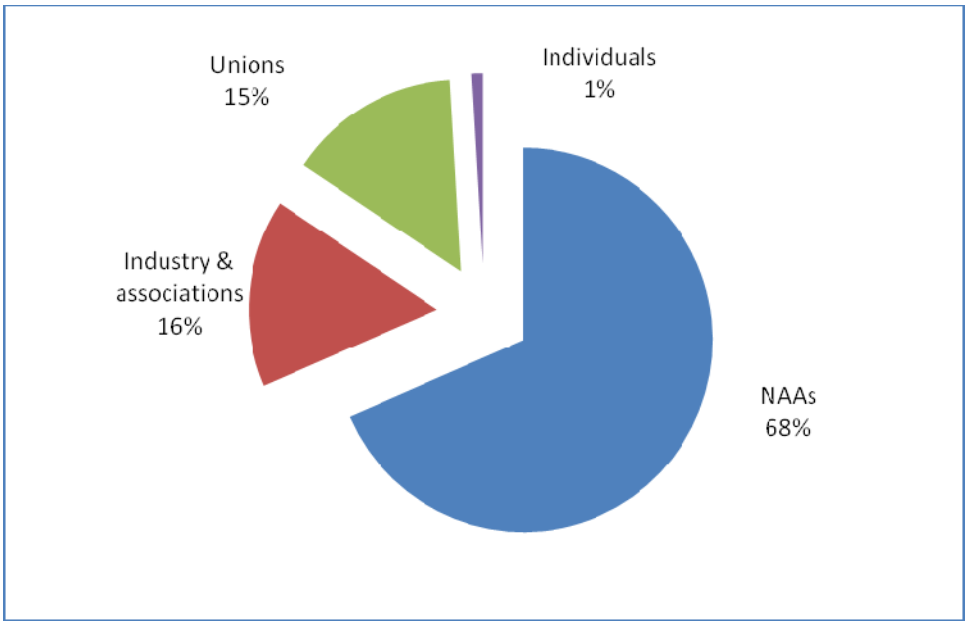

Figure 5: Reactions to Part-AR – origin

III. Scope and applicability

61. Although this Opinion is presented for CAT operations only, Part-ARO as proposed with this Opinion is applicable to all types of air operations, including commercial operations other than CAT, non-commercial operations of complex motor powered aircraft and other-than-complex motor-powered aircraft. This shall ensure that at the end of the adoption process the rules will be accurate and consistent for all types of air operations (commercial and non-commercial operations). It is stressed that any authority requirement intended to also apply to operations other than CAT will remain pending until the Opinions containing the relevant technical requirements (e.g. Part-NCC, Part-NCO, Part-SPO) are adopted.

Subpart GEN of Part-ARO defines common requirements for competent authorities; it is composed of three Sections:

- Section 1 General;
- Section 2 Management; and
- Section 3 Oversight, certification and enforcement.

62. These implement relevant articles of the Basic Regulation as regards the interactions between approved organisations and the competent authority, cooperation and exchange of information between competent authorities and with the Agency, the approval of means of compliance alternative to those established by the Agency, the need to immediately react to a safety problem, as well as conditions for issuing, maintaining, amending, limiting, suspending or revoking certificates and approvals. Subpart GEN further contains requirements for the organisation and management system of competent authorities that are directly relevant to competent authorities' oversight capabilities.

Basic Regulation	Authority Requirements
Article 2(2)(d) Objectives Article 15 Information network	Safety programme (Cover Regulation Article 3)
Article 18 Agency measures Article 19 Opinions, certifications and guidance material	Means of compliance (ARO.GEN.120)
Article 7 Pilots	Oversight capabilities (Cover Regulation Article 4) Oversight (ARO.GEN.300) Oversight programme (AOR.GEN.305) Initial certification (ARO.GEN.310 & 315) Changes – organisations (ARO.GEN.330) Findings – organisations (ARO.GEN.350) Findings and enforcement - persons (ARO.GEN.355)
Article 7 Pilots (ATOs, AeMCs, FSTDs)	
Article 8 Air Operations	
Article 8(4) Air Operations - Cabin Crew	
Article 10 Oversight and enforcement	Oversight (ARO.GEN.300) Oversight programme (ARO.GEN.305) Findings (ARO.GEN.350) Enforcement - persons (ARO.GEN.355)
Article 13 + Annex V – Qualified entities	Allocation of tasks (ARO.GEN.205)
Article 15 Information network	Information to the Agency (ARO.GEN.125) Oversight programme (ARO.GEN.305) Management system (ARO.GEN.200)
Article 14 Flexibility provisions Article 15 Information network Article 22(1) Air operation certification	Immediate reaction to a safety problem (ARO.GEN.135)
Article 24 Monitoring the application of rules	Management system (ARO.GEN.200) Changes in the management system (ARO.GEN.210)
Article 54 Inspection of Member States	Changes in the management system (ARO.GEN.210) Record keeping (ARO.GEN.220)

Table 2: Basic Regulation Articles and corresponding AR

63. In line with the total system approach the requirements in Subpart GEN have been drafted with a view to ensuring consistency and compatibility as far as practicable with relevant rules in the field of aerodromes, air traffic management/air navigation services, as well as of airworthiness. Considering their general character, the proposed Implementing Rules take due account of the critical elements (CE) of a safety oversight system defined by ICAO[10], in particular as regards:

- CE-3: State civil aviation system and safety oversight functions
- CE-4: Technical personnel qualification and training
- CE-5: Technical guidance, tools and the provision of safety-critical information
- CE-6: Licensing, certification, authorisation and/or approval obligations

[10] See ICAO Document 9735 *Safety Oversight Audit Manual*, 2nd Edition — 2006, Appendix C – by assessing the effective implementation of the critical elements of a safety oversight system, the State's capability for safety oversight is determined as part of the ICAO Universal Safety Oversight Audit Programme.

- CE-7: Surveillance obligations
- CE-8: Resolution of safety concerns.

64. ICAO standards on implementing a State Safety Programme (SSP) require the State to establish mechanisms to ensure effective monitoring of these critical elements11. Therefore, the requirements proposed with Subpart GEN will support Member States in their efforts to implement SSPs.

65. The proposed rules further draw upon relevant provisions in EU-OPS Subpart C "Operator Certification and Supervision"[12] and provisions that existed in the JAA JIPs. The IRs and related AMCs in Subpart GEN to Part-ARO are fully consistent with the relevant standards on safety oversight contained in ICAO Annex 6 Part 1 Appendix 5 and Part 3 Appendix 1.

ICAO Annex 6 Part 1 - Appendix 5 **ICAO Annex 6 Part 3 - Appendix 1**	**EASA Rules and related AMCs/GM**
1. Primary aviation legislation	the Basic Regulation ORO.GEN.140
2. Specific operating regulations	Regulation (EC) No 216/2008; Essential Requirements, Regulation (EC) No 2042/2003[13] Part-ARO Subpart OPS
3.CAA structure and safety oversight functions	ARO.GEN.200(a)(2) sufficient number of staff Cover Regulation Article 4
4. Technical Guidance	ARO.GEN.115 ARO.GEN.200(a)(1)
5. Qualified technical personnel	ARO.GEN.200(a)(2) GM1 and 2-ARO.GEN.200(a)(2)
6. Licensing and certification obligations	ARO.GEN.200(a)(1) - AMC1-ARO.GEN.305(b)-OPS ARO.GEN.310 - AMC1-ARO.GEN.310(a)-OPS
7. Continued surveillance obligations	ARO.GEN.200(a)(1); ARO.GEN.300 ARO.GEN.305; AMC1-ARO.GEN.305(b)
8. Resolution of safety issues	ARO.GEN.200(a)(1) and ARO.GEN.350 ARO.GEN.350

Table 3: Correspondence between relevant ICAO standards on oversight and Part-ARO / Part-ORO

11 See ICAO Annex 1 Attachment C and ICAO Annex 6 Attachment J "Framework for the State Safety programme" § 3.1.

12 Rule comparison tables for EU-OPS and JAR-OPS 3 were provided with the CRDs on Part-AR and Part-OR, cf. http://easa.europa.eu/rulemaking/docs/crd/part-ar/CRD%20c.4%20-%20Rule%20comparison%20EU-OPS+JAR-OPS3.pdf.

13 Commission Regulation (EC) No 2042/2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks. *OJ L 315, 28.11.2003, p. 1.*

66. Subpart GEN of Part-ARO, by proposing common requirements that may be applied to all types of certificates and approvals, implements the conclusions of the JAA COrA report in terms of performance-related oversight, streamlined approval processes providing consistency in organisation approvals, where such consistency is essential for organisations to implement effective (safety) management systems. The ICAO objective of introducing SMS in all aviation fields necessarily leads to the same basic principles of organisation management and approval.

67. Considering that Part-ARO builds upon existing rule material and proposes requirements that are fully aligned with the relevant ICAO standards for States' safety oversight systems, the core of the authority tasks defined in the IRs proposed with this Opinion are not fundamentally different from those that competent authorities are already performing today. Any additional tasks find their justification either in the Basic Regulation directly (i.e. the implementation of those Articles pertaining to the first extension, the achievement of the principal objective of the Basic Regulation in terms of safety, standardisation and harmonization) or in those ICAO standards related to the establishment of an SSP.

ARO.GEN Section 1 - General

68. Section 1 complements the requirements for Member States defined at the level of the Cover Regulation (Article 4 – Oversight capabilities) with general requirements applicable to competent authorities. It chiefly aims to facilitate cooperation and the exchange of information between authorities and the Agency, as well as between the authorities themselves. These provisions derive from the high level requirements provided for in the Basic Regulation (in particular Articles 5(5); 7(6); 8(5); 10; 15; 22(1) and 24). Section 1 also includes obligations related to oversight documentation that complement the relevant provisions on oversight capabilities included in the Cover Regulation, with reference to ICAO Critical Element CE-5 "Technical guidance, tools and the provision of safety-critical information".

69. Section 1 further requires competent authorities to provide safety-significant information to the Agency (ARO.GEN.125(b)). Although Directive 2003/42/EC[14] established the concept of mandatory safety reports in case of serious incidents, it was felt that the related implementing measures[15] do not provide for explicit requirements on the need to convey to the Agency all available safety information in a suitable format. The Agency should typically be informed of issues relating to design, operational suitability data (OSD) and operational safety as identified in the European Aviation Safety Programme (EASP) or areas specifically identified by the Agency as constituting a safety concern. AMC material will be included for AR.GEN.125(b) as an outcome of the work currently in progress in the framework of the Agency's Internal Occurrence Reporting System (IORS). In turn, this will

[14] Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation *(OJ L 167, 4.7.2003, p. 23).*

[15] Article 2 of Commission Regulation (EC) No 1321/2007 of 12 November 2007 laying down implementing rules for the integration into a central repository of information on civil aviation occurrences exchanged in accordance with Directive 2003/42/EC of the European Parliament and of the Council Text with EEA relevance *(OJ L 294, 13.11.2007, p. 3).*

provide the Agency with an essential tool to develop the annual safety review requested by the Legislator[16].

70. Section 1 includes requirements for processing means of compliance alternative to the Acceptable Means of Compliance issued by the Agency. The term Acceptable Means of Compliance (AMC) as referred to in Articles 18 and 19 of the Basic Regulation is primarily used to qualify technical/procedural material to be used by Member States and industry when implementing the Basic Regulation and its IRs. In this respect, an AMC illustrates a means to comply with the rule. Because the related material issued by the Agency is not of a legislative nature, it cannot create obligations on the regulated persons and they may decide to show compliance with the applicable requirements using other means. However, the Legislator intended such material to provide for legal certainty for applicants and to contribute to uniform implementation, so therefore has conferred it with a presumption of compliance with the rule. The AMC commits the competent authorities so that regulated persons complying with it must be recognised as complying with the law. However, flexibility is provided as stakeholders may propose an alternative means of compliance to their competent authority, and, provided they can demonstrate that an equivalent level of safety can be guaranteed, these alternative means of compliance could then be approved and implemented.

71. The proposal made with the CRD aimed at ensuring uniform processing of such alternatives by competent authorities and providing for full transparency, which is lacking in the current system. The legal basis for the alternative means of compliance mechanism and the obligations for competent authorities can be found in Articles 5(5), 7(6) and 8(5) of the Basic Regulation, among others, establishing that IRs shall be adopted on how to issue, maintain and amend certificates and approvals. Since alternative means of compliance are mainly means used by applicants to establish compliance with the IRs, the Agency considered it necessary to establish a process for both applicants and authorities to deal with these alternative means of compliance. As for the role and obligations included for the Agency, they find their legal basis in the powers attributed to the Agency to monitor the implementation of rules by competent authorities and to standardise their performance (see Basic Regulation, Articles 10 and 24).

72. For the sake of standardisation and harmonisation, an obligation is established for the competent authority to notify the Agency of each alternative means of compliance that it has approved or is using, as well as to make available to all organisations and persons under its oversight the alternative means of compliance the competent authority itself uses to achieve compliance with the applicable rules. This introduces a new task for competent authorities, which can however be implemented on the basis of existing mechanisms and procedures; therefore the additional burden is expected to be limited.

73. Through the NPA comments and CRD reactions it clearly appeared that a majority of stakeholders would favour a systematic ex-ante check by the Agency of all alternative means of compliance before their approval and/or implementation by the competent authority. The central argument is to maintain a level playing field and to eliminate uncertainty residing in the fact that alternative means of

[16] Article 15(4) of the Basic Regulation.

compliance approved by the competent authority without intervention of the Agency may subsequently be challenged, for example during a standardisation inspection. The Basic Regulation does not include a mandate for such ex-ante approval by the Agency as it leaves the implementation of the rules to the Member States. Consequently these concerns cannot be addressed under the current legal system. In order, however, to take into consideration stakeholder concerns, a mitigating element is foreseen by rendering explicit the requirement for the competent authority to establish a system to consistently evaluate and control all alternative means of compliance used by itself or by organisations under its oversight. In this context it is important to note that the use of alternative means of compliance approved by a competent authority is limited to the particular organisation. Other organisations intending to use the same alternative means of compliance have to process them again with their competent authority.

74. Finally, in response to CRD reactions, the Agency simplified the definitions by deleting the term “additional means of compliance” and extending the definition of “alternative means of compliance” to cover means that provide an alternative to an existing AMC and new means to establish compliance with the Basic Regulation and its IRs where no associated AMC have been adopted by the Agency.

ARO.GEN Section 2 - Management

75. The rules in Section 2 require competent authorities to establish and maintain a management system in order to comply with their obligations and to discharge their responsibilities as embedded in Part-ARO. The main elements of such management system emulate typical management system requirements applicable to organisations:

- documented policies and procedures;
- sufficient and adequately qualified personnel, including the obligation to plan the availability of personnel;
- nomination of management personnel for the different areas of activity;
- adequate facilities and accommodation;
- a function to monitor compliance of the management system, including nomination of a person or group of person responsible for the compliance monitoring function;
- the need to ensure that certification and oversight tasks performed on behalf of the competent authority conform to the applicable requirements;
- a system to identify changes that affect the management system and to take action to ensure it remains effective; and
- a system of record-keeping to ensure traceability of activities performed.

76. These management system requirements are complemented by a specific requirement to establish procedures for the effective exchange of information and assistance of other authorities, which further detail the requirements of Basic Regulation Article 15(1). The set of common requirements for competent authority management systems proposed with Section 2 directly relate to the ICAO critical

elements of safety oversight systems CE-4 “Technical personnel qualification and training” and CE-5 “Technical guidance, tools and the provision of safety critical information”. These requirements support the implementation of SSPs and shall contribute to creating an effective oversight system to encourage regulated organisations to implement management systems in line with Part-ORO.

77. With a view to supporting the standardisation process and facilitating the move of that process towards continuous monitoring[17], Section 2 also requires competent authorities to provide the Agency with the relevant documentation on their management system and on changes thereto.

78. Regarding ARO.GEN.205, some Member States challenged the inclusion of specific provisions in Part-ARO, claiming that Basic Regulation Article 13 and Annex V were sufficiently addressing the issue. Conversely, the Agency considers that the Basic Regulation does not provide how the specified obligations shall be ensured and therefore maintains the provisions, in an amended version: The rule now addresses the allocation by the competent authority of certification and oversight tasks to legal or natural persons and focuses on the criteria to be met. Such specific rules aim to warrant that any certification or oversight task performed on behalf of the competent authority conforms to the applicable requirements, similar to what is required from organisations when contracting activities within their scope of approval. This new implementing rule is directly relevant to ensuring a high level of safety in competent authority certification and oversight activities, as well as uniform implementation of the relevant Basic Regulation provisions. This new rule does not interfere with the flexibility provided to Member States regarding the designation of one or more entities as competent authority as defined in Cover Regulation Article 4.1; it is applicable within each competent authority designated by a Member State.

79. While the provisions in Section 2 derive from existing requirements, such as those contained in Sections B to Regulation (EC) No 2042/2003 in the field of competent authority organisation, qualification and training, procedures, facilities, record-keeping and more, they require some new tasks for competent authorities:

a. the transmission to the Agency of procedures and amendments thereto, the information to the Agency regarding changes affecting the management system (ARO.GEN.200(d) and ARO.GEN.210(c));

b. the definition and implementation of procedures for participation in a mutual exchange of information and assistance to other competent authorities ARO.GEN.200(c); and

c. the implementation of a compliance monitoring system encompassing internal audit and safety risk management processes (ARO.GEN.200 (a)(4);(5)), including the implementation of a system to initially and continuously assess legal or natural persons performing certification or oversight tasks on behalf of the competent authority (ARO.GEN.205).

[17] The Continuous Monitoring Approach (CMA) will involve the establishment of a system to continuously monitor Member States according to a harmonised and consistent approach. Monitoring of Member States’ safety oversight capability will be based on the following four key steps: (1) collect and validate safety data, (2) analyse and measure level of safety oversight capability, (3) identify deficiencies and assess the related risks, (4) develop and implement strategies for risk mitigation.

80. Whereas for tasks a. and b. it may be assumed that authorities can rely on existing resources and communication channels, it is acknowledged that implementing task c. may require additional resources. The responsibilities of Member States for providing the necessary oversight capabilities and resources to competent authorities to perform their tasks in accordance with applicable requirements are clearly set out in Article 4(4) of the Cover Regulation. This shall form the legal basis for ensuring that all additional tasks can be financed. In this context it is worth noting that an effective management system, including compliance monitoring and safety risk management, shall also contribute to ensuring cost-efficiency in certification and oversight processes and to facilitate the implementation of SSPs.

81. In addition, the provisions in Section 2 now present the obligations:

a. for competent authorities to maintain a list of all organisation certificates, FSTD qualification certificates and personnel licences, ratings, certificates or attestations issued (ARO.GEN.220(b));

b. for competent authorities to keep records of the evaluation of alternative means of compliance proposed by organisations subject to certification and the assessment of alternative means of compliance used by the competent authority itself (ARO.GEN.220(a)(11)); and

c. to implement a system to plan the availability of personnel (ARO.GEN.200(a)(2)).

82. Although current rules do not include such explicit requirements, it can be assumed that competent authorities do have in place systems required to comply with these new requirements as part of their administration of certificates and approvals and their management of personnel.

ARO.GEN Section 3 – Oversight, certification and enforcement

83. This Section within Part-ARO Subpart GEN provides the necessary elements to the competent authority on how to interact with regulated organisations and persons. It describes general oversight principles, addresses the elements of the oversight programme and details the specific actions, roles and responsibilities of competent authorities for certification, continuing oversight and enforcement processes. It is based on established procedures in existing regulations. The rules on oversight take into account the high-level requirements contained in the Basic Regulation to ensure oversight is not limited to organisations and persons certified by the competent authority.

84. The relevant provisions derive from JAA JIPs to JAR-OPS and JAR-FCL, as well as existing section B requirements in Regulations (EC) Nos 1702/200318 and 2042/2003. Relevant articles of the Basic Regulation are for OPS: 8(5); for FCL: 7(6); for cooperative oversight: Articles 10, 11, and 15. In response to stakeholder feedback, more specific instructions on initial certification and oversight, specifically addressing processes, staff qualifications and adequacy of

[18] Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations. *OJ L 243, 27.9.2003, p. 6.*

number, validity of licences and ratings for flight instructors etc… will be included with the AMCs and GM.

85. The proposal made with the NPA included elements stemming from the COrA recommendations for issuing a single organisation certificate to those organisations holding approvals in accordance with more than one Part. The analysis of NPA comments clearly indicated that the "single certificate" concept is not supported: industry concerns relate to the fact that ICAO does not require a "cover" organisation approval on top of the AOC, thus the single certificate would create a European specificity without international recognition. Competent authorities commented that the conditions for the issuance of the single certificate and the link between the stand-alone organisation certificate and the area-specific certificates (AOC, ATO, AeMC) were not clearly established. They further claimed that the single organisation certificate would create a significantly increased workload for authorities that was not justified in terms of safety. As the main objectives behind the concept of a single organisation certificate can be achieved without imposing the issuance of a single certificate, the Agency agreed not to maintain the single certificate concept. Indeed, in terms of effective oversight it is far more relevant to rationalise the oversight programme for organisations holding approvals in accordance with more than one Part than to issue a stand-alone organisation certificate. Crediting audit items for organisations certified in accordance with more than one Part is allowed, as described in the AMCs to ARO.GEN.305.

86. The NPA also included a proposal for cooperative oversight[19] aimed at creating the basis for ensuring the most efficient oversight of those activities that are not geographically limited to the Member State where the certificate has been issued. The main objective of the cooperative oversight provisions is to bring a European dimension into oversight, by encouraging the best use of oversight resources locally, while ensuring that all persons, organisations or aircraft are subject to regular oversight. This would implement some of the specific recommendations of the Conference of Directors General of Civil Aviation on a Global Strategy for Safety Oversight (held at the ICAO premises in 1997) during which the need for coordinating and harmonising the principles and procedures for assessing safety oversight at a global level was emphasised and the advantages of adopting a regional focus were recognised. The Agency proposal was largely commented upon. The majority of comments were made by competent authorities, expressing concerns about a possible blurring of oversight responsibilities and on the practical aspects of cooperation between authorities, where different legal systems or language barriers would constitute potential obstacles. Industry concerns mainly pointed to the additional burden and possible duplication of oversight on organisations operating in several Member States.

87. In line with the recommendations made by the AR/OR review group and following a dedicated meeting with Advisory Group of National Authorities (AGNA) representatives, relevant ARO.GEN Section 3 provisions were further refined so as to address the main concerns expressed by stakeholders. A risk-based approach primarily considering the safety priorities identified in the State Safety Plan referred to in Cover Regulation Article 3 shall be used to determine the scope of

[19] The term "collective oversight" used in the Explanatory Note to NPA 2008-22 is now replaced by "cooperative oversight", which better reflects the intent of the relevant provisions.

oversight for activities performed in the territory of the Member State by persons or organisations not certified by the competent authority. The primary responsibility of the competent authority that issued the certificate remains unchanged. The proposal is complemented with provisions for cooperation on a voluntary basis in form of agreements between authorities so that some oversight tasks may be performed by the authority in whose territory the activity takes place, thus increasing the visibility of those activities. This should encourage competent authorities to make the best use of authority resources locally. The IRs related to findings and enforcement (ARO.GEN.350 and ARO.GEN.355) were amended accordingly. ARO.GEN.350 was further amended for consistency with ARA.CC to address falsification and fraud. A new subparagraph ARO.GEN.300(f) is added to include a provision for competent authorities to collect and process any information deemed useful for oversight, which is based on that previously defined in AR.GEN.425(a), as collecting such information is not only relevant for ramp inspections. This provision will support the determination of safety priorities in view of implementing risk-based oversight and continuous monitoring.

88. While the Agency amended its proposal on cooperative oversight to address the main concerns expressed by Member States, it insists on the importance of extending oversight to all activities within a Member State's territory and enhanced cooperation between Member States' competent authorities, in order to cope with the challenges of the common market: An increased number of pilots and operators may exercise their privileges in an EU State different to the State primarily responsible for their oversight. Therefore, the Agency suggests a review of the implementation of the cooperative oversight provisions and the appropriate functioning of the oversight system in the future, not only to detect possible oversight loopholes at the earliest possible stage, but also to determine the need for more specific provisions, with the aim to foster oversight capabilities at European level, both in terms of safety and efficient use of resources.

89. Another important element proposed with the NPA was the move towards risk-based and performance-based oversight, also stemming from the COrA initiative. Following an assessment of NPA comments, the 24-month oversight interval initially defined at the level of implementing rule was moved to AMC to AR.GEN.305 for the CRD, so as to provide flexibility. This change to AMC level triggered stakeholder reactions expressing serious concerns about implementing a purely risk-based system at the present stage: These claimed such system should not be adopted before regulated organisations had achieved a sufficient maturity in their safety management systems and competent authorities gained visibility of their safety performance, through collection and analysis of relevant data. Some stakeholders further commented that the flexibility provided could be used to justify further reductions in competent authority resources. In order to address those concerns, the Agency agreed to reinstate the 24-month interval at implementing rule level and now proposes a number of criteria for extending or reducing this standard oversight interval. These provisions apply to organisations certified by the competent authority.

90. The provisions of "indirect approval" of certain types of organisation changes proposed with the NPA were reviewed. The issue is now addressed in ARO.GEN.330 "Changes – organisations" and changes are classified as either requiring prior approval or as not requiring prior approval by the competent

authority. Moreover, provisions are included for those organisations wishing to implement changes without prior competent authority approval: the organisation shall have a procedure specifying the scope of such changes and describing how these will be managed and submit this procedure to the competent authority for approval (cf. ARO.GEN.310(c)). The amended provisions fully meet the intent of "indirect approval" or changes "acceptable to the authority".

91. The proposed IRs on findings and enforcement actions were amended to include the findings description previously provided with Part-OR and to align with changes made in ARO.GEN.300 and ARO.GEN.305 related to cooperative oversight. Moreover, all references to penalties were deleted, as these are subject to the applicable national rules implementing Basic Regulation Article 68. Finally, the implementation period for corrective actions was redefined to align with existing requirements in the continuing airworthiness rules. The title of ARO.GEN.355 was amended to better align with the title of ARO.GEN.350.

92. Considering that a large portion of the IRs proposed with ARO.GEN Section 3 are based on existing requirements, and taking into account the obligations of Member States under ICAO to implement effective oversight systems as part of their SSP, the tasks that are genuinely new or that are not part of those deriving from the obligations under the Chicago Convention or the JIPs are limited to the obligations to:

    a. inform persons and organisations that are subject to an oversight agreement between competent authorities (ARO.GEN.300(e));

    b. approve the organisation's procedure related to changes not requiring prior approval (ARO.GEN.310(c));

    c. inform the competent authority that issued the certificate in case any non-compliance with the applicable requirements by an organisation certified by the competent authority of another Member State or the Agency has been detected, as well as to provide an indication of the level of the finding (ARO.GEN.350(e)); and

    d. inform the competent authority that issued the license, certificate, rating or attestation in case any non-compliance with the applicable requirements by a person certified by the competent authority of another Member State has been detected (ARO.GEN.355(e)).

93. It can be assumed that authorities may rely on existing resources, oversight and certification processes, as well as communication channels to perform those additional tasks.

ARO.OPS – Air operations

94. Part-ARO Subpart OPS is applicable to commercial operators and non-commercial operators. It defines the application process for an air operator certificate, the approval of leasing and code-sharing arrangements, the specific operations approval procedure, the approval of the minimum equipment list (MEL), the determination of a local area, the approval of helicopter operations over a hostile environment located outside a congested area, the approval of helicopter operations to or from a public interest site and the approval for operations to an isolated aerodrome.

95. ARO.OPS consists of two Sections:

- ARO.OPS Section 1: Certification of commercial air operators
- ARO.OPS Section 2: Approvals

96. This Subpart is based on the relevant JAA Joint Implementing Procedures (JIPs) to JAR-OPS.

97. The main issues raised as a response to the CRD were related to the approval of code share (**ARO.OPS.105**) and lease agreements (**ARO.OPS.110**). Significant changes were made to some provisions of this Section, in particular to the provisions on code-share and leasing.

98. **ARO.OPS.020** "Record-keeping - Register of operator certificate and declarations" was deleted because record keeping of the certification and declaration process is covered by ARO.GEN.220.

99. In **ARO.OPS.100** "Issue of the air operator certificate" no significant text changes were made. From the comments it appeared that it is not clear what is meant by "and general conditions". The wording "and general conditions" is already covered by the wording "associated operations specifications" and is therefore deleted.

100. **ARO.OPS.230** "Changes" was deleted because it is sufficiently covered in ARO.GEN.310(c) and (d) and ARO.GEN.330.

101. **ARO.OPS.105** "Code-share agreements": the comments made on code share and leasing were similar to those made to the respective provision in ORO.AOC. A detailed explanation of the changes and the justifications is offered in the Explanatory Note to Part-ORO, cf. Subpart ORO.AOC.

102. Some editorial changes were made and the provision was brought in line with ORO.AOC.115. The reference to Regulation (EC) No 2111/200520(EU Safety list) and Part-TCO are deleted to bring it in line with the modification made to ORO.AOC.115. The modification made to ORO.AOC.115 prevents an EU operator to sell or issue tickets for flights operated by an operator that is subject to an operating ban in accordance with Regulation (EC) No 2111/2005.

103. **ARO.OPS.110** "Lease agreements": the provision underwent a major text change. The provision on dry lease-in will be reassessed in the course of the amendment of Regulation 2042/2003 (NPA 2010-10 "Part-T"). Moreover, specific requirements were introduced for the suspension and revocation of the approval of wet lease-in agreements, including a reference to Regulation (EC) No 2111/2005.

104. With regard to dry lease-out, a paragraph was added to ensure that the competent authority approving the agreement will coordinate with the competent authority responsible for the oversight of the aircraft in accordance with Commission Regulation (EC) No 2042/2003 or for the operation of the aircraft, if it is not the same authority and that the dry leased-out aircraft is removed from the operator's AOC in good time.

[20] Regulation (EC) No 2111/2005 of the European Parliament and of the Council of 14 December 2005 on the establishment of a Community list of air carriers subject to an operating ban within the community and on informing air transport passengers of the identity of the operating air carrier, and repealing Article 9 of Directive 2004/36/EC.

105. Short-term leasing in the event of unforeseen urgent operational circumstances or operational needs for a limited duration is subject to Article 14.4 of the Basic Regulation. ACJ OPS1.165 provides guidance for the competent authority and the lessee for short-term leasing. In a number of comments it was proposed to include this ACJ. However, after assessing the ACJ it was considered not to be suitable in the current legal framework. Therefore it has been decided to address ACJ OPS1.165 in a separate rulemaking task.

106. AR.OPS.300 "Certification procedure", now as **ARO.OPS.200** "Specific approval procedure" was amended to cater for a newly introduced list of specific approvals template for non-commercial operations (cf. Appendix III – EASA Form 140).

107. AR.OPS.305, now as **ARO.OPS.205** "Minimum equipment list approval": the provision was edited to improve clarity. The wording "…and conduct where relevant, an inspection of the organisation" is deleted because the MEL and related maintenance and operations procedures approval is solely a documentary process.

108. A new rule **ARO.OPS.210** "Local area" was added. The term "local area" is used in some provisions to provide certain alleviations, e.g. regarding the applicability of flight crew training requirements.

109. The radius of this local area shall be determined by the competent authority, depending on the local environment and operating conditions. More guidance will be provided in a GM to this paragraph.

110. **ARO.OPS.215** "Approval of helicopter operations over a hostile environment located outside a congested area" is introduced to require those mountain and remote areas for which operations can be approved to be conducted without an assured safe forced landing capability, to be designated by the Member State and to require the competent authority to review the risk assessment and consider the technical and economic justification for the conduct of such operations before approving them.

111. **ARO.OPS.220** "Approval of helicopter operations to or from a public interest site and **ARO.OPS.225** "Approval for operations to an isolated aerodrome" are introduced to ensure that a list is available to which the approval applies, as the site/aerodrome specific procedures need to be assessed by a competent authority before the approval is granted. An approval without defining to which sites or aerodrome it applies would not ensure that site or aerodrome-specific procedures have been appropriately assessed or developed.

ARO.OPS – AOC and operations specifications

112. The AOC template, now as **Appendix I to Part-ARO**, **EASA Form 138**, is based on the AOC template developed by ICAO.

113. The template was slightly modified. The expiry date was removed since the AOC is issued for an unlimited duration. The reference to CAT and non-CAT in the operations specifications template was moved to the AOC template. This means that the AOC will indicate whether or not the operations carried out under the AOC are CAT.

114. The operations specifications template in **Appendix II to Part-ARO**, **EASA Form 139** is also based on the template developed by ICAO. It has undergone some changes. Partly because the scope is wider (all commercial EU operators need to hold an AOC), but also due to changes in terminology, to specific approvals for e.g. cabin crew (CC) training and the issuing of CC attestations and changes resulting from the comments received. A section on aircraft registration marks was included. In footnote 6 a sentence is added to clarify that the registration mark could also be entered in the remark column to the related specific approval in case not all specific approvals apply to the same aircraft model. In footnote 20 a sentence is added to ensure that aircraft used for non-commercial operations in accordance with ORO.AOC.125 are specified in the operations specifications.

115. **Appendix III to Part-ARO** was added to document specific approvals issued to non-commercial operators in a coherent manner. This template is similar to the operations specifications template for commercial operations. It is identified with an EASA Form number (EASA Form 140).

ARO.RAMP – Ramp inspections of aircraft of operators under the regulatory oversight of another State

116. Subpart RAMP is applicable to competent authorities when performing ramp inspections of aircraft used by third country operators and EU operators that fall under the regulatory oversight of any other Member State. It defines the annual quota of ramp inspections of aircraft landing at the Member State's aerodromes, conditions for the Agency to perform ramp inspections, criteria for the prioritisation of ramp inspections, the qualification of ramp inspectors, the approval of training organisations, the conduct of ramp inspections, the classification of findings and follow-up actions, grounding of aircraft and the coordination tasks of the Agency.

117. This Subpart is based on Regulation (EC) No 216/2008, Directive 2004/36/EC ("SAFA Directive")[21], Commission Regulation (EC) No 351/2008[22], Commission Regulation (EC) No 768/2006[23] and Directive 2008/49/EC[24].

118. The main issues raised in this Subpart were on the scope (ARO.RAMP.005), the prioritisation criteria (ARO.RAMP.105), the conduct of ramp inspections (ARO.RAMP.125), the categorisation of findings (ARO.RAMP.130), the grounding of aircraft (ARO.RAMP.140) and the minimum annual quota (ARO.RAMP.100 (c)(1) and related AMC).

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21 Directive 2004/36/CE of the European Parliament and of the Council of 21 April 2004 on the safety of third-country aircraft using Community airports.*OJ L 143, 30.4.2004, p. 76.*

22 Commission Regulation (EC) No 351/2008 of 16 April 2008 implementing Directive 2004/36/EC of the European Parliament and of the Council as regards the prioritisation of ramp inspections on aircraft using Community airports. *OJ L 109, 19.4.2008, p. 7*.

23 Commission Regulation (EC) No 768/2006 of 19 May 2006 implementing Directive 2004/36/EC of the European Parliament and of the Council as regards the collection and exchange of information on the safety of aircraft using Community airports and the management of the information system. *OJ L 134, 20.5.2006, p. 16.*

24 Directive 2008/49/EC of the European Parliament and of the Council of 16 April 2008 amending Annex II to Directive 2004/36/EC of the European Parliament and of the Council regarding criteria for the conduct of ramp inspections on aircraft using Community airports .*OJ L 109, 19.4.2008, p. 17.*

119. **ARO.RAMP.005** "Scope": a number of Member States apply the methodology established in the SAFA Directive when performing ramp inspections on aircraft used by operators they oversee: the so-called "domestic operators". Other Member States indicated that they have a different approach with regard to the oversight of domestic operators or only apply the SAFA methodology partially. These Member States consider that applying ARO.RAMP to domestic operators is neither needed nor proportionate and will have a detrimental effect on resources. They believe that inspections should be focusing on "system checks" rather than "output checks", which are considered less effective. Some comments indicated that the scope of this Subpart should be limited to SAFA only.

120. The SAFA Directive mandates Member States to inspect third country aircraft suspected of non-compliance with international safety standards. It allows for the conduct of spot check inspections (i.e. inspections performed in the absence of any suspicion) and reaffirms the right of Member States to conduct other ramp inspections (i.e. on aircraft registered in a Member State). The concept of ramp inspections on foreign aircraft was endorsed by the 36th ICAO Assembly and subsequently the Annex 6 was amended to mandate the contracting States to "establish a programme with procedures for the surveillance of operations in their territory by a foreign operator and for taking appropriate action when necessary to preserve safety". The ICAO Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335) contains guidance on the performance of ramp inspections on foreign operators, emulating to a large extent the procedures applied in the EU SAFA Programme.

121. Currently, a little over 50 % of the ramp inspections are conducted on aircraft operated by EU operators (although considering that the majority of the traffic is intra-EU traffic the inspection rate (inspections/no. of landings) is far higher for third country operators). Inspections are conducted against ICAO standards for EU and third country aircraft. Inspections on EU operators, whilst overall producing less findings when compared with other regions of the world, still identify serious non-compliances of a number of EU operators. Following EASA regular analysis, this information is transmitted to the respective NAAs ensuring oversight, which in many occasions have decided to conduct further, more in depth, investigations and audits, which in several cases have led to the limitation, suspension and revocation of an AOC.

122. The data collected through ramp inspections, which is a bottom-up, product sampling programme, complements and articulates well with other top-down programmes, like regular oversight programmes or the EASA standardisation programme. Having in mind the initiative to gradually change the oversight activities from "hard-time" to "on-condition" by introducing a risk based approach, it is therefore very important to have available means to measure and monitor the risk. Ramp inspections have been proven to be a good tool to collect safety data and derive risk indicators and therefore are contributing to an appropriate risk-based oversight.

123. The principles of cooperative oversight are clearly established in Article 10 of the Basic Regulation which stipulates that:

- the Member States and the Agency shall cooperate in order to enforce compliance with the applicable EU safety regulations

- the Member States shall conduct ramp inspections, in addition to their national oversight responsibilities
- measures shall be enacted specifying the "conditions for conducting ramp inspections, including systematic ones".

124. Considering the above and that most of the ICAO SARPs have been implemented in EU legislation, it is therefore obvious that inspections on aircraft used by EU operators should continue and that those inspections should be made against EU standards. The Agency believes that the Safety Assessment of Community Aircraft programme (SACA), once implemented properly, can serve as a tool for the oversight of domestic operators. Therefore the Agency decided not to change the scope of this Section.

125. **ARO.RAMP.100** "General": (a) was brought in line with ARO.GEN.305 "Oversight programme". Therefore the reference to the "spot check procedure" was deleted. ARO.GEN.305 requires competent authorities to establish an oversight programme which shall be based on past oversight activities and an assessment of risks. The Agency therefore considers that the objective of the deleted part of this paragraph is adequately covered in ARO.GEN.305.

126. Paragraph (b) was deleted because SANA is excluded from the scope of this Subpart. A new (b) was brought in line with (a). The annual programme will be part of the oversight programme referred to in ARO.GEN.305.

127. **"Minimum annual quota":** The number of SAFA inspections conducted by the Member States on an annual basis varies dramatically, not only in absolute numbers but also when considering the number of foreign operators (EU and third country) landing in their territory and the volume of their operations.

128. The immediate effect of this "imbalance" is limited data collected on those operators that do not operate in the most active States, which affects the relevance of any subsequent analysis.

129. The concept of a minimum national quota was introduced in order to ensure a level playing field among Member States by guaranteeing comparable input from each of them. The formula for the calculation of the national quota takes into account two components: (1) the diversity of foreign traffic (number of operators) and (2) the volume of operations (number of landings). Based on the comments received during the commenting period, the formula was revised to allocate a different weight to those operators having a limited number of landings (less than 12) in a particular State during a year. Also based on the comments received, the formula was revised to value differently the inspections considering risk factors (e.g. prioritised subjects, reduced sampling rate) and cost factors (remote locations, odd hours). Although not expressed quantitatively, the implementation of the formula should take into account two considerations: (1) achievement of the widest sampling basis and (2) avoidance of repeated inspections on operators for which previous inspections did not reveal safety concerns. The aim of the minimum quota is not to increase the overall number of inspections but to enable a better distribution across Member States. In fact, when applying the formula to the traffic of 2009 and 2010 the resulting overall quota would have been lower than the actual number of inspections performed in those years.

130. The data collected through ramp inspections will support two new processes: authorisation of third country operators and cooperative oversight of EU operators. It is therefore important that the data is collected in a consistent and uniform way, providing sufficient reliable information to support a risk based oversight of these activities.

131. The Agency will evaluate periodically the AMC containing the formula for the calculation of annual the quota. The text in (d) has been modified to ensure that ramp inspections performed by the Agency are performed in cooperation with Member States. Some modifications were made to (d)(2) and (3) to make it more clear when the Agency could perform a ramp inspection itself.

132. **ARO.RAMP.105** "Prioritisation criteria": in a new (c) a reference to the EU Safety list was included in order to be able to start preparing a prioritisation list after an air safety committee meeting in the context of Regulation (EC) No 2111/2005. The last sentence of (b)(3)(i) has been transferred to GM. ARO.RAMP.105(b)(5)has been modified to ensure that aircraft of third country operators whose authorisation issued by the Agency is limited or reinstated after suspension or revocation will be subject to prioritised inspections. (c) has been modified to cater for comments indicating that a procedure should be established for creating a priority list.

133. In **ARO.RAMP.115** "Qualification of ramp inspectors" the title has been changed and "ramp" included. In (d) a requirement has been added for the Agency to maintain the established training syllabi.

134. The CRDs **AMC1-AR.GEN.430(c)(2) and (3)** have been upgraded to **ARO.RAMP.120**. Directive 2008/49/EC regulates, inter alia, the evaluation of third party training organisations that provide training on ramp inspections (i.e. organisations that are not a part of a competent authority). Member States employing the services of such an organisation have the obligation to evaluate it. However, Member States may ask the Agency to perform a technical assessment of the training organisation on their behalf.

135. Member States and third party ramp inspection training organisations indicated that the current approach is inefficient and results in disproportionate administrative and regulatory burdens. Considering the small number of third party training organisations in operation, centralising the technical evaluation at the level of the Agency will therefore help to streamline the evaluation process while maintaining the safety objective of providing high quality training. Therefore the European SAFA Steering Group (ESSG) and the European Commission have requested the Agency to upgrade AMC1-AR.GEN.430(c)(2)and (3) to IR, as implemented in this Opinion. This provision creates a legal basis for the prior approval of a training organisation and refers to conditions to be met by the organisation before such an approval is granted. These conditions are already defined in guidance material developed and published by the Agency pursuant to Directive 2008/49/EC and will be reassessed in a separate rulemaking task for complementing the IR.

136. **ARO.RAMP.125** "Conduct of ramp inspections":(a) on conflict of interest was transferred to Article 4 of the Cover Regulation (cf. 4(4)), because the Agency considers it should be applicable to inspectors in all areas covered by Part-ARO. The reference to Appendix III (now as Appendix VI to Part-ARO) was deleted,

since this form will only be used by the Agency. The competent authority shall use the modified form in Appendix V (Proof of inspection) which now also includes the category of the finding.

137. In **ARO.RAMP.130** "Categorisation of findings": the level 1 and 2 findings were changed into category 1, 2 and 3 findings. Many concerns were raised with regard to the change of the categories 1 to 3 findings as established in the SAFA Directive into level 1 and 2 findings, which are the ones defined in ARO.GEN.350. These concerns were repeated in the ad-hoc group meeting on "ramp inspections", which took place in Cologne in June 2010. The main justifications put forward by competent authorities to maintain the current classification system are that the classification of findings as established in the SAFA Directive is more appropriate in the case of product audits, which are a "snapshot" at a particular moment in time, and that therefore this classification better serves the intention of ramp inspections. However, the general classification (level 1 and 2) is applicable in the case of a system or process audit. Competent authorities also expressed their concerns on changing a well-established classification system that has proven to be more than adequate.

138. The Agency believes that for the purpose of the current SAFA inspections the use of three categories of findings is appropriate. However, since the scope of ARO.RAMP is wider than that of the SAFA Directive (it also applies to aircraft used by EU operators), a link between the operator and the aircraft needs to be established in certain cases. Applying two different findings classification schemes (level 1 and 2 for the operator and category 1, 2 and 3 for an aircraft) could create difficulties for competent authorities on the one hand and possible confusion for operators on the other.

139. Nonetheless it is understood that the SAFA system, including the categorisation of findings, has been proven to work. Moreover, the Agency also considers that too many changes in the system at the same time may create a heavy burden on both the competent authorities' and operators' resources. Therefore, the Agency decided to introduce the already existing categorisation of findings into this Subpart.

140. **ARO.RAMP.140** "Grounding of aircraft": (d) was added to make clear which actions must be taken to lift the grounding if the non-compliance affects the validity of the certificate of airworthiness, taking into account the different authorities responsible for continuing oversight of the aircraft. (d)(4) has been deleted because the future Part-TCO does not address "sub-ICAO" aircraft (including temporarily non-airworthy aircraft) at the moment. The authorisation of such aircraft will be subject to a separate rulemaking task.

141. **ARO.RAMP.145** "Reporting": (a) was brought in line with ARO.RAMP.120 (a). In (b) the reference to the Agency was deleted because the information referred to must be collected by the competent authorities. (c) was aligned with ARO.RAMP.110 (b). The term "*voluntary*" was deleted from (d) to protect any person providing information and therefore encourage disclosure of safety relevant information.

142. In **Appendix IV to Part-ARO "Standard Report Form**" the National Coordinator's name and signature were deleted because the information will be entered into the centralised database referred to in ARO.RAMP.150 (b)(2).

143. **Appendix V "Proof of Ramp Inspection Form"** and **Appendix VI "Ramp Inspection Report":** the templates were slightly modified for clarity and consistency with changes made in terminology or in the respective Parts of this Opinion. EASA Form numbers were allocated to each form.

IV. Overview of differences

144. The following table lists differences between Part-ARO and EU-OPS / JAR-OPS 3. Relevant differences between Part-ORO and EU-OPS / JAR-OPS 3 are provided in the explanatory memorandum to Part-ORO.

Differences to EU-OPS/JAR-OPS 3

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
1./3.035 Quality system (c)	ARO.GEN.310	Quality Manager: Under Part-ORO, the concept of "acceptable to the competent authority" for nominated post holders (now referred to as "nominated persons") is encompassed in the approval of the operator and the management of changes in nominated persons as described in AMC1-ARO.GEN.330 "Changes-organisations"	This is seen as providing an equivalent level of control.
1.165 (b) (2)(i) and (c)(1)(i) Leasing	N/A	No requirement to impose conditions in the lease agreement which are part of this approval	The reference to "any conditions which are part of this approval must be included in the lease agreement" is not considered necessary because Member States are not allowed to impose additional safety related conditions to the lease agreement

Differences to ICAO Annex 6 for Part-ARO

145. The following table provides an overview of ICAO Annex 6 standards in Part I and Part III Section 1 and Section 2 within the scope of this Opinion[25] which are

[25] In particular, the ICAO standards on maintenance and the operator's maintenance control are not considered here.

considered to be either not transposed or transposed in a way which does not align with the corresponding ICAO Annex 6 standards.

Annex 6 Part I / III reference	EASA-EU reference	Description of difference
Part I - 3.3.1 Part III – 1.3.1 States shall establish a State safety programme in order to achieve an acceptable level of safety in civil aviation	N/A	This is not specific to air operations. It cannot be transposed in the Regulation on Air Operations.
Part I – 1.3.1 Part III – 1.3.2 The acceptable level of safety to be achieved shall be established by the State.	N/A	

V. List of proposed rulemaking tasks

146. The following table provides an overview of proposed rulemaking tasks relevant to Part-ARO. As regards Subpart GEN, these mainly focus on the following issues:

a. Following consultation of the OPS review groups it was suggested to complement the AMC material in Sections 2 and 3 of Part-ARO with additional provisions for competent authority personnel involved in the oversight of AOC holders as well as for initial certification and oversight of AOC holders by incorporating relevant sections from the JIPs and ICAO Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc. 8335);

b. The provisions for authorities and organisations addressing risk assessment, safety management and SSP will be further elaborated upon in parallel with the implementation of the EASP and following publication of the new ICAO Annex 19 regarding Safety Management Standards and Recommended Practices.

Part, rule references	Scope	Reference to RMP
ARO.GEN.125(b)	Create AMC to specify the type of information to be provided to the Agency. This should typically include all design related safety issues, issues related to the operational suitability data, as well as issues relating to specific areas identified by the Agency as constituting a safety concern.	MDM.095 a + b
ARO.GEN.200(a)(2)	Include additional AMC and GM on the qualification and training of inspectors for the oversight of AOC holders.	OPS.005 a, b

Part, rule references	**Scope**	**Reference to RMP**
ARO.GEN.200(a)(4)	Include additional guidance on how to establish a safety risk management process, including determining and using key risk elements, taking into account the establishment of the European Aviation Safety Programme and the requirement for a Safety Plan (Cover Regulation Article 3).	MDM.095 a + b
ARO.GEN.300 ARO.GEN.305 ARO.GEN.310	Include additional AMC and GM on the compliance verification for AOC holders upon initial certification, as well as for their continuing oversight.	OPS.005 a, b
ARO.OPS	Address ACJ OPS.1.165 on guidance for the competent authority and the lessee for short-term leasing in a separate rulemaking task.	OPS.005 a, b
ARO.RAMP	Develop a comprehensive system of procedures ensuring a harmonised way of performing ramp inspections in accordance with Part-ARO.RAMP by transferring existing EASA SAFA GM dealing with the qualification of ramp inspectors, the conditions for training organisations and the ramp inspection procedures and by complementing it by the parts required due to the introduction of the new requirements, notably the ones concerning the ramp inspections conducted on operators certified in an EASA country.	OPS.087

Annex III – Part-ORO

I. General

147. Part-ORO as proposed with this Opinion is composed of eight Subparts, which are further divided into Sections, containing general requirements and specific requirements for air operations:

148. Part-ORO Subpart GEN, general requirements, complemented by:

- Part-ORO Subpart AOC, specific requirements related to air operator certification;
- Part-ORO Subpart DEC, specific requirements for operators required to declare their activity;
- Part-ORO Subpart MLR, specific requirements related to manuals, logs and records;
- Part-ORO Subpart SEC, specific requirements on security;
- Part-ORO Subpart FC, specific requirements for flight crew;
- Part-ORO Subpart CC, specific requirements for cabin crew; and
- Part-ORO Subpart TC, specific requirements for technical crew in HEMS, HHO or NVIS operations;

149. Part-ORO Subpart GEN as proposed with this Opinion includes two Sections:

- Section 1 General
- Section 2 Management system.

150. The requirements in Subpart GEN of Part-ORO build upon the main COrA recommendations and ICAO standards related to SMS. They complement the authority requirements on conditions for issuing, maintaining, amending, limiting, suspending and revoking certificates and approvals.

151. The text proposed in the Opinion reflects the changes made to the initial proposal of the Agency (as published in NPAs 2008-22c and 2009-02c), as well as further changes made following the analysis and assessment of reactions made to the CRD.

II. Consultation

152. The explanatory memorandum Part-ARO contains general information on the reactions made to the CRDs to Part-AR and Part-OR. The table below shows the distributions of the 490 reactions received to Part-OR (CRD 2008-22c and 2009-02c), of which 1/3 were made on the AMCs and GMs and 2/3 on the IRs.

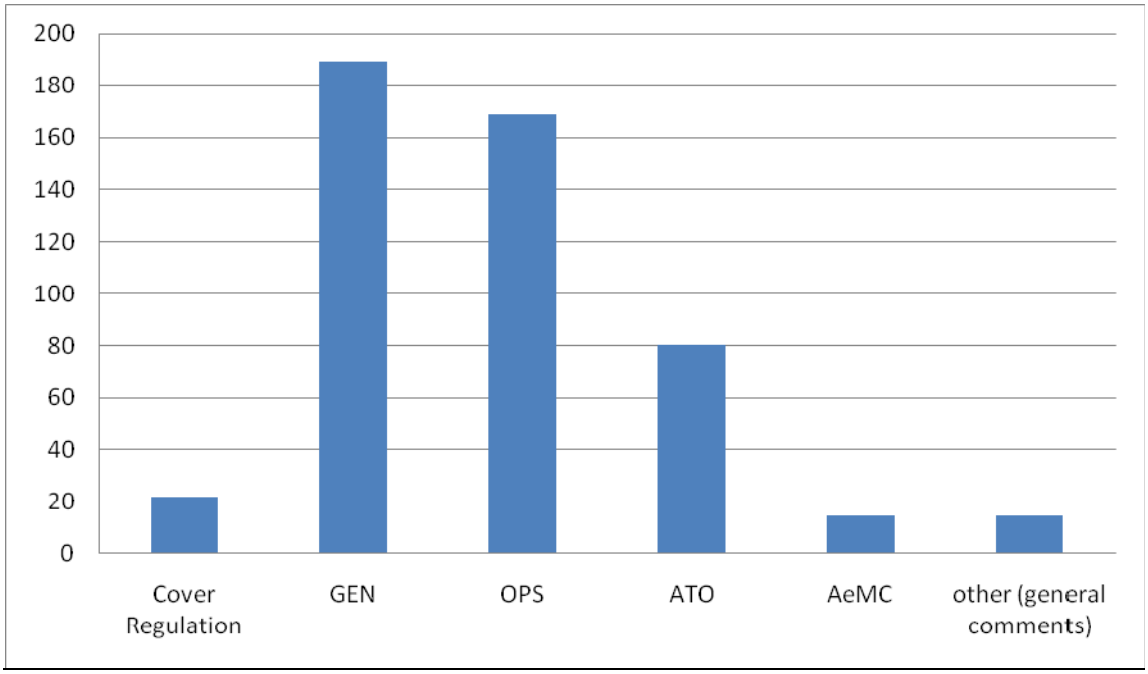


Figure 6: Reactions to Part-OR – distribution

153. An indication of the origin of reactions is provided below. Taking into account that reactions originating from industry representative associations are usually sent on behalf of their individual members, it can be assumed that the global share of industry is under-represented in this graph.

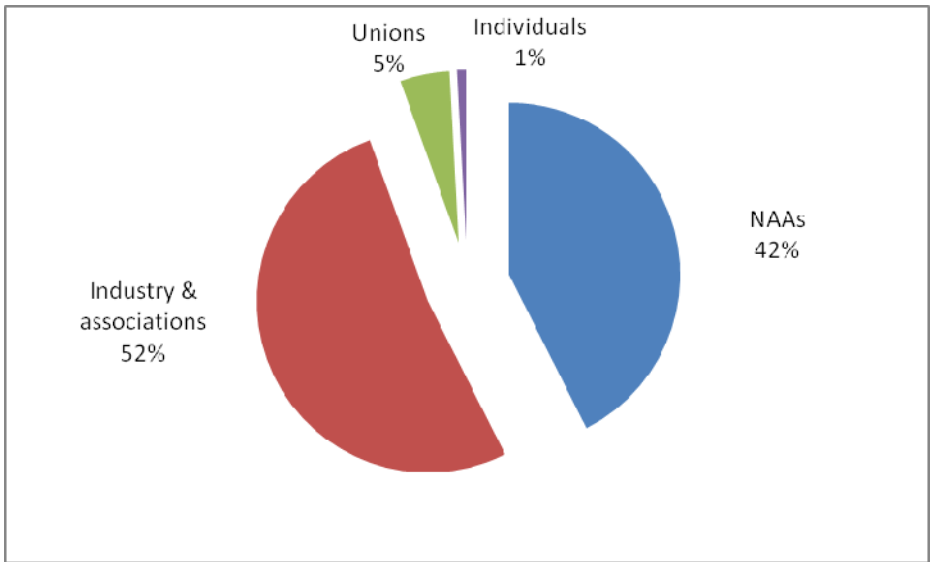


Figure 7: Reactions to Part-OR – origin

154. The main issues raised in the reactions to the CRD are addressed in the subsequent paragraphs.

III. Scope and applicability

155. Part-ORO as proposed with this Opinion is applicable to the approval and/or continuing oversight of air operators conducting non-commercial operations with complex motor-powered aircraft or commercial operations. The revised structure for the regulation on air operations places the organisation requirements relevant to air operations (Part-ORO) as a specific Annex containing all rules applicable to non-commercial operations with complex-motor-powered aircraft or commercial operations. This shall ensure that, at the end of the adoption process, the rules will be accurate and consistent for all types of air operations (CAT operations and non-commercial operations). Therefore, the sub-structure of Part-ORO has been maintained, although this may at first appear as not necessary from the CAT perspective only.

156. It is stressed that any organisation requirement in Part-ORO that is intended to apply to operations other-than CAT will remain pending until the Opinions containing the relevant technical requirements (e.g. Part-NCC, Part-NCO) are adopted.

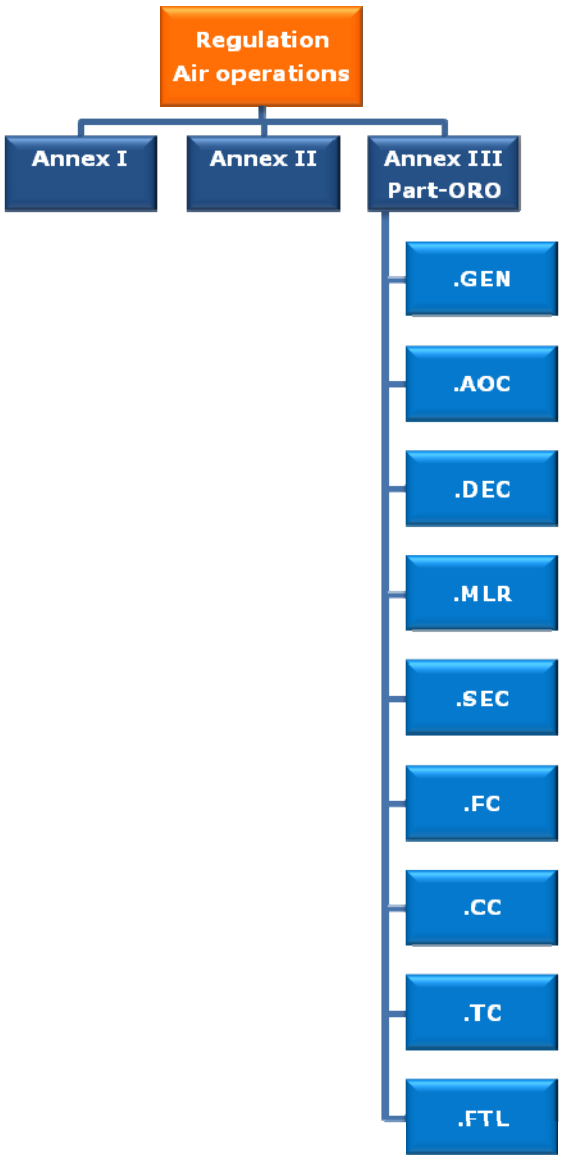
157. Subpart GEN of Part-ORO is aligned with Subpart GEN of the organisation requirements for aircrew (Part-ORA), with two exceptions:

- the provisions on declaration are only included in the rules for air operations; and
- to ensure consistency with Part-CAT and Part-SPA, the term “organisation” is replaced by “operator” in Part-ORO.

158. Part-ORO Subpart GEN Section 1 complements the Part-ARO requirements on issuing, maintaining, amending, limiting, suspending and revoking certificates and approvals. Part-ORO Subpart GEN Section 2 defines common management system requirements encompassing compliance monitoring and safety management.

159. Furthermore, Part-ORO Subpart GEN now includes the provisions on operator responsibilities previously included in Part-OR Subpart OPS Section GEN (OR.OPS.GEN). The remaining Sections of the former Part-OR Subpart OPS are now included as separate Subparts. In the future, these will be complemented with a new Subpart on flight time limitations (Subpart FTL).

Figure 8: Annex III Part-ORO



160. With a few exceptions, the numbering (last three digits) of the former Part-OR provisions remains unchanged. The cross-reference table below shows the rule references as per CRD and as per this Opinion, in the order of the Opinion:

CRD rule reference	CRD rule title	Opinion rule reference	Opinion rule title
OR.GEN	**General Requirements**	**ORO.GEN**	**Part-ORO Subpart General Requirements**
---	---	ORO.GEN.100	Scope
OR.GEN.105	Competent authority	ORO.GEN.105	Competent authority
---	---	ORO.GEN.110	Operator responsibilities
OR.GEN.115	Application for an organisation certificate	ORO.GEN.115	Application for an operator certificate

CRD rule reference	CRD rule title	Opinion rule reference	Opinion rule title
OR.GEN.120	Means of Compliance	ORO.GEN.120	Means of Compliance
OR.GEN.125	Terms of approval and privileges of an organisation	ORO.GEN.125	Terms of approval and privileges of an operator
OR.GEN.130	Changes to organisations subject to certification	ORO.GEN.130	Changes
OR.GEN.135	Continued validity	ORO.GEN.135	Continued validity
OR.GEN.140	Access	ORO.GEN.140	Access
OR.GEN.145	Declaration	---	(now in separate Subpart ORO.DEC)
OR.GEN.150	Findings	ORO.GEN.150	Findings
OR.GEN.155	Immediate reaction to a safety problem	ORO.GEN.155	Immediate reaction to a safety problem
OR.GEN.160	Occurrence reporting	ORO.GEN.160	Occurrence reporting
OR.GEN.200	Management system	ORO.GEN.200	Management system
OR.GEN.205	Contracting and purchasing	ORO.GEN.205	Contracted activities
OR.GEN.210	Personnel requirements	ORO.GEN.210	Personnel requirements
OR.GEN.215	Facility requirements	ORO.GEN.215	Facility requirements
OR.GEN.220	Record-keeping	ORO.GEN.220	Record-keeping
OR.OPS	**Part-OR Subpart OPS Air Operations**	**---**	**(all sections included as Subparts)**
OR.OPS.GEN	Section: General requirements	---	---
OR.OPS.GEN.100	Scope	---	(incorporated in ORO.GEN as 005)
OR.OPS.GEN.105	Operator responsibilities	---	(incorporated in ORO.GEN as 110)
OR.OPS.AOC	**Section: Air Operator Certification**	**ORO.AOC**	**Part-ORO Subpart Air Operator Certification**
OR.OPS.AOC.100	Application for an Air Operator Certificate	ORO.AOC.100	Application for an Air Operator Certificate
OR.OPS.AOC.105	Operation specifications and privileges of an air operator certificate holder	ORO.AOC.105	Operation specifications and privileges of an air operator certificate holder
OR.OPS.AOC.110	Leasing	ORO.AOC.110	Leasing
OR.OPS.AOC.115	Code share arrangements	ORO.AOC.115	Code share arrangements
OR.OPS.AOC.120	AOC approvals to provide Part-CC training and to issue cabin crew attestations	ORO.AOC.120	AOC approvals to provide Part-CC training and to issue cabin crew attestations
OR.OPS.AOC.125	Non-commercial operations of aircraft subject to an AOC	ORO.AOC.125	Non-commercial operations of aircraft subject to an AOC
OR.OPS.AOC.130	Flight data monitoring - aeroplanes	ORO.AOC.130	Flight data monitoring - aeroplanes
OR.OPS.AOC.135	Personnel requirements	ORO.AOC.135	Personnel requirements
OR.OPS.AOC.140	Facility requirements	ORO.AOC.140	Facility requirements
OR.OPS.AOC.150	Documentation requirements	ORO.AOC.150	Documentation requirements
OR.OPS.DEC	**Section: Air Operator Declaration**	**ORO.DEC**	**Part-ORO Subpart Declaration**
OR.OPS.DEC.100	Declaration	ORO.DEC.100	Declaration
OR.OPS.DEC.105	Content of the declaration	---	---
OR.OPS.MLR	**Section: Manuals Logs and Records**	**ORO.MLR**	**Part-ORO Subpart Manuals Logs and Records**
OR.OPS.MLR.100	Operations manual - General	ORO.MLR.100	Operations manual - General

CRD rule reference	CRD rule title	Opinion rule reference	Opinion rule title
OR.OPS.MLR.101	Operations manual - Structure for commercial operations and NC SPO with CMPA	ORO.MLR.101	Operations manual - Structure for commercial operations and NC SPO with CMPA
OR.OPS.MLR.105	Minimum equipment list (MEL)	ORO.MLR.105	Minimum equipment list (MEL)
OR.OPS.MLR.110	Journey log	ORO.MLR.110	Journey log
OR.OPS.MLR.115	Record-keeping	ORO.MLR.115	Record-keeping
OR.OPS.SEC	**Section: Security**	**ORO.SEC**	**Part-ORO Subpart Security**
OR.OPS.SEC.100.A	Flight crew compartment security	ORO.SEC.100.A	Flight crew compartment security
OR.OPS.SEC.100.H	Flight crew compartment security	ORO.SEC.100.H	Flight crew compartment security
OR.OPS.FC	**Section: Flight Crew**	**ORO.FC**	**Part-ORO Subpart Flight Crew**
OR.OPS.FC.005	Scope	ORO.FC.005	Scope
OR.OPS.FC.100	Composition of flight crew	ORO.FC.100	Composition of flight crew
OR.OPS.FC.105	Designation as pilot-in-command/commander	ORO.FC.105	Designation as pilot-in-command/commander
OR.OPS.FC.110	Flight engineer	ORO.FC.110	Flight engineer
OR.OPS.FC.115	Crew resource management (CRM) training	ORO.FC.115	Crew resource management (CRM) training
OR.OPS.FC.120	Operator conversion training	ORO.FC.120	Operator conversion training
OR.OPS.FC.125	Differences training and familiarisation training	ORO.FC.125	Differences training and familiarisation training
OR.OPS.FC.130	Recurrent training	ORO.FC.130	Recurrent training
OR.OPS.FC.135	Pilot qualification to operate in either pilot's seat	ORO.FC.135	Pilot qualification to operate in either pilot's seat
OR.OPS.FC.140	Operations on more than one type or variant	ORO.FC.140	Operations on more than one type or variant
OR.OPS.FC.145	Provision of training	ORO.FC.145	Provision of training
OR.OPS.FC.200	Composition of Flight Crew	ORO.FC.200	Composition of Flight Crew
OR.OPS.FC.205	Command course	ORO.FC.205	Command course
OR.OPS.FC.215	Initial Operator's Crew Resource Management (CRM) training	ORO.FC.215	Initial Operator's Crew Resource Management (CRM) training
OR.OPS.FC.220	Operator conversion training and checking	ORO.FC.220	Operator conversion training and checking
OR.OPS.FC.230	Recurrent training and checking	ORO.FC.230	Recurrent training and checking
OR.OPS.FC.240	Operation on more than one type or variant	ORO.FC.240	Operation on more than one type or variant
OR.OPS.FC.235	Pilot qualification to operate in either pilot's seat	ORO.FC.235	Pilot qualification to operate in either pilot's seat
OR.OPS.FC.245.A	Alternative training and qualification programme	ORO.FC.245.A	Alternative training and qualification programme
OR.OPS.FC.255.A	Commanders holding a Commercial Pilot Licence (Aeroplane) (CPL(A))	ORO.FC.255.A	Commanders holding a Commercial Pilot Licence (Aeroplane) (CPL(A))
OR.OPS.FC.255.H	Commanders holding a Commercial Pilot Licence (Aeroplane) (CPL(A))	ORO.FC.255.H	Commanders holding a Commercial Pilot Licence (Aeroplane) (CPL(A))
OR.OPS.FC.330	Recurrent training and checking - Operator Proficiency Check	ORO.FC.330	Recurrent training and checking - Operator Proficiency Check
OR.OPS.FC.201.A	In-flight relief of flight crew members	ORO.FC.201.A	In-flight relief of flight crew members

CRD rule reference	CRD rule title	Opinion rule reference	Opinion rule title
OR.OPS.CC	**Section: Cabin Crew**	**ORO.CC**	**Part-ORO Subpart Cabin Crew**
OR.OPS.CC.005	Scope	ORO.CC.005	Scope
OR.OPS.CC.100	Number and composition of cabin crew	ORO.CC.100	Number and composition of cabin crew
OR.OPS.CC.110	Conditions for assignment to duties	ORO.CC.110	Conditions for assignment to duties
OR.OPS.CC.115	Conduct of training courses and associated checking	ORO.CC.115	Conduct of training courses and associated checking
OR.OPS.CC.120	Initial training course	ORO.CC.120	Initial training course
OR.OPS.CC.125	Aircraft type-specific training and Operator conversion training	ORO.CC.125	Aircraft type-specific training and Operator conversion training
OR.OPS.CC.130	Differences training	ORO.CC.130	Differences training
OR.OPS.CC.135	Familiarisation	ORO.CC.135	Familiarisation
OR.OPS.CC.140	Recurrent training	ORO.CC.140	Recurrent training
OR.OPS.CC.145	Refresher training	ORO.CC.145	Refresher training
OR.OPS.CC.200	Number and composition of cabin crew	ORO.CC.200	Number and composition of cabin crew
OR.OPS.CC.205	Minimum number of cabin crew in unforeseen circumstances and during ground operations	ORO.CC.205	Normal ground operations and unforeseen circumstances
OR.OPS.CC.210	Conditions for assignment to duties	ORO.CC.210	Conditions for assignment to duties
OR.OPS.CC.215	Conduct of training courses and associated checking	ORO.CC.215	Conduct of training courses and associated checking
OR.OPS.CC.250	Operation on more than one aircraft type or variant	ORO.CC.250	Operation on more than one aircraft type or variant
OR.OPS.CC.255	Single cabin crew member operations	ORO.CC.255	Single cabin crew member operations
OR.OPS.CC.260	Senior cabin crew member	ORO.CC.260	Senior cabin crew member
OR.OPS.TC	**Section: Technical crew members in HEMS, HHO or NVIS operations**	**ORO.TC**	**Part-ORO Subpart Technical crew in HEMS, HHO or NVIS operations**
OR.OPS.TC.100	Scope	ORO.TC.100	Scope
OR.OPS.TC.105	Conditions for assignment to duties	ORO.TC.105	Conditions for assignment to duties
OR.OPS.TC.110	Training and Checking	ORO.TC.110	Training and Checking
OR.OPS.TC.115	Initial training	ORO.TC.115	Initial training
OR.OPS.TC.120	Operator conversion training	ORO.TC.120	Operator conversion training
OR.OPS.TC.125	Differences training	ORO.TC.125	Differences training
OR.OPS.TC.130	Familiarisation flights	ORO.TC.130	Familiarisation flights
OR.OPS.TC.135	Recurrent training	ORO.TC.135	Recurrent training
OR.OPS.TC.140	Refresher training	ORO.TC.140	Refresher training
Part-OR	**Appendices**	**Part-ORO**	**Appendices**
Part-OR Appendix I	Declaration form	Part-ORO Appendix I	Declaration form

Table 4: Cross-reference CRD-Opinion for Part-ORO

ORO.GEN Section 1 – General

161. The IRs in Section 1 contain general requirements for organisations, in particular relating to initial certification and oversight. These form the counterpart to the corresponding authority requirements in Part-ARO Subpart GEN Sections 1 and 3. They are based on the high-level requirements provided for in the Basic Regulation. In line with changes made to ARO.GEN, two new rule paragraphs were added to introduce organisation requirements related to the actions to be taken for immediate reaction to a safety problem (ORO.GEN.155), as well as related to occurrence reporting (ORO.GEN.160). The new ORO.GEN.155 introduces the requirement for organisations to comply with Airworthiness and Safety Enhancement Directives issued by the Agency, the latter deriving from rulemaking task 21.039 "Operational Suitability Data"[26].

Ref. Part-ORO	Title	Corresponding ARO
ORO.GEN.105	Competent authority	n/a
ORO.GEN.115	Application for an organisation certificate	ARO.GEN.310(a)
ORO.GEN.120	Means of compliance	ARO.GEN.120
ORO.GEN.125	Terms of approval and privileges of an organisation	ARO.GEN.310(b)
ORO.GEN.130	Changes to organisations	ARO.GEN.330
ORO.GEN.135	Continued validity	ARO.GEN.310(b)
ORO.GEN.140	Access	Cover Regulation Article 4(5)
ORO.GEN.150	Findings	ARO.GEN.350
ORO.GEN.155	Immediate reaction to a safety problem	ARO.GEN.135
ORO.GEN.160	Occurrence reporting	ARO.GEN.135

Table 5: Correspondence between ARO.GEN and ORO.GEN

162. Following the changes in rule structure the two IRs previously included with OR.OPS (OR.OPS.GEN.100 and OR.OPS.GEN.105) are now included with ORO.GEN. **ORO.GEN.110** defines operator responsibilities for the safe operation of an aircraft, including the requirement to establish and maintain a system for exercising operational control over each flight operated under the terms of its declaration or certificate, which are based on existing requirements, i.e. EU-OPS and JAR-OPS 3, with the following significant differences:

- The checklist system will be required to observe human factor principles, as specified in ICAO Annex 6 Parts I, II and III. In addition, it should take into account the latest documentation from the aircraft manufacturer; this additional text was added in response to stakeholders' comments.

[26] CRD 2009-01, cf. http://easa.europa.eu/rulemaking/docs/crd/2009/CRD%202009-01%20(EN,%20comment%20response%20summary%20and%20resulting%20text).pdf.

- The operator will be required to specify flight planning procedures in the operations manual, in accordance with ICAO Annex 6 Part II, Section 3.

163. Several dispatchers' associations asked for dispatcher licensing rules to be introduced, but this could not be accommodated as it was outside the scope of the NPA. The NPA transposed existing requirements; neither EU-OPS, JAR-OPS 3 nor the Basic Regulation contain such a requirement. The proposed text is in line with ICAO Annex 6, which states that the operator may elect to have a method of control that requires the use of flight operations officers or flight dispatchers, but it is not mandatory. According to ICAO Annex 6, if flight operations officers/flight dispatchers are used, the State of operator may (or may not) require the flight operations officers or flight dispatchers to be licensed.

164. The definition of "principal place of business" for the determination of the competent authority in accordance with **ORO.GEN.105** now aligns with the definition in Regulation (EC) No 1008/2008 on common rules for the operation of air services in the Community (Recast)[27], which is also the one adopted for Regulation (EC) No 2042/2003 with amending Regulation (EC) No 127/2010[28]. This caters for the fact that licensed air carriers need to be approved in accordance with Subpart G of Annex 1 to Regulation (EC) No 2042/2003 "Part-M" as part of their AOC. The definition assumes that the principal financial functions and the operational control of an organisation are located in the same Member State. While acknowledging the benefits of adopting common definitions for different Regulations, the Agency is of the opinion that the definition taken over from Regulation (EC) No 1008/2008 will create implementation problems. Therefore it recommends a review of this definition for all EASA Regulations concerned, including the airworthiness Regulations. This review should consider the location of the organisation's technical management with regard to the activity approved under the Basic Regulation and its IRs as the main criterion for determining the principal place of business of an organisation, for the purpose of determining the competent authority.

165. **ORO.GEN.115** defines the application process for an organisation certificate. Considering NPA comments from stakeholders, the proposal for a single organisation certificate made with NPA 2008-22c was not maintained, and concurrently no standard application form is proposed with Part-ORO. On this latter point, Member States expressed concerns on the impacts of imposing a standard application form on different administrative systems already in place under currently applicable rules. On the issue of the "single certificate" concept, the Agency considers that its main objectives can be achieved without imposing the issuance of a single organisation certificate: the certificate, which is merely the "attestation" of the certification process, can be in form of one single document or different documents. The main aspect is to ensure competent authorities may perform oversight in the most efficient way for organisations

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27 Regulation (EC) No 1008/2008 of the European Parliament and of the Council of 24 September 2008 on common rules for the operation of air services in the Community (Recast) (Text with EEA relevance) *OJ L 293, 31.10.2008, p. 3–20.*

28 Commission Regulation (EU) No 127/2010 of 5 February 2010 amending Regulation (EC) No 2042/2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (Text with EEA relevance); OJ L 40, 13.2.2010, p. 4–50.

holding multiple approvals[29]. In that respect, common management system requirements applicable to all types of organisations are essential.

166. **ORO.GEN.120** defines the process for the approval of alternative means of compliance, which applies to organisations holding a certificate under Part-ORO. Concerns were expressed during the consultation process on the alternative means of compliance used by organisations subject to a declaration obligation only. The Agency notes that there is no legal basis in the Basic Regulation for imposing on such organisations to follow the same approval process for alternative means of compliance as for certified organisations. An approval of alternative means of compliance can only exist when attached to a certificate or approval, where such means of compliance are then considered part of the basis for granting the approval. However, for organisations subject to a declaration obligation, the approval process does apply in the case of alternative means of compliance to an AMC directly related to any specific approval such organisations may hold under Part-SPA. As regards the possibility for professional organisations or stakeholder representative bodies not holding an organisation certificate under the Basic Regulation and its IRs to use alternative means of compliance, there is no need for such organisations to request an approval of such alternative means, as long as they are not subject to any obligation of compliance under the Basic Regulation and its IRs.

167. In response to reactions from industry stakeholders, the Agency will launch an additional rulemaking task to provide a methodology on how to demonstrate that the safety objective of the implementing rule is met when applying for the approval of an alternative means of compliance.

168. In **ORO.GEN.130** "Changes to organisations subject to certification" the type of changes requiring prior approval in relation to the organisation's management system is further specified, in order to alleviate the burden on organisations and authorities: in terms of management system, changes requiring prior approval are now defined more specifically as those affecting the lines of responsibility and accountability and/or the safety policy. The Agency proposal for ORO.GEN.130, together with the corresponding ARO provisions does not differ in its substance from the "indirect approval" or "changes acceptable to the competent authority" concepts: Upon initial certification, the competent authority verifies compliance with the applicable requirements and approves the organisation's management system, including its operational control system, as well as its procedure to manage changes not requiring prior approval. Subsequently, changes are either those requiring prior approval or those that may be managed as agreed with the competent authority. The proposed rules are also more adequate with regards to implementing performance-based oversight: Upon initial certification, an organisation may agree with its competent authority on the scope of changes not requiring prior approval, within the limits set by ORO.GEN.130. As the organisation "matures", the scope of such changes may be extended, provided they remain within the limits set at implementing rule level.

[29] Criteria for "crediting" audit items for the oversight of organisations holding more than one approval will be provided with the AMCs to ARO.GEN.305.

169. Several Member States' competent authorities commented on the concept of unlimited validity of certificates, expressing concerns about a possible lack of effective control with non-expiring certificates. The Agency notes that unlimited validity of certificates is now widely accepted in the area of airworthiness. Continued validity of organisation certificates is subject to continuing oversight by the competent authority. The Agency proposal promotes a continuous monitoring process through audits, reviews and inspections at intervals determined on the basis of past oversight results and taking into account risk elements. Were the certificates of limited validity, competent authorities may tend to delay audits and inspections until shortly before the expiration of the certificate. Part-ARO provides the necessary elements for competent authorities to take action on a certificate at any time if so required, in case of findings that seriously hazard safety. Moreover, Member States can take enforcement action by applying penalties, as laid down in their national rules implementing Basic Regulation Article 68.

170. A new IR ORO.GEN.160 "Occurrence reporting" is included to make reference to the applicable legislation and to define reporting requirements, including reporting to the organisation responsible for the design of the aircraft, for all organisations subject to Part-ORO. The text is based on existing requirements in the airworthiness rules. The occurrences to be reported are those that effectively endanger the safe operation of the aircraft, as opposed to aviation safety hazards to be managed as part of the internal occurrence reporting scheme, covered by ORO.GEN.200(a)(3).To consider CRD reactions, the requirements have been reviewed: initial reports, to be submitted within 72 hours of the organisation identifying the occurrence, do not need to contain details of actions the organisation intends to take to prevent recurrence, as determining such actions may require more time.

ORO.GEN Section 2 – Management system

171. The Agency proposes to dedicate a specific Section of the general organisation requirements to those related to organisations' management systems. These requirements stem mainly from those already existing in applicable standards, like the JARs. They cover the need to have qualified staff and in particular specific persons in charge of ensuring that the organisation complies with the applicable requirements. The existing requirements also cover the need to have appropriate facilities to perform the required tasks and the need to keep records of all activities performed in accordance with the applicable rules.

172. This specific section is also the right place to implement the ICAO standards on safety management systems (SMS)[30]. The Agency believes that these should not be implemented through an additional management system requirement superimposed onto the existing rules, be they related to finance, quality or any other concern of an organisation manager. Imposing a safety management system separate from the others could be seen as a mere additional prescriptive requirement, with the risk that organisations would seek to satisfy their competent authority by showing that they have added in their organisation all the required prescriptive elements. This would not support the implementation of

[30] ICAO Annex 1 Appendix 4 / ICAO Annex 6 Appendix 7 "Framework for Safety Management Systems".

performance-based rules, as fostered by ICAO to facilitate the implementation of SMS principles.

173. Instead, the Agency proposes to list the elements that the organisations must address. Thus, the proposed requirements are based on the idea that safety, as well as compliance with rules, should be a concern for all personnel and for all activities of the organisation. Therefore, the requirements are presented in such a way that allows the organisation to apply them in the way it sees fit, taking into account its own business model. In particular, the requirements would allow the implementation of an integrated management system where safety is a parameter to be taken into account with each decision, rather than a juxtaposition of management systems. Integrated management enables managers to recognise and take into account all significant influences on their organisation, such as the strategic direction of their business, relevant legislation and standards, internal policies and culture, risks and hazards, resource requirements and the needs of those who may be affected by any aspect of the organisation's operation.

174. In terms of quality systems the Agency proposes to retain what the regulator is really interested in when requiring the organisations to implement a quality system: compliance with the rules. Indeed, a quality system may be used to satisfy different sets of requirements. The Agency believes that it is necessary to simply require compliance monitoring as part of the management system requirements. The proposed requirements thus offer the ability to implement the ICAO SMS standards, without obliging the organisation to alter its business model.

175. The management system requirements, as proposed, fit various organisations, whatever their size, nature or complexity of the activities and whatever business model they wish to apply, thus ensuring their proportionate application. The Agency also proposes that, in case an organisation would contract out part of its activities subject to the present proposed requirements, it should retain the responsibilities of compliance with the applicable rules. This is necessary to ensure that organisations remain fully accountable for those activities that are subject to certification.

176. The management system requirements are proposed to apply to all organisations covered by these proposed Organisation Requirements. When drafting the management system requirements, the Agency checked what was already applicable to initial and continuing airworthiness organisations in order to check compatibility with those, keeping the wording of those already applicable rules when possible. The Agency intends to propose rules implementing the ICAO SMS standards for other types of organisations in the future. As far as possible, the Agency will strive to keep the requirements as similar as possible to those proposed in these Organisation Requirements. This will facilitate a streamlined implementation of the ICAO standards, in particular for those organisations whose activities cover several aeronautical sectors.

177. When drafting those proposed requirements, the Agency strived to ensure consistency between the requirements applicable to the various types of organisations. Therefore, the Agency has studied the requirements laid out in JAR-FCL 1, 2 and 3, in EU-OPS, in the AMCs and GMs to JAR-OPS 1 and in JAR-OPS 3. Those standards contained the requirements to be followed by the organisations in the scope of the proposed Organisation Requirements. Then, in order to ensure

overall consistency, the Agency has studied the relevant requirements provided in the IRs already applicable to airworthiness organisations. The Agency then proposed, in its NPA, the wording which seemed to fit best to all organisations, complementing this, when needed, by requirements for specific types of organisations.

178. The Agency supplemented those proposed rules with other rules based on ICAO standards which had not been introduced in the standards listed in the previous paragraph. This is the case for the ICAO SMS requirements, for example.

179. During the consultation phase, the Agency has extensively explained the process followed to come up with the proposed management system requirements. The initial comments of stakeholders showed that the proposed rules were not fully understood. Therefore, the Agency, assisted by the review group has reviewed the proposed text with a view to improving its clarity.

180. The Agency also found it interesting that some stakeholders requested to move further in the direction of performance-based rules. However, the Agency considers that it would not be wise to propose full performance-based rules at this stage and that continuous improvement of the rules, consistent with the progress made at the level of organisations, will facilitate the route towards performance-based rules.

181. Although different in wording, the proposed requirements are fully compliant with ICAO. A correspondence table with the proposed requirements and related AMCs and GM in Part-OR(O) and the relevant ICAO standards was provided with Annex III of the Explanatory Note to the CRD "Organisation Requirements" (2008-22C AND 2009-02C)[31]. The 37th ICAO Assembly, held in September/October 2010, confirmed the creation of a new Annex dealing with safety management, Annex 19, which is expected to contain the general SMS standards applicable to all organisations, thus following the total system approach proposed by EASA in its NPA on Authority and Organisation Requirements. Following publication of this new Annex, the organisation requirements on SMS will be reviewed, also to consider work being done in the framework of the Safety Management International Collaboration Group (SM-ICG), progress with the implementation of the EASP, and in particular to address the management of safety risks stemming from interactions with other organisations. On this latter point, the Agency agrees with stakeholders that the organisations should not manage safety in isolation, but should do this in coordination with the other organisations with which they are connected. For example, effective safety management by an aerodrome operator implies appropriate coordination with the air operators and air navigation service providers who use the aerodrome services. Therefore, the Agency intends to review the Organisation Requirements as outlined above through a new rulemaking task.

ORO.AOC - Air operator certification

182. This Subpart is applicable to commercial operators. It defines the air operator certificate application process, the conditions for leasing and code-sharing

[31] http://easa.europa.eu/rulemaking/docs/crd/part-or/CRD%20a.%20-%20Explanatory%20Note%20Part-OR.pdf.

agreements, the application process for the approval to provide cabin crew training and to issue cabin crew attestations and the requirements for non-commercial operations with aircraft operated under an AOC. The latter requirements are concerned with flight data monitoring, personnel, facilities and the production of manuals and documentation.

183. This Subpart is based on the relevant EU-OPS and JAR-OPS 3 requirements laid down in Subpart B and C. ORO.AOC contains a new requirement on code-sharing, an aspect not covered by EU-OPS. This was included to reflect the broader scope of the Basic Regulation compared with EU-OPS. The initial proposal in NPA 2009-2c has been amended following stakeholders comments.

184. The main issues raised by stakeholders regarding this Subpart were on the applicability and scope of the AOC (ORO.AOC.100), the requirements for dry and wet lease-in of third country aircraft (ORO.AOC.110), code-sharing (ORO.AOC.115) and the relation between different post holders and the post holder system (ORO.AOC.135).

185. Significant changes were made to some provisions following comments received. Some modifications are more of an editorial nature or to make the provisions clearer.

186. **ORO.AOC.025** "changes" has been deleted because this is adequately covered in ORO.GEN. A preliminary list of changes that are subject to prior approval is introduced as GM in ORO.GEN, which will be published with the Decision.

187. **ORO.AOC.110 (b)** "Leasing": many concerns were raised about leasing aircraft from third country operators. The Agency carefully assessed the comments received. Leasing is an important business tool for commercial airlines and therefore safety-related rules should be proportionate. However, it is also clear that leasing of aircraft, in particular leasing aircraft from third country operators, must take place in a controlled environment ensuring an acceptable level of safety. The European legislator has recognised this and addressed leasing in Regulation (EC) No 1008/2008 and EU-OPS. Both pieces of legislation have been taken into account when amending the NPA rule text. The Agency believes that the modified text presented in this Opinion provides the necessary flexibility for commercial airlines and at the same time provides a level of safety that is expected by the public and the legislator.

188. The provision on leasing has undergone a major text change. The main changes concern wet lease-in of aircraft from third country operators. Many comments indicated that the requirements for wet lease-in of these aircraft as presented in the NPA/CRD were considered difficult to comply with. EU-OPS allows for wet lease-in to apply safety standards that are "equivalent" to those established in EU-OPS. Taking into account the comments received and in order to align with EU-OPS, the wording "equivalent safety standards" has been introduced. Consequently, the EU operator has now been given the possibility to demonstrate to the competent authority that the wet leased-in aircraft is subject to standards equivalent to the EU safety rules. Also concerns were raised on the applicability of Commission Regulation (EC) No 2042/2003 and Part-FCL Annex III. The comments related to Commission Regulation (EC) No 2042/2003 will be addressed in the CRD to NPA 2010-10. The comments related to Part-FCL Annex III will be assessed in a new rulemaking task (FCL.002).

189. Some comments indicated that ORO.AOC should reflect the existing practice of dry lease-in of third country registered aircraft in the event of operational needs of a limited duration. Similar comments were made to NPA 2010-10. Since dry lease-in is mainly a continuing airworthiness issue, the conditions under which dry lease-in of third country registered aircraft could be made possible will be assessed in the course of the CRD to NPA 2010-10. This rulemaking task could require a reassessment in the future of the provisions in ORO.AOC on dry lease-in.

190. With regard to dry lease-out, the reference to Commission Regulation (EC) No 2042/2003 has been transferred to ARO.OPS.110. Also the requirement to remove the aircraft from the AOC of the lessor has been transferred to ARO.OPS.110, because it is the competent authority's responsibility to ensure that the aircraft is removed from the operator's AOC within an appropriate time period. The text has been modified to clarify that it will not be necessary to enclose the financial arrangements of the lease agreement to an application for an approval.

191. A new paragraph on wet lease-out has been introduced that requires EU operators to notify their competent authority in case they enter into a wet lease-out agreement.

192. In **ORO.AOC.115** "Code-share agreements": the discussion on leasing also applies to code-sharing. Many comments indicated that Part-TCO should not be applied to code-share agreements with third country operators since some code-share partners never fly into Europe. Some comments questioned the legal basis for regulating code-sharing and proposed to delegate the oversight of code-share partners to the EU operator. Furthermore, compliance with the Essential Requirements (Annex IV to Regulation (EC) No 216/2008) was contested, because full compliance could not be ensured by third country operators. Other comments indicated that code-share should be addressed in a separate rulemaking task. Firstly it must be underlined that the Agency considers code-sharing within the scope of Article 4.1.(c) of Regulation (EC) No 216/2008. After assessing the comments, the provision on code-share has been modified. In the new proposal for the Opinion a reference to Part-TCO has been deleted. The oversight of code-share partners now falls under the responsibility of the EU operator ensuring continuous compliance with the Essential Requirements. For this purpose the operator must establish a code-share audit programme. This also applies to code-share partners that do not operate in the EU. Guidance material will be developed with a table of provisions to be complied with. Compliance with these provisions will ensure adherence to the Essential Requirements in Annex IV of Regulation (EC) No 216/2008. The provisions in the table shall be identical to the ones applied on third country operators when applying for an authorisation in accordance with Part-TCO. Finally, the provision was modified in such a way to ensure that an EU operator cannot sell or issue tickets for a flight operated by a third country operator that is subject to an operating ban in accordance with Regulation (EC) No 2111/2005[32] (EU Safety list). It is still possible for a third country operator on the EU Safety list to sell and issue tickets for a flight operated by its EU code-share partner. The approach taken on code-share is to a great

[32] Regulation (EC) No 2111/2005 of the European Parliament and of the Council of 14 December 2005 on the establishment of a Community list of air carriers subject to an operating ban within the community and on informing air transport passengers of the identity of the operating air carrier, and repealing Article 9 of Directive 2004/36/EC.*OJ L 344, 27.12.2005, p. 15*.

extent in line with the "Code-share Safety Program Guidelines" of the Department of Transportation and the Federal Aviation Administration of the USA.

193. **ORO.AOC.120** "AOC approvals to provide Part-CC training and to issue cabin crew attestations" transposes EU-OPS requirements that were not fully covered in the NPA.

194. **ORO.AOC.125** "Non-commercial operations of aircraft subject to an AOC": three changes were made to this provision. Firstly, OR.OPS.GEN.105 has been moved to ORO.AOC.125. Secondly, in order to make the subject clearer, the title was changed to "Non-commercial operations of aircraft subject to an AOC". Thirdly, the Agency proposes a new text defining what an operator, holding an AOC, has to do if it also intends to operate aircraft non-commercially. The principle remains: the procedures to operate non-commercially need to be specified in the operations manual where a clear identification of differences of operating procedures (between commercial and non-commercial operations) must be identified. Also, the operator must ensure that personnel involved are fully up-to-date on the associated procedures. Additionally, this endorsement must be approved by the competent authority. However, no declaration is needed when a commercial operator conducts non-commercial flights. The provision has been slightly amended to improve clarity following comments received on the CRD.

195. **ORO.AOC.130 (a)** "Flight data monitoring": the notion of "*unless they are operated temporarily and only for ferry flights or test flights*" was introduced to the CRD text after a comment on NPA-2009-2c because operators delivering a non-revenue flight service cannot easily implement an FDM programme. However, after internal review it has been concluded that this notion does not adequately and precisely cover the intent of the change and that there is a risk of unintentional and unforeseen negative effects on safety. Moreover, ORO.AOC.130 is fully in line with EU-OPS 1.037 and ICAO Annex 6 Part I 3.3.6. Therefore it has been decided to delete "*unless they are operated temporarily and only for ferry flights or test flights*".

ORO.DEC –Declaration

196. This Subpart contains the requirement for submitting a declaration. The content of the declaration form is defined in Appendix I to Part-ORO. It is applicable to non-commercial operators of complex motor-powered aircraft (NCC operators). The requirements implement Article 8.5 (d) of the Basic Regulation. This Subpart complements ARO.GEN.345.

197. In accordance with the Basic Regulation and as already proposed in the NPA/CRD, all NCC operators shall be required to provide a declaration to the State of the operator. This includes managed aircraft operations which are undertaken as non-commercial operations.

198. The intent of the declaration is to:

- have the operator acknowledge its responsibilities under the applicable safety regulations and that it holds all necessary approvals;
- inform the competent authority of the existence of an operator; and
- enable the competent authority to fulfil its oversight responsibilities

199. The content of the declaration was revised based on the comments received. Terms were aligned with those used in other Subparts and Parts.

ORO.MLR – Manuals, logs and records

200. The proposed IRs in ORO.MLR, implementing paragraphs 8.a.3 and 8.b of Annex IV to the Basic Regulation, contain provisions on the operator's operations manual, the minimum equipment list, the journey log and record-keeping.

201. For CAT operations with helicopters and aeroplanes, the proposed IRs are based on existing requirements i.e. EU-OPS, JAR-OPS 3 and JAR-MMEL/MEL, with the following significant differences:

- Whilst the provisions on the structure of the operations manual (parts A to D), copied from EU-OPS/JAR-OPS 3 appendices, are presented as IRs, the list of contents for the operations manual will be presented as AMC, to provide flexibility and proportionality.
- Preparation of the operations manual in the English language is not mandatory according to EU-OPS/JAR-OPS 3, but transposed EU-OPS/JAR-OPS 3 provisions make it clear that the operator is responsible for ensuring that personnel are able to understand the language of the operations manual. As commented by several stakeholders, operations personnel being able to understand the language of the operations manual is a safety matter.
- The provisions on the minimum equipment list contain an additional reference to the upcoming operational suitability data established in accordance with Commission Regulation (EC) No 1702/2003.

202. For non-commercial operations with complex motor-powered aircraft, the proposed IRs are based on ICAO Annex 6 Part II Sec. 2 and 3, and Annex 6 Part III Sec. 3, with no significant differences.

203. For non-commercial specialised operations with complex motor-powered aircraft and commercial specialised operations, the proposed IRs are based on ICAO Annex 6 Part II Sec. 2 and Annex 6 Part III Sec. 3, with no significant differences.

ORO.SEC – Security

204. The proposed IRs in OR.OPS.SEC contain the requirements for operators to have in place protective procedures and equipment to protect the flight crew compartment against security breaches. For aeroplanes, the requirements apply to all that are equipped with a flight crew compartment door and to all commercial air transport aeroplanes with a maximum certified take-off mass above 45 500 kg and with a maximum operational passenger seating configuration of more than 60.

The requirement for helicopters is to be complied with provided a flight crew compartment door is installed.

205. The proposed rules are based on EU-OPS Subpart S and JAR-OPS 3 Subpart S and reflect the content and the intent of the mentioned subparts. The proposed rules are also in line with ICAO Annex 6 Part I.

206. The main issue was the concern by stakeholders of possible conflict of rules between the Agency's proposed rules on in-flight security and Regulation (EC) No 300/2008 of the European Parliament and of the Council of 11 March 2008 on common rules in the field of civil aviation security and repealing Regulation (EC) No 2320/2002[33]. It was agreed with the Commission that the Agency would only keep, in the Opinion, those rules that have a strong safety dimension and that are not covered by Regulation (EC) No 300/2008 or by ICAO and to transfer the remaining rules to the Commission for later development.

ORO.FC – Flight crew

207. The proposed IRs in ORO.FC contain the qualification, training and checking requirements for flight crew members.

- Section 1 specifies common requirements and is applicable to both non-commercial operations with complex motor-powered aircraft and any commercial operation.
- Section 2 specifies additional requirements applicable to commercial air transport operations with the exception of sailplane or balloon operations and passenger operations conducted under visual flight rules (VFR) by day, starting and ending at the same aerodrome or operating site and with a maximum duration of 30 minutes, or within a local area specified by the competent authority, of:
- single-engined propeller-driven aeroplanes having a maximum certified take-off mass of 5 700 kg or less and carrying a maximum of six persons including the pilot; or
- single-engined helicopters carrying a maximum of six persons including the pilot.
- Section 3 specifies additional requirements applicable to commercial operations other than commercial air transport and sailplane or balloon operations and A-to-A commercial air transport activities mentioned in the paragraph above.

208. The proposed rules are based on EU-OPS and JAR-OPS 3 for commercial air transport operations as well as draft JAR-OPS 0, 2 and 4 for commercial operations other than commercial air transport and non-commercial operations with complex motor-powered aircraft. The requirements applicable to non-commercial operations are aligned and fully compliant with ICAO Annex 6 Part II for aeroplanes and Part III Section III for helicopters.

209. As regards commercial air transport operations, compared to EU-OPS/JAR-OPS 3 and in addition to the general changes described in CRD 2009-02b, para 89ff[34]. the following changes are highlighted:

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33 OJ L 97, 9.4.2008, p.72.

34 http://easa.europa.eu/rulemaking/docs/crd/part-ops/CRD%20a.1%20-%20Explanatory%20Note%20-%20OPS%20Parts.pdf

- The requirements applicable to aeroplanes and helicopters are harmonised as much as possible, taking into account the differences between the operational characteristics of both categories of aircraft.
- While the alleviations of Appendix 1 to 1.005(a) of EU-OPS and Appendix 3.005(f) of JAR-OPS 3 have been fully transposed into the proposed IRs, stakeholders requested that further consideration be given to the proportionality of the rules. Consequently, certain A-to-A operations as described above have been subjected to the same set of rules as commercial operations other than commercial air transport. When establishing the threshold, consideration was given to the level of safety expected from commercial air transport operations as well as Member State legislation in place today. Regarding helicopters, the figure of six persons is seen as a compromise between small and medium-sized helicopters and should cover most of the sightseeing activities. The engine criterion is considered more suitable than a weight limit of 3 175 kg as the latter would include certain complex multi-engined helicopters. The main differences in the proposed IRs concern the annual operator proficiency check and the requirements concerning the command course, crew resource management and conversion training – the latter are less prescriptive.
- The recent experience requirements for all pilots are transferred to Part-FCL, namely paragraph FCL.060, as they are considered to be a restriction on the privileges of the license.
- The FSTD user approval has been improved to include requirements for the operator to establish a system to appropriately manage FSTD changes that could affect the operators' training programmes.
- Regarding the route/area and aerodrome competence, the expression 'qualification' is not transposed since it is used in relation to pilot licenses only. EU-OPS/JAR-OPS neither explain nor determine what such a qualification is, who issues it or whether it is related to the licence or not. Consequently, to avoid confusion in terminology that could generate confusion in regime, it was considered that it was better to remove the mention of 'qualification' while maintaining the requirements in substance unchanged.
- Taking into account comments received, CRM training has been included in all single pilot training. The reasons are that CRM addresses not only interaction between two pilots of the same crew but also with, for example, ground crew. Moreover, it teaches how to effectively manage the workload in the cockpit, which is an important aspect for single pilot operations.
- Additional requirements for single pilot operations under IFR or at night are introduced based on JAA NPA OPS 65, aligning with ICAO Annex 6 Part I amendment 29.

210. Overall, consistency is ensured with Part-FCL and the newly developed concept of operational suitability data. The latter was already partly embedded in EU-OPS by referencing the Joint Operational Evaluation Board (JOEB).

211. The following differences with ICAO Annex 6 are identified:

- Changes were made concerning the scope to establish proportionate rules especially for CAT A-to-A operations. In addition, Appendix 1 to 1.005(a) of EU-OPS was considered. This represents a non-compliance with Annex 6, Part I 9.4.4.1 on the number of operator proficiency checks per year. The same holds true for Annex 6, Part III, Section II 7.4.3.1. due to a transposition of Appendix 3.005(f) of JAR-OPS 3 concerning operations under VFR by day with reference to visual landmarks of other-than-complex motor-powered helicopters.
- Provisions for radio operators and flight navigators were not included in EU-OPS and are consequently not included in the proposed text. This represents a non-compliance with Annex 6, Part I, 9.1.2 for radio operators. There are no operations that are requiring flight navigators. Moreover, while the Agency may regulate the function of these crew members Member States are still responsible for regulating their qualification. This also means that Annex 6, Part I, 9.1.3 and Annex 6, Part II, 3.9.1.2 concerning flight engineers are only partially implemented by these rules as licensing still remains a Member State competence.
- Regarding knowledge of the route/area and aerodromes, by transposing a provision from Appendix 1 to 1.005(a) of EU-OPS, a non-compliance for operations under VFR by day of performance class B aeroplanes with Annex 6, Part I, 9.4.3.5 and 9.4.3.6 regarding the 12 month period is noted.
- Concerning single-pilot operations under IFR and at night the standard of Annex 6, Part I, 9.4.5.3 on initial checking in the single pilot role and in an environment representative of the operation is not particularly mentioned. The resulting text is however the same as in EU-OPS and was therefore not changed, in accordance with the guidelines agreed by the Commission and the EASA Committee.

212. The following are identified as topics for future rulemaking:

- review and update the crew resource management provisions by taking into account the experience gained over the last couple of years;
- alternative training and qualification programme for commercial air transport helicopter operations.

213. The comments received also show that the training concept for single-pilot operations is controversial and might require further review. However, not many detailed proposals for improvement have been made. The Agency may add an additional rulemaking task on this issue at a later stage, pending further rulemaking proposals from stakeholders.

ORO.CC – Cabin crew

214. The proposed IRs in ORO.CC contain the training, checking and validity requirements which any operator operating aircraft with cabin crew shall comply with to ensure the continuous qualification of cabin crew members.

- Section 1 specifies common requirements applicable to commercial air transport operations (CAT) as well as to non-commercial operations with complex motor-powered aircraft.

- Section 2 specifies additional requirements only applicable to CAT.

215. The proposed rules are based on existing requirements: i.e. Subpart O of EU-OPS and JAR-OPS 3. TGL 44[35], which was published by the JAA and contains Section 2 of JAR-OPS 1 (AMC and Interpretative Explanatory Material - IEM), has also been taken into account.

216. The requirements are compliant with ICAO Annex 6, Chapter 12 of Part I for aeroplanes and Chapter 10 of Part III for helicopters. The proposed rules, as with EU-OPS and JAR-OPS 3 requirements, are more detailed than those specified by the corresponding ICAO standards. However, the detailed ICAO recommendations that can be found in ICAO Doc 7192-AN/857 Training manual Part E-1 for Cabin Attendants' safety training (Second edition – 1996) have also been considered.

217. Taking into account that EU-OPS requirements were in most cases complied with on a voluntary basis for non-commercial operations with complex motor-powered aircraft, the main differences compared to Subpart O of EU-OPS and JAR-OPS 3 are the following for both types of operations:

- Scope (ORO.CC.005): the proposed rules under section 1 'Common requirements' will apply to non-commercial operations with complex motor-powered aircraft and to commercial air transport operations.
- Determination of the minimum required cabin crew (ORO.CC.100): the EU-OPS requirement (OPS 1.990(b)(2)) has been clarified to ensure that the airworthiness rules and the related certification specifications relevant to cabin crew are commonly understood and considered by operators. In particular, the certification requirements relating to the evacuation demonstration, direct view of the passenger compartment and required cabin crew seats must be taken into account when determining the minimum number of cabin crew required for operations. Experience has recently shown that there are different understandings of the certification processes required for the approval of particular passenger seating configurations of individual aircraft, and/or of their impact on the determination of the minimum cabin crew required for operations. As an example, an accident investigation report showed that the minimum required cabin crew specified in the operations manual of the concerned operator was lower than the number identified by the relevant evacuation demonstration/analysis applicable to that individual aircraft.
- Checking of senior cabin crew member training (ORO.CC.115(d) and ORO.CC.260(a)(2)): the absence of checking in EU-OPS only for this particular training was widely considered as inconsistent. This is now corrected as recommended by reactions received during the consultation process.
- Aircraft type-specific training and operator conversion training (ORO.CC.125): in EU-OPS, all such training elements were part of one only conversion training programme. Training elements common to all aircraft of a same type have been clearly differentiated from those training elements that are

[35] JAA Administrative & Guidance Material - Section Four: Operations, Part Three: Temporary Guidance Leaflet (JAR-OPS) - LEAFLET No 44: JAR-OPS 1 AMT 13 SECTION 2 UPDATED TO INCORPORATE SECTION 2 TEXT PROPOSALS FROM SUSPENDED JAA NPAs.

operator specific, thus to be consistent with the on-going work on the process for operational suitability data (OSD). This may also facilitate crediting of training in the future.

- Differences training (ORO.CC.130): as requested by reactions for clarity, this training is now covered by a requirement separate from the requirement for aircraft type-specific training and operator conversion training. This also facilitates the link with the appropriate elements of the OSD referred to above.

- Validity periods of training and checking (ORO.CC.140(e) and 145(c)): the lack of clarity in EU-OPS regarding these aspects has been highlighted by the different understandings expressed by stakeholders in the reactions received to the CRD and has been addressed accordingly taking also into account the provisions specified in TGL 44 (Section 2 of JAR-OPS 1).

- Cabin crew attestations (CCA) (ORO.CC.210): cabin crew members involved in CAT are required by the Basic Regulation to hold a CCA. The supplementing IRs are part of a specific annex (Part-CC) to the Commission Regulation on air crew. The CCAs must be maintained, and may also be limited, suspended or revoked in case of non-compliance by their holders. This is in contrast to the attestations of safety training required by EU-OPS, which had no conditions of validity and use for their holders. Compared to the initial NPA proposal, the requirement for aircraft type training is no longer a condition for the issue of the CCA, as widely requested. However, valid aircraft type qualifications remain a condition for the use of CCA by the holders.

- List of aircraft type qualifications for CCA holders (ORO.CC.215(b)(2)): CCAs are required by the Basic Regulation to be maintained valid. As for any other civil aviation personnel who must comply with rules, showing compliance at any time by the holders is required in the interest of safety and to support harmonised implementation, oversight and standardisation. This becomes increasingly relevant in the current aviation context where most cabin crew members work for different operators in their professional life and with the growing number of freelance, seasonal cabin crew members, and those who work for more than one operator at any one time. Furthermore, since the CCA is to be issued after the initial training course, continuous compliance with all applicable safety rules by the holders can only be shown if the attestation is supplemented by a list of aircraft type qualifications, which the operators shall make available to each attestation holder they employ. This option was considered more practical than requiring to re-issue and/or re-validate the CCA.

- Operation of more than one aircraft type or variant (ORO.CC.250): the limitation to 3 types, or to 4 types with the approval of the authority, is the same as in EU-OPS. The differences to be noted relate to the determination of types and variants, which has been drafted to be consistent with the on-going work on the process for OSD as relevant to cabin crew.

218. Consistency with Part-CC, as well as with ORO.FC and ORO.TC, has also been ensured where relevant.

219. The consultation process clearly showed a wide consensus among Member States and stakeholders on the need to develop common criteria or standards at the EU level for the approval of training organisations for cabin crew, for qualifications of instructors and examiners and for training devices. Therefore, subject to common understanding and agreement on the legal basis by the legislator, the Agency proposes to address these issues with future rulemaking tasks.

ORO.TC - Technical crew member in HEMS, HHO or NVIS operations

220. The proposed IRs in ORO.TC contain the common training and checking requirements when operating an aircraft with technical crew members in commercial air transport helicopter emergency medical services (HEMS), helicopter hoist operations (HHOs) and night vision imaging system (NVIS) operations. Further specific requirements regarding training of technical crew members appropriate to the operation concerned are included in SPA.HEMS, SPA.HHO and SPA.NVIS.

221. Technical crew members or task specialists in specialised operations (aerial work) are presently not addressed in this Subpart. Their training requirements related to specific aerial work activity will be included in Part-SPO and its related AMC and GM. The Agency may decide at a later stage to review the requirements of ORO.TC to include technical crew members engaged in certain aerial work activities.

222. The proposed rules are based on JAR-OPS 3 Subpart O. In addition to the general changes described in CRD 2009-02b, para 89ff, the following changes are highlighted:

- The scope and applicability of the provisions is better defined and a definition for technical crew members in CAT HEMS, HHO and NVIS operations proposed.
- Taking into account that the Essential Requirements for air operations do not mention medical fitness of technical crew members, the appropriate provisions of JAR-OPS 3 on initial medical examination or assessment are kept in GM only.
- The provisions on helicopter types and limitation on the maximum number of types have, in principle, been transposed from JAR-OPS 3. However, some amendments were made since generally no types are established for technical crew members. Some operators use the types established for flight crew. Taking into account the scope of HEMS, HHO and NVIS operations consideration should be given to differences in equipment and procedures being used. The limitation contained in JAR-OPS 3 is therefore transposed into AMC by requiring the operator to specify the maximum number of types in its operations manual, taking into account the specific environment in which technical crew members operate.

223. Consistency with ORO.FC and ORO.CC is ensured.

IV. Overview of differences

Differences to EU-OPS/JAR-OPS 3

224. The following table provides an overview of differences between Part-ORO and EU-OPS / JAR-OPS 3 together with a justification of each difference.

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
EU-OPS 1.1.75(c)(1) and JAR-OPS 3.175(c)(1)	ORO.GEN.105 and ORO.GEN.115	The notion that an applicant for an AOC must not hold an AOC issued by another Authority unless specifically approved by the Authorities concerned has been deleted	This provision is redundant because an AOC issued in accordance with Part-ORO will be valid in all Member States.
1./3.035 Quality system	ORO.GEN.200	No reference to quality system, but to management system, encompassing safety management and compliance monitoring	compliance with ICAO SARPS on SMS
1./3.037 Accident prevention and flight safety programme items	ORO.GEN.200	Accident prevention and flight safety programme superseded by ICAO SMS as implemented by ORO.GEN.200	compliance with ICAO SARPS on SMS
EU-OPS 1.165 (c)(1)(ii) Leasing	ORO.AOC.110(a)	No requirement to impose conditions in the lease agreement which are part of this approval The notice that any differences from the requirements prescribed in Subparts K, L and/or OPS 1.005(b), are notified to and are acceptable to the Authority has been deleted	It is considered not necessary to impose conditions for dry lease-in of aircraft registered in a third country or dry lease-in from another community operator, because it is considered as a variation to the AOC and aircraft on an AOC must comply with Part-CAT and have a certificate of airworthiness issued in accordance with Part 21.

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
EU-OPS 1.165 (c)(3)(A) Leasing	ORO.AOC.110(d)	The requirement that the Authority exempts the operator from the relevant provision of OPS Part 1 has been deleted	In case of dry lease-out the aircraft is removed from the AOC of the lessor and the aircraft will be operated under the operational control of the lessee. The future EU rules on air operations only apply to EU operators. So there is no need to exempt the EU operator from the relevant OPS requirements if the aircraft is used by a non- EU operator.
1./3175 (i)(2)	ORO.AOC.135(a)	Reference to "maintenance system" has been deleted	Covered by Regulation (EC) No 2042/2003
EU-OPS 1.185(e) and JAR-OPS 3.185(d)	N/A	There is no requirement that the application for the renewal of an AOC must be submitted at least 30 days, or as otherwise agreed, before the end of the existing period of validity.	The AOC will be issued for an unlimited duration
JAR-OPS 3.175(c)(3)	N/A	No obligation for an applicant for an AOC to register the helicopters which are to be operated under the AOC in the State responsible for issuing the AOC	Covered by Regulation (EC) No 1008/2008
1./3.155 (a)(1)	ORO.MLR.115(e)	"even if the operator ceases to be the employer of that crew member, provided it is within the timescales prescribed in (c)" added.	Clarification, in response to comments received.
1./3.155 (a)(2)	ORO.MLR.115(f)	Scope extended to all records, not just for flight duty, duty and rest periods. "provided this is within the timescales prescribed" added.	For completeness and clarification, in response to comments received.

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
1./3.1040(c)	N/A	The following EU-OPS/JAR-OPS 3 text was not transferred: "Unless otherwise approved by the Authority, or prescribed by national law, an operator must prepare the Operations Manual in the English language. In addition, an operator may translate and use that manual, or parts thereof, into another language".	Although EU-OPS/JAR-OPS 3 stipulates that the operations manual shall be prepared in the English language, it also allows translation of the manual into another language. However, as the EU regards all official languages as equal, the associated paragraph from EU-OPS/JAR-OPS 3 has not been transposed. Moreover, it is questionable whether an English operations manual used by non-native English-speaking crew may not pose a safety risk. This is addressed by the standard copied from EU-OPS/JAR-OPS 3 which requires all personnel to be able to understand the language in which those parts of the operations manual pertaining to their duties and responsibilities is written.
1./3.1040(i)	ORO.MLR.100(g)	Changed to apply only to those amendments which are required to be notified e.g. to exclude editorial changes.	For clarification and to align with new approach to prior approvals.

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
1./3.1055	ORO.MLR.110	Changed to allow journey log to be recorded in a form other than on printed paper. The journey log contents will be presented as acceptable means of compliance.	To provide flexibility and to support technological advancements. Printed paper not specified in ICAO SARPS.
Appendix 1 to OPS 1./3.1065	ORO.MLR.115(b) and (c)	Tables for document storage periods merged. Aeroplane technical log deleted. CC attestation added. Records on cosmic and solar radiation dosage not transposed.	Tables merged, for clarity and simplification. Aeroplane technical log deleted, as this is covered in the airworthiness rules. CC attestation added, to reflect new CC rules. Records on cosmic and solar radiation dosage not transposed, as this subject does not come under the scope of aviation safety.
Appendix 1 to EU-OPS 1.005(a) point (31) Appendix 1 to JAR-OPS 3.005(f) point (18)	N/A	Text is not transposed	No criteria for an abbreviated command course are given. Basic Regulation Art. 14 must be used.
1/3.105 (d)	ORO.FC.145(d)+(e)	Clarification of FSTD user approval New subparagraph to ensure continued compliance and proper management of changes to an FSTD that may affect the operator training programmes	Implementation problems of EU-OPS/JAR-OPS 3 Level playing field Alignment with ORA.FSTD and ORA.ATO
N/A	ORO.FC.145(b)	New paragraph added specifying that training courses have to take into account mandatory OSD elements	To take account of OSD

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
1/3.943(a)	N/A	Text is not transposed	Old transition provision
EU-OPS 1.955(a)(2)	ORO.FC.105(b)(3)	Text is aligned with JAR-OPS 3.955(a)	The way EU-OPS is written indicates that a pilot who joins the operator when previously already qualified as commander with the previous operator must complete another command course with the new operator before being able to be designated as commander by the new operator. JAR-OPS 3 is more logic in this regard.
EU-OPS 1.978(b)+(e)	N/A	The reference to requirements on recent experience is not transposed	The ATQP cannot extend FCL requirements. The extension for recency is already contained in FCL.060.
EU-OPS 1.978(f)	N/A	The requirement on the responsibility of a nominated post holder is not transposed	Redundant with the general and AOC specific organisation requirements

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
Appendix 1 to EU-OPS 1.978(c)(1)	N/A	The sentence of point (c)(1) allowing to establish an equivalent method other than a formal safety case is not transposed	It could not be established what this alternative might be. A similar sentence was included in ACJ to Appendix 1 to JAR-OPS 1.978(c)(1)(i), point 4. The EU-OPS Appendix is now AMC and the wording of the related ACJ seem to indicate that it would be appropriate to use the alternative means of compliance process in order to make such an alternative available to everyone
Appendix 2 to OPS 1.940(a)(2)	ORO.FC.202(a)(7)	Single-pilot CRM included	Single-pilot CRM has several distinct factors that do not apply to multi-crew operations
Appendix 2 to OPS 1.940(a)(5)	ORO.FC.202(c)	Minimum number of hours for flying single-pilot at night	NPA OPS 65 and ICAO Amdt 29 to Annex 6 I which was decided by JAAC, EASA and ASC as one of the JAA NPA to be inserted in the initial IRs
N/A	ORO.FC.100(e)(2)	Specification regarding FTL for freelance crew members added	By mandate of the Air Safety Committee to clarify responsibilities as regards compliance with FTL requirements when pilots are working for more than one operator

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
JAR-OPS 3.988	ORO.TC and Annex I Definitions	Definition of technical crew member introduced and scope of ORO.TC better defined	JAR-OPS 3 Subpart O is applicable to crew members other than flight crew. These other crewmembers were identified as being crew members in CAT HEMS, HHO and NVIS operations. For cabin crew JAR-OPS 3 already requires compliance with Subpart O of JAR-OPS 1/EU-OPS
JAR.OPS 3.995(a)(2)	GM to ORO.TC	JAR-OPS 3 requires an initial medical examination or assessment. The Basic Regulation establishes the legal basis for cabin crew medical requirements in ER 7.b. There is no comparable requirement for technical crew. Therefore, the requirements have been transposed in accordance with the OPS.001 ToR, as GM only.	Difference in legal basis
JAR-OPS 3.1030(a)	N/A	Text on maximum number of types is not transposed	There are no types established for technical crew members
N/A	ORO.TC.105 (b)(2)	Specification regarding FTL for freelance crew members added	In line with changes made for flight and cabin crew
EU-OPS Subpart O OPS 1.988	Cover Regulation Part-CC and Annex I to Regulation on Air Operations	Definition of cabin crew	For clarity and legal certainty, considering the changes occurred since the definition was drafted for publication of JAR-OPS 1 in 1993

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
OPS 1.990(b)(2)	ORO.CC.100 (b)(1)	Text on how to determine the minimum cabin crew	Lack of clarity in EU-OPS requirement leading to differences in understandings and implementation that could impact on safety (particularly at floor level emergency exits in case of emergency and evacuation) To ensure that the determination of the minimum number of cabin crew takes into due account the certification specifications relevant to cabin crew operations that are applicable to the unique aircraft cabin configurations of the operators (re. TC, STC or change to TC) Level playing field
OPS 1.990(c)	N/A	Additional cabin crew members required by the Authority under exceptional circumstances	Not transposed in Part-ORO, as covered by Article 14(1) of Regulation 216/2008
OPS 1.995(b)	ORO.CC.110 (a)(2)	Minimum requirements or conditions to be assigned and operate as cabin crew in CAT with regard to medical fitness	Difference in legal basis Detailed requirements in Part-MED specify intervals for medical assessments and medical requirements to assess fitness

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
OPS 1.995(c)	ORO.CC.210(a)	Minimum requirements or conditions to be assigned and operate as cabin crew in CAT with regard to cabin crew attestations	Difference in legal basis Detailed requirements in Part-CC and Part-ORO specify that the attestations must be maintained valid
OPS 1.1000(c)	ORO.CC.260 (a)(2)	New requirement for checking of senior cabin crew training	Difference resulting from the consultation Addition of checking as considered required to ensure that the senior cabin crew training, as all other training, is successfully completed and the required level of competence attained
OPS 1.1005(a) and (b)	Part-CC (CC.CCA.100) Part-ARA Subpart CC	New scope and conditions for the attestation	Difference in legal basis Decision to approve operators and/or training organisations remains at the discretion of the Member State as in EU-OPS. In contrast to the EU-OPS attestation of safety training, the cabin crew attestation must be maintained valid to attest, together with the list of aircraft type qualifications, that the holder is qualified to operate

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
OPS 1.1005(b), (d) and (e)	ORO.AOC.120	Approvals of an operator to conduct cabin crew training and/or to issue attestations are to be specified in the operations specifications of the AOC.	Difference in legal basis To ensure some harmonisation of the processes, basic common provisions have been added in ORO.AOC for operators (and in Part-ARA Subpart CC, for training organisations)
OPS 1.1010	ORO.CC.125 ORO.CC.130	Conversion and differences training are placed in separate rules	Difference resulting from the consultation New rule and wording for differences training that is clearly differentiated from the aircraft type training and operator conversion training
N/A	ORO.CC.125(b) ORO.CC.130(c) ORO.CC.250(b)	References to OSD	To take account of OSD, new paragraph added specifying that training courses have to take into account mandatory OSD elements The wording in ORO.CC.205(b) on the determination of variants as new types includes a few changes to ensure consistency with the provisions that will result from the OSD
N/A	ORO.CC.110 (b)(2)	Specification regarding FTL for freelance crew members added	By mandate of the Air Safety Committee to clarify responsibilities as regards compliance with FTL requirements when cabin crew are working for more than one operator

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
OPS 1.1015(c)	ORO.CC.140 (e)(3)	Addition of the validity period of triennial training elements of recurrent training	Difference resulting from the consultation To address the lack of clarity of EU-OPS with regard to the precise validity period of training elements required to be covered at intervals not exceeding 3 years
OPS 1.1020	ORO.CC.145(c)	Addition of a validity period	To address the lack of clarity of EU-OPS on this item As AMC/GM cannot contradict a rule, addition of provisions initially in Section 2 of JAR-OPS 1 (IEM OPS 1.1020(a)) on the applicable validity period and on the flexibility for operators to replace refresher training by recurrent training under certain conditions
Appendix 1 to OPS 1.1005(h)(1)(i)	N/A	Text on introductory CRM course for already operating cabin crew by the time of the next recurrent training is not transposed	Old transition provision no longer relevant
Appendix 1 to OPS 1.1010(j)	N/A	Text on initial training on avoidance of infectious diseases is not transposed	Old transition provision no longer relevant
Appendix 1 to OPS 1.1015 + Appendix 1 to OPS 1.1020	ORO.CC.140 (c)(2)(ii) ORO.CC.145 (b)(3)	Training on flight crew compartment security door included in as triennial element of recurrent training and in refresher training	Difference resulting from the consultation, taking into account the importance of cabin crew in case of security event

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
JAR-OPS 3 Subpart O Appendix 1 to JAR-OPS 3.988(c)	Part-ORO Subpart CC	Alleviations from training elements not to be covered under JAR-OPS 3 by helicopter cabin crew are not specifically listed	Part-ORO refers to 'aircraft', thus all rules are applicable to operations by aeroplanes and by helicopters and the list of alleviations is not necessary any more as the proposed rules make clear that training shall be covered only 'where fitted', for equipment 'when carried on board', and/or 'as relevant to the aircraft to be operated'

Differences to ICAO Annex 6 for Part ORO

225. The following table provides an overview of ICAO Annex 6 standards in Part I and Part III Section 1 and Section 2 within the scope of this Opinion[36] which are considered to be either not transposed or transposed in a way which does not align with the corresponding ICAO Annex 6 standards. Some of the items mentioned are not within the remit of the Basic Regulation and may need to be addressed by Member States.

Annex 6 Part I/III reference	EASA-EU reference	Description of difference
Part I, 9.4.5.3	ORO.FC.202	Initial checking in the single pilot role and in an environment representative of the operation not particularly mentioned

[36] In particular, the ICAO standards on maintenance and the operator's maintenance control are not considered here.

Annex 6 Part I / III reference	EASA-EU reference	Description of difference
Part I 9.4.4.1 Part III Section II 7.4.3.1	ORO.FC.130/230/330	Only one operator proficiency check required before flying VFR by day with performance class B aeroplanes during seasons not longer than 8 consecutive months Proficiency checks may be conducted in only one type for flight crew members engaged in helicopter operations by day and over routes navigated by reference to visual landmarks with an other-than-complex motor-powered helicopter provided the least recently type is being used Annual proficiency check for commercial air transport operations of passengers conducted under visual flight rules (VFR) by day, starting and ending at the same aerodrome or operating site and with a maximum duration of 30 minutes, or within a local area specified by the competent authority, with single-engined propeller-driven aeroplanes having a maximum certified take-off mass of 5 700 kg or less and carrying a maximum of six persons including the pilot or single-engined helicopters and carrying a maximum of six persons including the pilot.
Part I, 9.1.2	N/A	Radio operator licensing is not within the remit of the Basic Regulation and remains responsibility of Member States.
Part I, 9.1.3	ORO.FC.110	Flight engineer licensing is not within the remit of the Basic Regulation and remains responsibility of Member States.
Part I, 9.1.4	N/A	Flight navigator is not required. Flight navigator licensing is not within the remit of the Basic Regulation and remains responsibility of Member States.
Part I, 9.4.3.5 and 9.4.3.6	ORO.FC.105(c)	Instead of 12 month, 36-month period for aerodromes for flight crew operating performance class B aeroplanes VFR day.

Annex 6 Part I / III reference	EASA-EU reference	Description of difference
Part I, 10.3 (b) – (f) Part III, 8.3 (b) – (f)	N/A	No particular knowledge, training, experience or validity periods specified as regards Flight Operations Officers/Dispatchers.

V. List of proposed rulemaking tasks

226. The following table provides an overview of proposed rulemaking tasks for Part-ORO. As regards Subpart GEN, these mainly stem from the need to review the relevant ARO and ORO provisions on safety management and risk assessment following publication of the new ICAO Annex 19 regarding Safety Management Standards and Recommended Practices and in line with the implementation of the EASP.

Part, rule references	Scope	Reference to RMP
ORO.GEN.120	Provide GM on how to demonstrate that the safety objective of the implementing rule is met when applying for the approval of an alternative means of compliance.	MDM.094 a + b
ORO.GEN Section 2	Review requirements in view of latest developments at ICAO (publication of new Annex 19), in particular, address the management of safety risks stemming from interactions with other organisations/to be better addressed by organisations with whom the own organisation interacts.	MDM.094 a+b
ORO.AOC.125	Address non-commercial operations of aircraft subject to an AOC.	OPS.075
ORO.FC	Review and update the crew resource management provisions by taking into account the experience gained over the last couple of years.	OPS.094
ORO.FC	Develop alternative training and qualification programme for commercial air transport helicopter operations.	OPS.088 a+b

Annex IV - Part-CAT(A,H)

I. Scope

227. Part-CAT contains the technical requirements for commercial air transport operations of aeroplanes, helicopters, sailplanes and balloons. It consists of four Subparts which are further broken down to Sections containing aircraft category specific rules. Some Sections are further broken down into Chapters.

228. The structure of the Subparts is comparable to the structure of the Essential Requirements in Annex IV of the Basic Regulation, EU-OPS/JAR-OPS3 and ICAO Annex 6 Part I.

229. The rule structure, and in particular the Sections and Chapters, have been designed in such a way that requirements for additional aircraft categories, or specific operations, could be added in the future without the need to make changes to the existing rule text or the existing structure. It should be noted that future rulemaking tasks will develop the requirements for airships, tilt-rotor aircraft, and unmanned aerial systems.

230. Figure 9 and Figure 10 provide an overview of the structure of Part-CAT.

231. This Explanatory Memorandum concerns only the Sections for CAT operations with aeroplanes and helicopters:

- CAT.GEN.MPA;
- CAT.OP.MPA;
- CAT.POL.A, CAT.POL.H, CAT.POL.MAB; and
- CAT.IDE.A, CAT.IDE.H.

Figure 9: Structure of Part-CAT – Headings

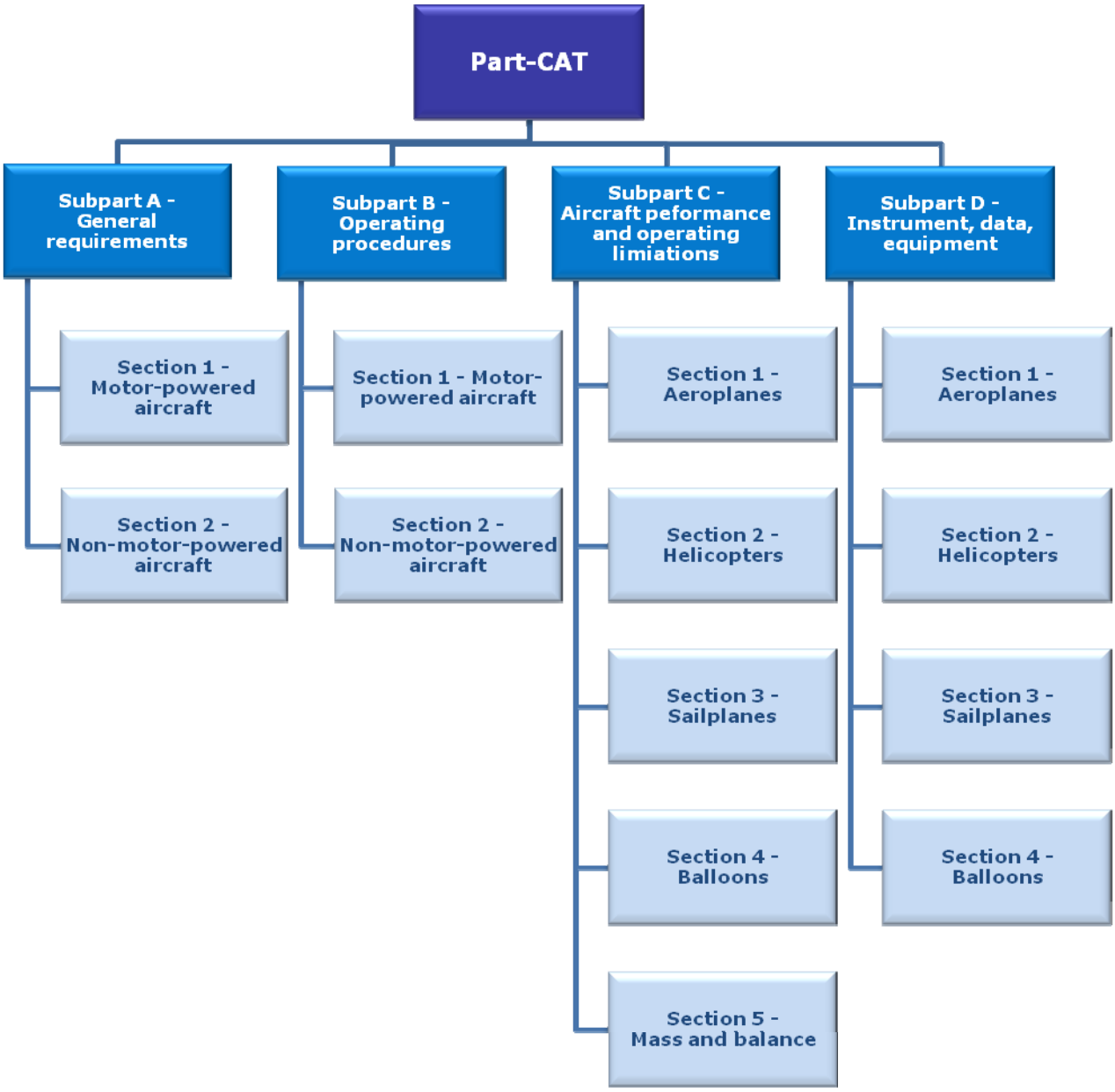
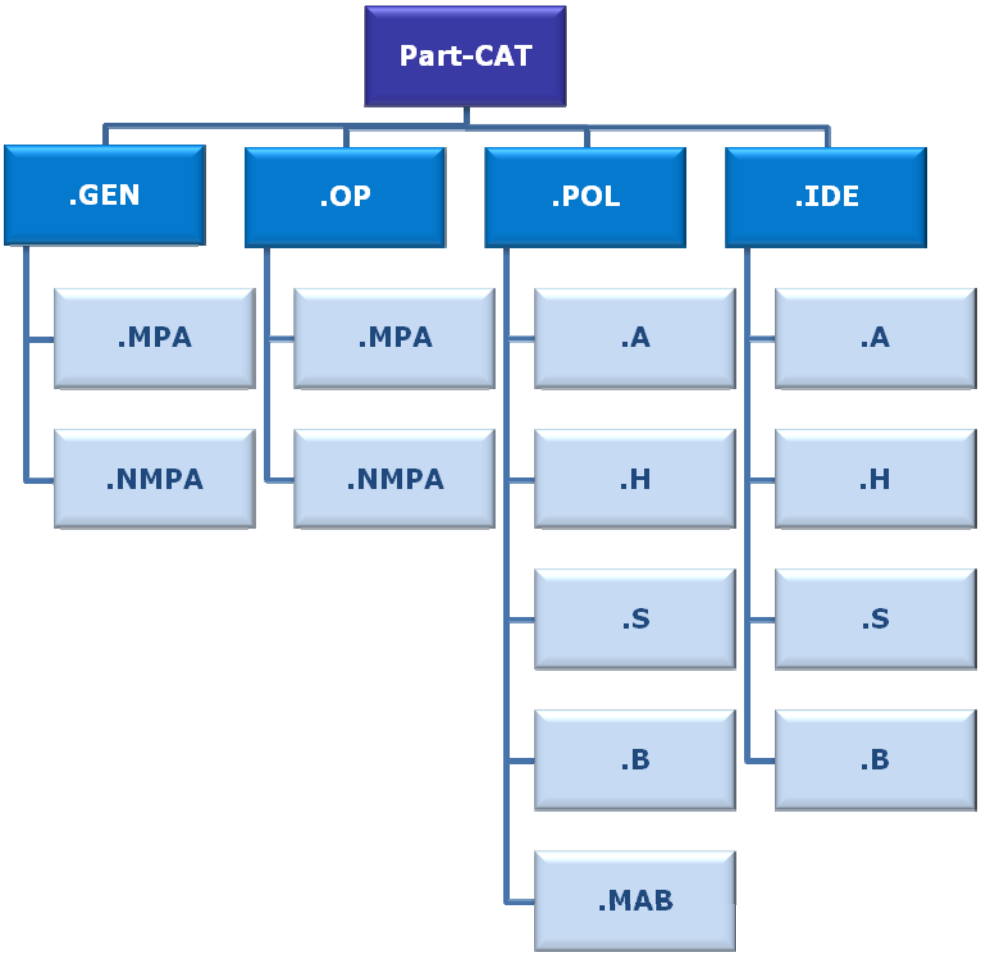


Figure 10: Structure of Part-CAT – Rule identifiers



II. Overview of reactions

232. In general, the received reactions showed overall support for the CRD version of Part-CAT.

233. The majority of stakeholders supported the level of alignment of the proposed rules with EU-OPS and JAR-OPS 3, the proposed balance between Implementing Rules and AMC material, as well as the proposed rule structure.

234. The CRD text for CAT operations with helicopters raised concerns in some areas whereas for CAT operations with aeroplanes, most parts of the text received overall acceptance.

III. Overview of differences

Differences to EU-OPS/JAR-OPS 3

235. EU-OPS and JAR-OPS 3 rules containing a safety objective have been retained as IR. EU-OPS and JAR-OPS 3 rules unambiguously containing a means to comply with a safety objective have been moved to AMC level. In many instances,

appendices of EU-OPS and JAR-OPS 3 were regarded as a means of compliance and have been transposed as AMC. In such cases where it was not possible to make a clear distinction between a safety objective and a means to comply with a safety objective, the rule text has been retained as IR.

236. In cases where the need for a more proportionate approach was demonstrated, the Agency proposed a rule text with a safety objective and an AMC. However, the Agency did not made major changes to the rule substance, except for varying the level of text between IR and AMC.

237. It should also be noted that the content of Appendix 1 to OPS 1.005(a), Operations of performance class B aeroplanes, Appendix 1 to OPS 3.005(f), Operations for small helicopters (VFR (visual flight rules) by day only), and Appendix 1 to OPS 3.005(g), Local area operations (VFR day only) have been transposed in the relevant Sections, where appropriate.

238. Nevertheless, the Agency is of the opinion that the rules require further review as regards proportionality and the alleviation criteria that were applied in EU-OPS/JAR-OPS 3. It will therefore schedule in its RM programme a task to review the CAT rules in relation to other-than-complex motor-powered aircraft and their use in defined areas.

239. EU-OPS and JAR-OPS 3 rule text indicating an alternative to an IR has been deleted for legal reasons; such alternatives need to be dealt with using the procedures provided in Article 14 of the Basic Regulation. EU-OPS and JAR-OPS 3 rule text moved to the AMC level and indicating an alternative to an AMC without demonstrating that the requirements of the safety objective were fully met has been deleted; such alternative AMC, however, can be followed up by operators using the alternative means of compliance procedure, provided it is demonstrated that the safety objective can be met.

240. Text transposed in AMC material that demanded an approval by the competent authority for an alternative means of compliance has been deleted since it would be covered through the alternative means of compliance procedure.

241. EU-OPS / JAR-OPS 3 rule text that is also covered in Annex IV of the Basic Regulation has been retained and a reference to the Basic Regulations was added.

242. EU-OPS / JAR-OPS 3 rule text of an explanatory nature has been transposed as GM; notes have either been redrafted into AMC provisions, where treated as footnotes, transposed as GM, or deleted if they did not provide sufficient added value.

243. Rules that contained provisions as “acceptable to the authority” have been consistently redrafted through all Subparts as “the operator shall specify in the operations manual …”. The Agency adopted this approach in order to specify a defined procedure for how such items should be brought to the attention of the competent authority.

244. The following table provides an overview of intentional differences to EU-OPS and JAR-OPS 3. The nature of differences and their justifications are further described in more detail in the text below.

Table 6: Differences to EU-OPS/JAR-OPS3

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
1./3.125(a)(4)	CAT.GEN.MPA.180 (a)(5)	AOC shall be certified true copy, whereas in EU-OPS/JAR-OPS3 it was original or copy of the AOC.	Alignment with ICAO amt 30
N/A	CAT.GEN.MPA.180 (a)(9)	Journey log shall be carried, whereas this was not mandated in EU-OPS/JAR-OPS3.	Compliance with Article 29 of the Chicago Convention.
1.192	CAT.OP.MPA.106	Prior approval required for the use of an isolated aerodrome as destination aerodrome with aeroplanes.	The use of an isolated aerodrome exposes the aircraft and passengers to a greater risk than to operations where a destination alternate aerodrome is available. Whether an aerodrome is classified as an isolated aerodrome or not often depends on which aircraft are used for operating the aerodrome. The competent authority should therefore assess whether all possible means are applied to mitigate the greater risk.
1./3.255	CAT.OP.MPA.150	The fuel policy and any change to it requires a prior approval.	The Agency shares the view of stakeholders, that the requirements on the fuel policy are a safety critical requirement and should therefore require a prior approval.
Appendix 1 to JAR-OPS 3.005 (c)	N.A.	Deletion of the momentary flight through the HV envelope.	This is considered to be in contradiction with 4.a of Annex IV to the Basic Regulation.

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
1./3.620	CAT.POL.MAB.100 (f)	Additional criteria for approval of standard masses for load items other than passengers and baggage have been included	To provide more flexibility to operators
1./3.625	CAT.POL.MAB.105 (a)	Approval for omitting data from the mass and balance documentation is removed	Since it is intended that those data are not missing but provided elsewhere
1./3.625	CAT.POL.MAB.105 (e)	Mass and balance documentation provisions have been expanded to cover the use of different types of on-board mass and balance systems.	To address existing systems previously not covered
1.635	CAT.IDE.A.110	Requirements on spare electrical fuses have been updated	In line with ICAO and JAA NPA-OPS 43[37]
1.665	CAT.IDE.A.150	Requirements on TAWS Class A & Class B have been introduced	In line with JAA NPA-OPS 39B[38]
1.675	CAT.IDE.A/H.165	The first part of the original requirement on equipment for flight in icing conditions has been deleted.	It is already covered in Essential Requirement 2.a.5
Provisions on recorders	CAT.IDE.A/H.185/190/195/200	FDR requirements upgraded. Datalink recording mandated	JAA NPA OPS 39C[39], 48A[40],67[41]
1./3.790	CAT.IDE.A/H.250	Provision mandating the use of Halon removed	To comply with Regulation (EC) No 1005/2009[42]

37 NPA-OPS 43 (JAR-OPS 1) Circuit Protection Devices.
38 NPA-OPS 39B (JAR-OPS 1) Pitot heater failure, TAWS B, HF.
39 NPA-OPS 39C (JAR-OPS 1) Type IA FDR & Fuel Codes).
40 NPA-OPS 48A (JAR-OPS 1) Data Link Communications Recording for New Built Aeroplanes.
41 NPA-OPS 67 (JAR-OPS 3) Type IVA FDRs.
42 Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer. *OJ L 286, 31.10.2009, p. 1.*

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
1./3.730	CAT.IDE.A.205	1.An upper torso restraint (UTR) system is required on small aeroplanes. 2.Definition of UTR is introduced	1.JAA NPA 26-20[43]. 2. to provide flexibility for existing design solutions
1./3.680	N.A.	The requirement related to the cosmic radiation indicator has been deleted.	Deleted as the Basic Regulation, which only addresses the mitigation of safety risks, does not provide the legal basis for their transposition, i.e. health issues, and to avoid overlaps with other Community Legislation, (Council Directive 96/29/Euratom of 13 May 1996[44]).

Differences to ICAO Annex 6

245. The following table provides an overview of ICAO Annex 6 requirements that are considered to be either not transposed or transposed in a way which does not provide at least an equivalent level of safety as specified in ICAO Annex 6 standards.

Table 7: Differences to ICAO Annex 6

Annex 6 Part I/III reference	EASA-EU reference	Description of difference
Annex 6 Part I 6.3.1.2.3	CAT.IDE.A.190 (a) (1) and (b)(3)	Implementation dates for a Type I FDR in CAT.IDE applies to CofA issued after July 1990 instead of January 1989
Annex 6 Part I 6.3.1.2.4	CAT.IDE.A.190 (a) (1) and (b)(2)	Implementation dates for a Type II FDR in CAT.IDE applies to CofA issued after July 1990 instead of January 1989

[43] NPA 26-20 UPPER TORSO RESTRAINT INSTALLATION ON TRANSPORT CATEGORY (PASSENGER) AEROPLANES WITH MAXIMUM TAKE-OFF WEIGHT < 5700 KG.

[44] Council Directive 96/29/Euratom of 13 May 1996 laying down the basics safety standards for protection of the health of workers and the general public against the dangers arising from ionizing radiation, *OJ L 159, 29.6.1996, pp. 1-114.*

Annex 6 Part I / III reference	**EASA-EU reference**	**Description of difference**
Annex 6 Part I 6.3.1.2.12 & 13	CAT.IDE.A.190	Maximum sampling and recording interval of certain parameters not implemented
Annex 6 Part I 6.3.1.3 &	CAT.IDE.A.190	Discontinuation of old memory media for FDRs not implemented.
Annex 6 Part I 6.3.2.1.1	CAT.IDE.A.185 (a)	CVR for light aeroplanes not implemented.
Annex 6 Part I 6.3.2.2	CAT.IDE.A.185	Discontinuation of old memory media for CVRs not implemented.
Annex 6 Part I 6.3.2.3	CAT.IDE.A.185 (b)	Retrofit extension of recording duration to two hours for CVRs not implemented
Annex 6 Part I 6.3.3.1.2	CAT.IDE.A.195	Retrofit of data link communication recording not implemented
Annex 6 Part I 6.3.3.3	CAT.IDE.A.195	Correlation of data link communication recording and CVR recording not implemented
Annex 6 Part I 6.3.4.5.2	CAT.IDE.A.200	Dual combination recorder configuration for MCTOM exceeding 15000 kg not implemented.
Annex 6 Part I 6.5.2.1 b)	CAT.IDE.A.285	Carriage of life jackets when flying en route over water beyond gliding distance from the shore, in the case of all other landplanes (not operated in accordance with 5.2.9 or 5.2.10) not implemented
Annex 6 Part I 6.6	CAT.IDE.A.305	CAT.IDE has exemptions for additional survival equipment not foreseen by ICAO
Annex 6 Part I 6.19.2 & 3	CAT.IDE.A.350	Resolution of 7.62 m for the pressure altitude reporting transponder not implemented.
Annex 6 Part I, Appendix 8, 3.1	CAT.IDE.A.185 (d) and (e)	In CAT.IDE the requirement to start recording during the cockpit checks is not applicable to all aeroplanes, it depends on the date of issuance of the individual CofA
Annex 6 Part I, Appendix 8, 4	N.A.	Requirements for Airborne image recorders are not implemented.
Annex 6 Part I, Appendix 8, 6	N.A.	Requirements for Aircraft data recording systems (ADRS) are not implemented

Annex 6 Part I / III reference	EASA-EU reference	Description of difference
Annex 6 Part I, Appendix 8, 7.1	N.A.	Requirements to monitor the built-in test features for the flight recorders and flight data acquisition unit (FDAU), when installed, is not implemented
Annex 6 Part III, 4.3.1.3	CAT.IDE.H.190	Discontinuation of old-technology memory media for FDRs has not been implemented.
Annex 6 Part III, 4.3.1.4	CAT.IDE.H.190 (b)	In CAT.IDE, depending on the class and date of delivery of the individual CofA, the required recording duration may be less than 10 hours
Annex 6 Part III, 4.3.2.2	CAT.IDE.H.185	Discontinuation of old-technology memory media for CVRs has not been implemented
Annex 6 Part III, 4.3.2.3	CAT.IDE.H.185 (b)	The retrofit extension of recording duration of the CVR has not been implemented.
Annex 6 Part III, 4.8.2 & 3	CAT.IDE.H.240	Pressurized helicopters requirements for oxygen not implemented
Annex 6 Part III, Appendix 5, 3	CAT.IDE.H.185 (d) and (e)	In CAT.IDE, the requirement to start recording during the cockpit checks is not applicable to all helicopters. It depends on the date of issuance of the individual CofA
Annex 6 Part III, Appendix 5, 4	N.A	Requirement for Airborne image recorders are not implemented.
Annex 6 Part III, Appendix 5, 6	N.A	Requirements to monitor the built-in test features for the flight recorders and flight data acquisition unit (FDAU), when installed, is not implemented
Annex 6 Part I, Attachment C	Runway surface condition	The definition aligns with EU-OPS/JAR-OPS 3. Rulemaking task OPS.005 will include a review of the runway surface definition.
Annex 6 Part III, Attachment A	Category A / B with respect to helicopters	Definitions aligned with CS-Definitions (JAR-OPS 3).

IV. List of proposed rulemaking tasks

246. During the consultation phases with stakeholders a number of items have been identified which – if they would have been addressed in this Opinion - would have gone far beyond the Agency's mandate to transpose the content of existing rules.

These items however have been documented and will be addressed in separated rulemaking tasks to allow for an appropriate consultation with and involvement of stakeholders. The following table provides an overview of these proposed rulemaking tasks.

Table 8: Proposed rulemaking tasks

Part, rule references	Scope	Reference to RMP
Annex I, Part-CAT, Part-SPA, Part-NCC, Part-NCO, Part-SPO	The first editorial review of the OPS Implementing Rules and AMC/GM will include OPS.047 Clarification of separate runway definition and certain items to align with the latest amendments to ICAO Annex 6 that have not been included in the Opinion. This rulemaking task is scheduled to start in 2013.	OPS.005 Updating EASA OPS Implementing Rules
OPS	Review of the rules in respect of requirements addressing initial or continuing airworthiness issues and therefore could be more appropriately contained in Part-21, Part-145 or Part-M.	MDM.047
CAT.POL.H.420	Single-engined helicopter operations over a hostile environment located outside congested areas	OPS.049
CAT.POL.MAB.100	General assessment of requirements on aircraft weighing to incorporate them in Part-M. In particular a review of the subjects entitled to perform aircraft weighing is requested from stakeholders, to assess whether a weighing can be performed only by Part-M / Part-145 organisations or also by third parties working under the quality systems of approved organisations.	MDM.047
CAT.IDE.A.175	Proposal to require an interphone system regardless of size of the aircraft if the type is operated multi-crew. In fact many single-engined light aircraft used for basic training already have this already.	OPS.065

Part, rule references	**Scope**	**Reference to RMP**
CAT.IDE.H.115	Proposal to allow the use of new technologies for helicopter landing lights(e.g. LED) that are capable of providing alternative ways of achieving lighting to "illuminate the ground in front of and below the helicopter and the ground on either side of the helicopters".	OPS.065
CAT.IDE.H.130(i)	Proposal to require a chart holder for all night operations.	OPS.065
CAT.IDE.H.280	Means other than portable location beacons to be considered acceptable: they can be as efficient as ELT (AD) particularly since, during accidents, physical connection between the ELT (AD) and its antenna can be lost.	OPS.065
SPA.LVO, CAT.OP.MPA.110, SPA.ETOPS	An overhaul of EU-OPS Subpart E. This concerns in particular rules on APV operations, LTS CAT I operations, OTS CAT II operations and operations using EVS, recent amendments of ICAO SARPs, new technological advancements, such as synthetic vision systems (SVS).	OPS.083

Part-CAT	Alignment with ICAO regarding: (i) recording data link communication - transposition of JAA NPA-OPS.48A. Extending to all aeroplanes and helicopters that utilise data link communication applications of the requirements to record on a regulatory recorder the data link communication. (ii) new carriage requirements for turbine-engined aeroplanes with an MCTOM of less than 5 700 kg of being equipped with an FDR or ADRS or AIR and of a CVR or CARS; (iii) discontinuation of the use of recorders using frequency modulation and of magnetic tape recorders, for aeroplanes and helicopters; (iv) aeroplanes with MCTOM over 15 000 kg for which the TC is first issued on or after 01/01/2016 and that are required to be equipped with both a CVR and FDR, to be equipped with two combination recorders (FDR/CVR); (v) extension of the required recording duration for all CVR to 2 hours as of 01/01/2016, for helicopters and aeroplanes.	OPS.007 MDM.073 OPS.090 OPS.091 OPS.092
Part-CAT	Update the FDR parameter list including the parameter performance, to align with ED-112. Revision of the provisions relating to FDR maintenance (following an air accident investigation recommendation).	OPS.023 MDM.099
CS-29	Excursions through the HV diagram for CS-29 rotorcraft. Review CS-29 and consider producing Supplement to the TC basis & review HFM for in-service helicopters in light of the alleviation contained in Appendix 1 to JAR-OPS 3.005(c).45	27&29.027

[45] See also Table 1 above, where it is mentioned that the alleviation is not transposed due to the contradiction with 4.a of Annex IV to the Basic Regulation

V. CAT.GEN: Subpart A – General requirements

247. This Subpart contains general requirements for CAT operations. It contains two Sections:

- Section 1 – Motor-powered aircraft; and
- Section 2 – Non-motor-powered aircraft.

248. This Opinion covers only the requirements for Section 1.

CAT.GEN.MPA: Section 1 – Motor-powered aircraft

General

249. This Section transposes parts of Subpart B of EU-OPS and JAR-OPS 3. It relates to NPA OPS.GEN Sections I, V, and VI and OPS.CAT Section I.

EU-OPS / JAR-OPS 3 rules transposed in Part-ORO

250. The following rules of Subpart B are transposed in Part-ORO and are not included in this Section:

- OPS 1./3.005 General, is covered by the Cover Regulation on Air operations, Part-M, Essential Requirements of the Basic Regulation, ORO.FC;
- OPS 1./3.030 Minimum Equipment Lists – Operator's Responsibilities is covered in ORO.MLR;
- OPS 1./3.035 Accident prevention and flight safety programme is covered in ORO.GEN.200;
- OPS 1./3.037 is covered in ORO.GEN.200;
- OPS 1./3.155 is covered in ORO.SEC;
- OPS 1./3.165 Leasing is covered in ORO.AOC.

CAT.GEN.MPA.100 Crew responsibilities

251. This rule transposes OPS1./3.085 (a), (b), (d). Paragraph (b)(5) was added in line with the discussion in the Air Safety Committee to particularly address crew members who work for more than one operator. Such items that are already covered in Annex IV of the Basic Regulation have been retained and a reference to Annex IV was added.

CAT.GEN.MPA.105 Responsibilities of the commander

252. This rule transposes OPS 1./3.085 (f). With the objective to combine all responsibilities of the commander within a single rule, the following have been merged with this rule: OPS 1/3.330 and OPS 1.420 (d)(2), (d)(3).

CAT.GEN.MPA.180 Documents, manuals and information to be carried

253. The proposed IRs are based on existing requirements in EU-OPS and JAR-OPS 3, with the following significant differences:

- Carriage of 'documents' in electronic format has been extended to include certificates and manuals, to account for increasing use of electronic means. Directive 1999/93/EC of the European Parliament and Council on a Community framework for electronic signatures[46], provides the mechanism for originals in electronic format, i.e. electronic signature.
- If a copy of the AOC is carried instead of the original, it is required to be a certified true copy, whereas this was not specified in EU-OPS/JAR-OPS 3. The change has been made to align with ICAO Annex 6 standards. Guidance Material on how to comply with this rule will be provided in the related ED Decision.
- The journey log shall be carried, whereas this was not mandated in EU-OPS/JAR-OPS 3.The change has been made to comply with Article 29 of the Chicago Convention. The journey log and its data may be available in different systems or documentation.
- The provisions for carriage of certificates, manuals and other information that were presented in three separate paragraphs in EU-OPS and JAR-OPS 3 have been merged, for simplification and clarity.
- The text now clearly indicates that only the certificate of registration, certificate of airworthiness and the aircraft radio licence must be "the original", reflecting the intent of EU-OPS/JAR-OPS 3.
- The reference to carriage of dangerous goods documentation has been moved to Part-SPA.
- The alleviation allowing certain documents to be retained at the aerodrome or operating site under certain conditions has been changed to include mass and balance documentation, as a copy is required to be retained on the ground.

CAT.GEN.MPA.200 Transport of dangerous goods

254. The requirements in CAT.GEN address the circumstances under which dangerous goods might be carried without holding an approval in accordance with SPA.DG. This concerns, for example, items carried in passengers' baggage that are normally considered as dangerous goods. This paragraph also addresses the awareness of crew members to detect dangerous goods carried inadvertently.

255. The approach taken by the Agency is to work with a reference to the ICAO Technical Instructions, as was presented in the NPA. The reference is specified in the IR. Extracts from the Technical Instructions are not generally included in these rules. Therefore the requirement in CAT.GEN and the requirements in SPA.DG are shorter than their equivalents in Subparts R of EU-OPS and JAR-OPS 3. Only requirements specifying particular operator responsibilities have been repeated from the Technical Instructions.

VI. CAT.OP: Subpart B – Operating procedures

256. This Subpart contains requirements for operating procedures for CAT operations. It contains two Sections:

[46] *OJ L 13, 19.1.2000, p. 12–20.*

- Section 1 – Motor-powered aircraft; and
- Section 2 – Non-motor-powered aircraft.

This Opinion covers only Section 1.

CAT.OP.MPA: Section 1 – Motor-powered aircraft

General

257. This Section transposes Subpart D and parts of Subpart E of EU-OPS and JAR-OPS 3.

Comparison with EU-OPS / JAR-OPS 3

258. Rules of Subpart E of EU-OPS / JAR-OPS 3 that are not related to low visibility operations (LVO) have been transposed into CAT.OP.MPA.110. This concerns parts of OPS 1/3.430 and the related text of Appendix 1 (New) to OPS 1./3.430 and Appendix 2 to OPS 1.320(c). Appendix 1 (Old) to OPS 1./3.430 has not been transposed because it is replaced by Appendix 1 (New) in June 2011.

259. The EU-OPS / JAR-OPS 3 rules on reduced vertical separation minima (RVSM), ETOPS, minimum navigation performance specifications (MNPS) and performance-based navigation (PBN) have been moved to the relevant Subparts of Part-SPA.

260. The following Appendices that contain means to comply with a safety objective have been transposed as AMC and will be addressed in the corresponding Agency Decision; this approach applied to the following Appendices:

- Appendix 1 to OPS 1.255 Fuel policy;
- Appendix 1 to OPS 1.270 Stowage of baggage and cargo;
- Appendix 1 to OPS 1.305 Refuelling / defuelling with passengers embarking, on board or disembarking; and
- Appendix 1 (New) to OPS 1./3.430.

261. The following rules of Subpart D are transposed by other Parts or rule documents and are not included in this Section:

- OPS 1.311 is transposed in ORO.CC;
- OPS 1.390 Cosmic radiation, is covered by Council Directive 96/29/Euratom; and
- OPS 1.420 is covered in Regulation (EC) No 996/2010[47], ORO.GEN, Part-M, Part-SERA, CAT.GEN.MPA.105(c) and (d), SPA.DG, and ORO.SEC.

CAT.OP.MPA.105 Use of aerodromes and operating sites

262. This rule transposes OPS 1/3.220. The scope of this rule has been extended to operations that do not depart from, or land at an aerodrome. Due to safety

47 Regulation (EC) No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation and repealing Directive 94/56/EC, *OJ L 295, 12.11.2010, pp. 35-50.*

considerations, the rule text does not allow the use operating sites for CAT operations with complex aeroplanes.

CAT.OP.MPA.106 Use of isolated aerodromes – aeroplanes

263. The Agency proposes a prior approval for the use of an isolated aerodrome as destination aerodrome for commercial operations with aeroplanes.

264. The Agency concurred with the view of stakeholders and RGs that the use of an isolated aerodrome exposes the aircraft and passengers to a greater risk than to operations where a destination alternate aerodrome is available. Whether an aerodrome is classified as an isolated aerodrome or not often depends on which aircraft are used for operating the aerodrome. The competent authority should therefore assess whether all possible means are applied to mitigate the greater risk of operating to an isolated aerodrome.

CAT.OP.MPA.110 Aerodrome operating minima, CAT.OP.MPA.115 Approach flight technique –aeroplanes

265. These rules transpose OPS 1./3.225 and parts of 1./3.430. To improve the readability of the rules, 1./3.430 was split into two requirements. The text has been redrafted and simplified as far as feasible.

266. As already mentioned above, the following corresponding rules of Appendix 1 (New) to OPS 1.430 have been transposed as AMC and are published in the Decision:

- Take-off operations with a runway visual range (RVR) at or above 400 m;
- Non-precision approach (NPA) operations;
- Approach operations with vertical guidance (APV);
- CAT I operations;
- Circling operations;
- Visual approach operations;
- Rules for failed or downgraded ground equipment; and
- Rules for the conversion of reported meteorological visibility to RVR.

CAT.OP.MPA.115 Approach flight technique –aeroplanes

267. These rules transpose OPS 1./3.225 and parts of 1./3.430. To improve the readability of the rules, 1./3.430 was split into two requirements. The text has been redrafted and simplified as far as feasible.

CAT.OP.MPA.140 Maximum distance from an adequate aerodrome for two-engined aeroplanes without an ETOPS approval

268. This rule transposes EU-OPS 1.245. This includes the rule for turbo-jet aeroplanes with a maximum operational passenger seating configuration of 19 or less and a maximum take-off mass less than 45 360 kg to increase the threshold distance up to 180 minutes if approved by the competent authority. For legal reasons,

subparagraph (d) was added with the requirements on how to obtain such an approval from the competent authority.

CAT.OP.MPA.150 Fuel policy

269. This rule transposes OPS 1./3.255. The Agency shares the view of stakeholders and the RGs that the requirements on the fuel policy are a safety-critical requirement. Based on the result of stakeholder consultation and reactions received to the CRD, the Agency maintains its proposal to require a prior approval of the fuel policy and any change to it.

270. As mentioned above, the text of Appendix 1 to OPS 1.225 has been moved to AMC material and will be published in the Decision.

CAT.OP.MPA.155 Carriage of special categories of passengers (SCPs)

271. This rule primarily transposes OPS 1.260 and 1.265. It also aims at providing the necessary hook for future AMC/GM that could be developed as a result of the rulemaking task on the carriage of persons with reduced mobility (PRMs) (MDM.072) that is due to start in 2012. The proposed text has been redrafted taking into account Regulation (EC) No 1107/2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air[48]. Particular attention has been given to Article 2(a), which gives a definition of 'disabled person' or 'person with reduced mobility' that has a slightly wider scope than its equivalent in EU-OPS (re. ACJ OPS 1.260 in Section 2 of JAR-OPS 1). Having also in mind that the rules existing in the USA for the carriage of PRMs (14 CFR Part 382) are now applicable to European operators, consideration has been given to ensure that the proposed IR is consistent with the principle stated in Article 4(1)(a) of Regulation (EC) No 1107/2006. To summarise, the proposed text has therefore been developed to ensure that Regulation (EC) No 216/2008 and the related IR for air operations as well as Regulation (EC) No 1107/2006 can be complied with.

CAT.OP.MPA.295 Use of airborne collision avoidance system (ACAS)

272. This rule transposes OPS 1.390. The text has been aligned with the text proposed in the Opinion 5/2010 to AUR.ACAS[49]. AUR.ACAS was drafted with the objective to introduce ACAS with collision avoidance logic version 7.1 as a mandatory standard to European airspace.

273. Based on reactions received, the Opinion proposes specific requirements for aeroplanes and helicopters.

VII. CAT.POL: Subpart C – Aircraft performance and operating limitations

274. This Subpart contains requirements for aircraft performance and operating limitations for aircraft used in CAT operations. It contains five Sections:

- Section 1 – Aeroplanes;
- Section 2 - Helicopters;

[48] *OJ L 204, 26.7.2006, pp. 1-9.*

[49] Available on the Agency's website.

- Section 3 – Sailplanes;
- Section 4 – Balloons; and
- Section 5 – Mass and balance.

275. This Opinion covers Sections 1, 2 and 5.

CAT.POL.A: Section 1 – Aeroplanes

General

276. This Section transposes Subparts F-I of EU-OPS.

277. This Section consists of four Chapters:

- Chapter 1 – General requirements;
- Chapter 2 – Performance class A;
- Chapter 3 – Performance class B;
- Chapter 4 – Performance class C.

Compared with EU-OPS / JAR-OPS 3

278. The rule content of Subparts F-I have been retained. There are editorial revisions to align with the terms used in other Subparts. In those cases where the EU-OPS text allowed alternative methods, the text was either moved to AMC or deleted since it would require an Article 14 (6) derogation if the criteria for the alternative are not clearly specified.

279. Appendix 1 to OPS 1.545(b)(1) and (c)(1) has been moved to AMC level.

Chapter 2 – Performance class A

280. The rule text has been retained without any significant change.

281. Based on comments received, for steep approaches, the screen height values were raised from 50 to 60 ft to align with NPA 25B-267 and the proposal of the JAA Performance Sub-Committee.

Chapter 3 – Performance class B

282. The rule text has been retained without any significant change.

Chapter 4 – Performance class C

283. The rule text has been retained without any significant change.

CAT.POL.H: Section 2 - Helicopters

General

284. This Section transposes Subparts F-I of JAR-OPS 3.

285. This Section consists of four Chapters:

- Chapter 1 – General requirements;
- Chapter 2 – Performance class 1;
- Chapter 3 – Performance class 2;
- Chapter 4 – Performance class 3.

Operations to/from public interest sites – CAT.POL.H.225

286. A public interest site is a landing site at a hospital located in a congested hostile environment. Provided it is not the HEMS operating base, it attracts alleviation from performance class 1 requirements because the landing area is too small for compliance with a Category A procedure or the obstacle environment results in a too demanding climb gradient.[50] The rule applies to HEMS operations as well as inter-hospital transfers for which no HEMS approval is necessary.

287. The operator has to specify public interest sites where operations in accordance with performance class 1 cannot be conducted and apply for an approval to operate without an assured safe forced landing capability. A corresponding authority requirement (ARO.OPS.220) mandates the competent authority to include the list of public interest sites in the approval.

288. The final proposal corresponds to JAR-OPS 3 with some editorial changes to improve the text and to align it with other requirements. The provision attracted a number of reactions due to different or non-implementation of JAR-OPS 3 in Member States. Following extensive discussions with Member States and experts, the Agency concluded that it could not establish a safety case allowing altering the intent or implementation dates of JAR-OPS 3. The implementation dates in particular may be an issue for decision at Commission level since this goes beyond the domain of air operations safety legislation.

Operations without an assured safe forced landing capability - CAT.POL.H.305

289. Appendix 1 to JAR-OPS 3.517(a) has been included in this IR.

290. For legal certainty the “set of conditions” needs to be explicit. Therefore some elements of ACJ-2 to Appendix 1 to JAR-OPS 3.517(a) were upgraded to rule material, rather than leave them open to alternative interpretation. The method to comply with such a condition is retained in the AMC material.

Helicopter operations over a hostile environment located outside a congested area - CAT.POL.H.420

291. A hostile environment located outside a congested area can be defined as an environment in which:

[50] For landing sites (at hospitals) not located in a congested hostile environment, the provisions for exposure - already contained in CAT.POL.H - can be applied, as this is not an alleviation to the performance class 1 requirements.

- a safe forced landing cannot be accomplished because the surface is inadequate;
- the helicopter occupants cannot be adequately protected from the elements; and
- search and rescue response/capability is not provided consistent with anticipated exposure.

292. The source of paragraph CAT.POL.H.420 is Appendix 1 to JAR-OPS 3.005(e), which is based on a risk assessment having the objective to provide a high level of passenger protection in commercial air transport operations. The passenger protection part of the requirement lies in the fact that by definition a single-engined helicopter operating in Performance Class 3 over a hostile environment will in the case of a critical engine failure results in a forced landing with possible casualties.

293. Nevertheless, when the rule was established back in 1999, the JAA acknowledged the economic impact of the new provision and that helicopters with the appropriate performance might not be available immediately. Consequently, guidance material was included to allow existing operations to continue, in particular in:

- mountains; and
- remote areas, where it is impractical and not proportionate to cease single-engined operations and replace the fleet with multi-engined helicopters.

294. Due to the different implementation of JAR-OPS 3 in Member States the provision is used more widely than was intended by the JAA back in 1999; either by allowing such single-engined helicopter operations in any hostile environment or also by approving new operators.

295. As certain multi-engined helicopters today might not be able to meet the performance class 1 or 2 requirements for flights at higher altitudes, the JAR-OPS 3 provisions are transposed into the proposed IRs to allow such operations to continue until helicopters with better performance are available. Certain adaptations were made in order to accommodate, as much as possible, the situation in Member States.

296. A new authority requirement (ARO.OPS.215) requires these mountain and remote areas to be designated by the Member State and to require the competent authority to review the risk assessment and consider the technical and economic justification for the conduct of such operations before approving them.

297. New GM will be introduced to replace IEM to Appendix 1 to JAR-OPS 3.005(e), clarifying the circumstances under which approvals may be obtained.

298. Some Member States and stakeholders argue that the proposed rule should not be limited to mountainous or remote areas but allow operations in any hostile environment. However, within the timeframe available, stakeholders and the Agency were not able to gather the appropriate data and establish a safety case that would show the need to reconsider the basic underlying principle of JAR-OPS 3, which was to transition fleets to multi-engined helicopters, given subsequent technological advances and increased reliability of single-engined helicopters. The Agency therefore considers it premature to make any substantial changes to the

rule now. It has started to collect appropriate data and it is foreseen to start a new rulemaking task on this issue. This rulemaking task will also address the use of helicopters with reciprocating engines.

CAT.POL.MAB: Section 5 – Mass and balance

General

299. This Section transposes Subpart J of EU-OPS and JAR-OPS 3.

300. This Section consists of two Chapters:

- Chapter 1 – Motor-powered aircraft;
- Chapter 2 – Non-motor-powered aircraft.

301. This Opinion covers only Chapter 1.

Chapter 1 – Motor-powered aircraft

Specific issues

302. Mass and balance requirements for motor powered aircraft have been kept together since only a few differences were identified between aeroplanes and helicopters. The resulting text is aligned as much as possible with the original requirements of EU-OPS and JAR-OPS 3.However, it has been streamlined and the balance between rule level and AMC has been improved, to allow sufficient flexibility and to account for different operational circumstances.

303. The requirements for weighing of aircraft have been kept, for the time being, in CAT.POL.MAB.100(b). They will be incorporated into Part-M within the rulemaking task MDM.047. This task will include an assessment of subjects/organisations entitled to perform aircraft weighing.

304. Additional criteria for approval of standard masses for load items other than passengers and baggage have been included in CAT.POL.MAB.100(f).

305. Approval for omitting some data from the mass and balance documentation has been deleted in CAT.POL.MAB.105(a) since it is intended that those data are not missing but provided elsewhere in a way that is readily available for use.

306. Mass and balance documentation provisions have been expanded (CAT.POL.MAB.105(e)) to cover the use of different types of on-board mass and balance systems, to address existing systems not covered by EU-OPS / JAR-OPS 3.

VIII:CAT.IDE: Subpart D – Instrument, data, equipment

307. This Subpart contains general requirements for CAT operations. It consists of four Sections:

- Section 1 – Aeroplanes;
- Section 2 - Helicopters;

- Section 3 – Sailplanes; and
- Section 4 - Balloons.

308. This Opinion contains Sections 1 and 2.

309. Section 1 and 2 transposes Subpart K and L of EU-OPS and JAR-OPS 3.

310. Text has been generally drafted keeping performance-based objectives where practical, i.e. at rule level and giving systems/equipment specifications and means of compliance at AMC level.

311. Equipment requirements were separated from purely operational requirements, e.g. on the use of equipment, which are properly addressed in CAT.OP.

312. The numbering of the rules has been kept consecutive in each section, giving the same number and title to rules on the same subject for aeroplanes and helicopters. Whenever a rule was peculiar to aeroplanes that number was skipped for helicopters and vice versa.

313. The approval requirements in CAT.IDE.A/H.100 on the instruments and equipment required by Subpart CAT.IDE have been clarified, in line with the Part-21 requirements. Additional provisions have been added to ensure instruments and equipment not required by Part-CAT that do not need to be approved in accordance with Part-21 are not used for safety functions and do not affect airworthiness.

314. A new requirement has been introduced, CAT.IDE.A/H.105 Minimum equipment for flight, to address operations with failed items in line with OPS 1.030/3.030.

315. Requirements for flight data recorders have been updated in accordance with NPA-OPS 39B (Type 1A FDR). NPA-OPS 48A Data Link Communications Recording for New Built Aeroplanes and NPA-OPS 67 Type IVA Flight data recorders for helicopters were also taken into consideration.

316. The first part of the original requirement on equipment for flight in icing conditions in CAT.IDE.A/H.165 has been deleted, as it is already covered in Essential Requirement 2.a.5.

317. The date for mandating data link communication recording should ideally correspond to the date when data link is used for essential VHF communications. However, many comments requested sufficient notice to avoid costly retrofitting. It is therefore proposed to mandate data link communication recording two years after the OPS Regulation enters into force, i.e. on the 8th April 2014.

318. CAT.IDE.A(H).250 Hand fire extinguishers: the provision of OPS mandating the use of extinguishing agent Halon were removed to comply with Regulation (EC) No 1005/2009 that will forbid its use. The rule contains a general safety objective on the efficiency of the fire extinguishing agent. This allows the use of Halon in the transition period.

319. The requirement related to the cosmic radiation indicator (OPS 1.680/3.680) has been deleted as the Basic Regulation, which only addresses the mitigation of safety risks, does not provide the legal basis for their transposition, i.e. health issues. This deletion also avoids overlapping with other European legislation, in particular that related to health and safety at work or the protection against radiations (Council Directive 96/29/Euratom of 13 May 1996).

Section 1 – Aeroplanes

320. Requirements on spare electrical fuses (CAT.IDE.A.110) have been enhanced, in line with ICAO and EU-OPS and JAA NPA-OPS 43.

321. The alleviation for some of the instruments and equipment required in VFR by day operations, for those aircraft where compliance would require retrofitting and which was subject to the approval of the Authority, is now directly given in the rule to ensure uniform application throughout Member States.

322. A requirement for an upper torso restraint (UTR) system on small aeroplanes, CAT.IDE.A.205, has been added in accordance with NPA 26-20 for aeroplanes with a MTOM of less than 5 700 kg, following an accident investigation board recommendation addressed to CAA UK and a subsequent study carried out by CAA UK.

323. A definition of UTR has been also provided to provide flexibility for existing design solutions. The review of comments made clear that EU-OPS was not consistent in the use of the term “safety harness”. While there seems to be a common understanding that a safety harness includes a safety belt and two shoulder straps, there are a number of aeroplanes that may not be in compliance with the applicable requirements. Exemptions received by the European Commission under EU-OPS confirm this view. Several comments were received in order to allow the use of safety belts with a diagonal shoulder strap on the observer seat in the flight crew compartment on aeroplanes where the fitting of a four-point harness is not practicable. Considering the latest developments in aircraft interior designs, different design solutions for the upper torso restraint systems can provide the same enhanced safety level for those observer seats.

324. Requirements on TAWS Class A& Class B (CAT.IDE.A.150) have been introduced in line with NPA-OPS 39B.

Section 2 – Helicopters

325. The alleviation for oxygen requirements for pilots (CAT.IDE.H.240) is kept, as originally given in JAR-OPS 3, for other-than-complex helicopters operated between 10 000 ft and 13 000 ft, after comments to the CRD. Further exemptions for short incursions between 13 000 ft and 16 000ft, originally foreseen by JAR-OPS 3 under a specific approval of the authority will have to be handled through Article 14 of the Basic Regulation. These further exemptions are not in line with ICAO SARPs and to be approved should be based on specific mitigating measures (e.g. operator’s experience, pilot’s physiological adaptation to certain altitudes. Furthermore, they would usually be achievable only in certain regions (i.e. mountainous areas).

Annex V - Part-SPA

I. Scope

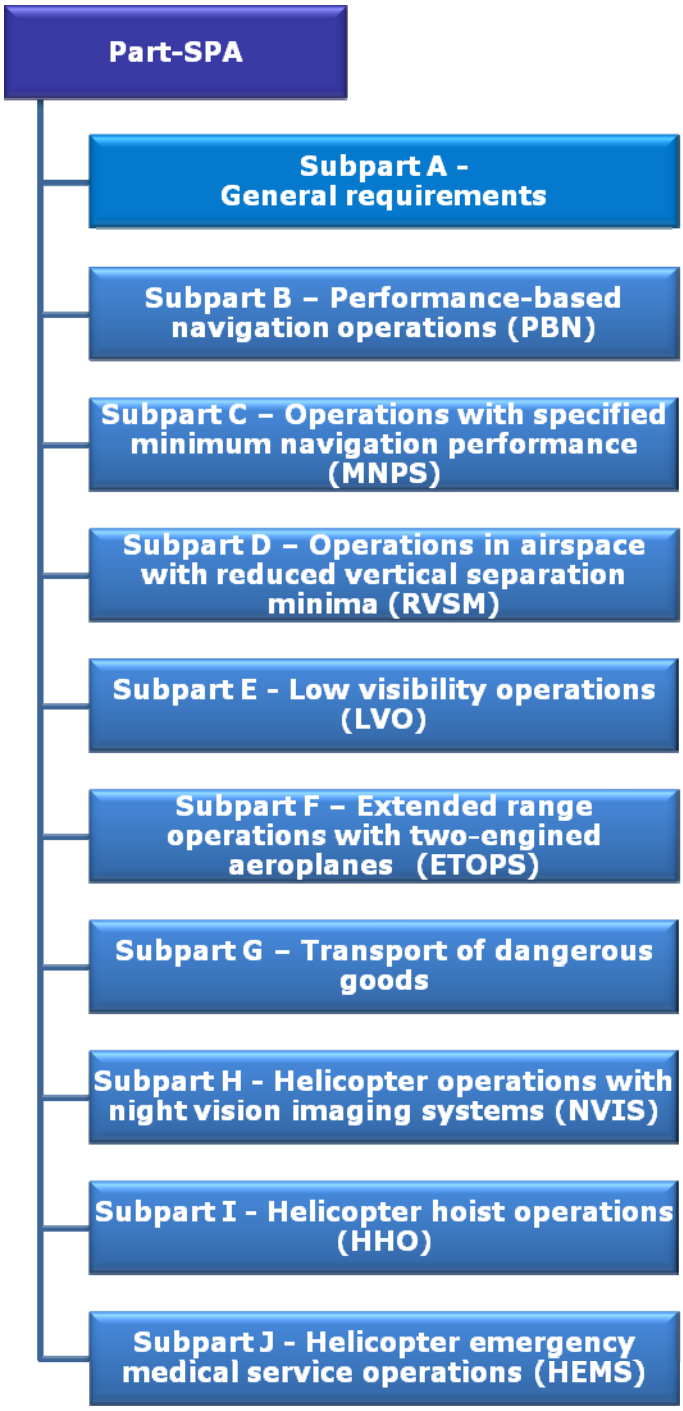
326. Part-SPA contains operator requirements for operations requiring specific approvals.

327. Part-SPA consists of 10 Subparts:

- the first Subpart contains general requirements, which are applicable to all nine specific approvals addressed in Part-SPA;
- the requirements for the nine specific approvals are each given in a separate Subpart.

The table below provides an overview of the structure of Part-SPA.

Figure 11: Structure of Part-SPA



328. Part-SPA requirements are applicable to commercial as well as non-commercial operators with the following exceptions:

- SPA.ETOPS only applies to CAT operations of aeroplanes; and
- SPA.NVIS, SPA.HHO and SPA.HEMS only apply to CAT operations of helicopters.

II. Overview of reactions

329. In general, the received reactions showed overall support for the CRD version of Part-SPA.

III. Overview of differences

Differences to EU-OPS / JAR-OPS 3

330. The following table provides an overview of intentional differences to EU-OPS and JAR-OPS 3.

Table 9: Differences to EU-OPS/JAR-OPS 3

EU-OPS/JAR-OPS3 reference	EASA-EU reference	Description of difference	Justification
Appendix 1 to JAR-OPS 3.005(d) subparagraph (c)(2)	SPA.HEMS.125	The performance requirements have been amended to reflect the JAA HSST WP and the stakeholders' positions following the NPA consultation.	Inclusion of a JAA HSST WP.
Appendix 1 to JAR-OPS 3.175	N/A	Deletion of the offshore approval.	Objective criteria were not provided in JAR-OPS 3.

Differences to ICAO Annex 6

331. The Opinion does not contain requirements that would be less restrictive than currently applicable ICAO standards.

IV. List of proposed rulemaking tasks

332. During the consultation phases with stakeholders a number of items have been identified which – if they would have been addressed in this Opinion - would have gone far beyond the Agency's mandate to transpose the content of existing rules. These items however have been documented and will be addressed in separated rulemaking tasks to allow for an appropriate consultation with and involvement of stakeholders. The following table provides an overview of proposed rulemaking tasks.

Table 10: Proposed rulemaking tasks

Part, rule references	Scope	Reference to RMP
SPA	Approval for conducting offshore operations	OPS.093

Part, rule references	Scope	Reference to RMP
SPA.LVO, CAT.OP.MPA.110, SPA.ETOPS	An overhaul of EU-OPS Subpart E. This concerns in particular rules on APV operations, LTS CAT I operations, OTS CAT II operations and operations using EVS, recent amendments of ICAO SARPs, new technological advancements, such as synthetic visions systems (SVS).	OPS.083
SPA.NVIS	Develop proportionate rules for NVIS operations for other than CAT(H) operations	OPS.096
SPA.HHO	Develop one section for all human external cargo operations, rather than having these requirements split over Part-SPA and Part-SPO.	OPS.067
SPA.HEMS	Transposition of JAA TGL-43	OPS.057

V. SPA.GEN: Subpart A – General requirements

General

333. This Subpart contains general requirements for operators for obtaining and holding a specific approval. This Subpart should be read together with the Subpart containing the requirements for a specific approval.

SPA.GEN.100 Competent authority

334. This requirement defines the competent authority and distinguishes between commercial and non-commercial operators.

335. To maintain compliance with ICAO Annex 6 Part II, this requirement stipulates that for non-commercial operators using aircraft registered in a third country, the specific approvals for PBN, MNPS and RVSM should be issued by the third country State of Registry.

SPA.GEN.105 Application for a specific approval

336. The Agency included a reference to “operational suitability data (OSD) established in accordance with Commission Regulation (EC) No 1702/2003”. Operational suitability data are a set of data required to be produced by the aircraft manufacturer during the type certification process to support safe operation of the aircraft type. Some of these data will become mandatory for operators in so far as they have to develop their minimum equipment list (MEL) and training programmes on the basis of these data. The OSD therefore represent minimum requirements for an aircraft type to ensure a harmonised level of safety.

337. The CRD to NPA 2009-01 "Operational Suitability Certificate" and "Safety Directives", published on 13 May 2011, provides further explanations.

SPA.GEN.110 Privileges of an operator holding a specific approval

338. The requirement states that specific approvals are documented for non-commercial operations in the "list of specific approvals" and for commercial operations in the "operations specifications" (OPSPECS). The corresponding authority requirements are specified in Part-ARO. The forms for the "OPSPECS" and "list of specific approvals" are provided as Appendices II and III to Part-ARO.

SPA.GEN.115 Changes to operations subject to a specific approval

339. This requirement specifies that any change affecting the conditions of a specific approval needs a prior approval by the competent authority. This includes the development of alternative means of compliance.

340. It should therefore be noted that SPA requirements and corresponding AMC material has been developed with the intent that alternative means of compliance proposed by commercial and non-commercial operators need a prior approval by their competent authority.

SPA.GEN.120 Continued validity of a specific approval

341. This requirement is based on the concept of the continued validity of approvals, which is in line with the approach taken for all other operator-related approvals and certificates.

342. The Agency added a reference to the OSD as additional criteria for maintaining the validity of a specific approval.

VI. SPA.PBN: Subpart B – Performance-based navigation operations (PBN)

General

343. This Subpart addresses the specific approval for operations in designated airspace where performance-based navigation (PBN) specifications are established. It includes the following specifications:

- RNAV10;
- RNP4;
- RNAV1;
- Basic-RNP1;
- RNP APCH;
- RNP AR APCH[51].

344. This Subpart transposes EU-OPS 1.243.

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[51] RNAV: area navigation; RNP: required navigation performance; AR: authorisation required; APCH: approach.

SPA.PBN.100 PBN operations

345. The Agency requires a specific approval for all PBN operations except for RNAV5 (B-RNAV). The Agency concluded that operations in RNVA5 airspace do not constitute such a safety-critical operation that a specific approval would be justified.

346. The Agency concurred with the opinion of some non-commercial operators to make a distinction between commercial and non-commercial operations and to re-assess the necessity and the appropriateness of the concept of operational approvals. The Agency therefore intends to initiate rulemaking task MDM.062 with the following scope:

- develop rules for Part-FCL on the training requirements of PBN operations;
- review the justification for the need of an operational approval for each PBN operation for CAT, NCC and NCO operators and assess if there are alternatives to the operational approval, e.g. requirements in Part-FCL; and
- develop an AMC for the operational approval in SPA.PBN that builds on the existing AMC 20 material.

347. A GM to this requirement will provide further information on the criteria for the approval and the operation as specified in AMC 20 material and/or in ICAO Doc 9613 (PBN Manual).

VII. SPA.MNPS: Subpart C – Operations with specified minimum navigation performance (MNPS)

General

348. This Subpart contains the requirements for the specific approval to be allowed to operate in designated minimum navigation performance specifications (MNPS) airspace in accordance with Regional Supplementary Procedures.

349. The Subpart MNPS transposes EU-OPS 1.243 and 1.870.

VIII. SPA.RVSM: Subpart D – Operations in airspace with reduced vertical separation minima (RVSM)

General

350. This Subpart contains the requirements for the specific approval to operate in designated airspace where a reduced vertical separation minimum of 300 m (1 000 ft) applies.

351. This Subpart transposes EU-OPS 1.241 and contains parts of the rule text of TGL 6 (Guidance material on the approval of aircraft and operators for flight in airspace above FL 290 where a 300 m (1 000 ft) vertical separation minimum is applied).

IX. SPA.LVO: Subpart E - Low visibility operations (LVO)

General

352. This Subpart contains the specific approval for low visibility operations, which consist of the following operations:

- low visibility take-off (LVTO) operation;
- lower than Standard Category I (LTS CAT I) operation;
- Standard Category II (CAT II) operation;
- other than Standard Category II (OTS CAT II) operation;
- Standard Category III (CAT III) operation; and
- approach operation utilising enhanced vision systems (EVS) for which an operational credit on the runway visual range (RVR) minima is applied.

353. The Subpart transposes the LVO-related rules of Subpart E of EU-OPS and JAR-OPS 3.

SPA.LVO.100 Low visibility operations (LVO)

354. This requirement defines which operations constitute an LVO.

355. LVOs together with the lowest operating minima are defined in “Annex I – Definitions for terms used in Annexes II to VIII” (Annex I - Definitions).

356. In compliance with EU-OPS, LVTO operations are defined as a take-off with an RVR lower than 400 m. EU-OPS requires a training programme for LVTO and additional further specific approvals for take-offs with an RVR lower than 150 m and for take-offs with an RVR lower than 125 m. The proposed requirement aligns with these provisions but slightly changes the concept. There is only a single approval for LVTO, which would specify the approved operating minimum.

357. The Agency shares the opinion of the majority of stakeholders that EU-OPS classifies EVS operations as an LVO, e.g. in Appendix 1 to OPS 1.450 or Appendix 1 to OPS 1.455. The proposed rule text clarifies that only such EVS operations should be dealt with as LVOs for which operational credits on the RVR minima are applied.

SPA.LVO.110 General operating requirements

358. The Agency transposed the content of Appendix 1 to OPS 1.455 (b)(2)(ix), which requires a radio altimeter to determine call-out heights below 200 ft above the aerodrome threshold.

359. For LVO operations using EVS, possible amendments to current EU-OPS equipment requirements to determine call-out heights as well as their implications on aerodrome operating minima for NPA, APV and PA operations are still under assessment taking into account all available documentation available.

SPA.LVO.115 Aerodrome considerations

360. This requirement clarifies that, in accordance with EU-OPS, an LVO can only be conducted if the selected aerodrome has established low visibility procedures (LVP). This requirement applies to all operations with a visibility below 800 m.

361. An additional subparagraph requires that, at aerodromes outside of the European Union, where the term LVP may not be used, the operator shall ensure that for these aerodromes there are equivalent procedures in place adhering to the requirements of LVP.

Future rulemaking tasks

362. Within the mandate given to the Agency, the existing rule text of EU-OPS was revised only where obvious errors needed to be rectified, essential amendments were required in the interest of safety, or the intent of the rule was ambiguous.

363. The Agency takes the view that a thorough overhaul of requirements stemming from Subpart E is necessary. This would in particular concern the rules on APV (approach procedure with vertical guidance) operations, LTS CAT I operations, OTS CAT II operations and operations with EVS. For this, a dedicated rulemaking task is required, which also takes into account recent amendments of ICAO SARPs and new technological advancements, such as synthetic visions systems (SVS) and combined vision systems (CVS).

X. SPA.ETOPS: Subpart F – Extended range operations with two-engined aeroplanes (ETOPS)

General

364. This Subpart contains the requirements for the specific approval for extended range operations with two-engined aeroplanes under CAT operations.

365. This Subpart transposes EU-OPS 1.246.

Ongoing and future rulemaking tasks

366. It should be noted that these requirements will undergo further amendments in the near future for the following reasons:

- the corresponding AMC 20-6 material was proposed in NPA 2008-01 and the Decision was published on 16 December 2010;
- early in 2012, ICAO is expected to publish a state letter containing proposed amendments to extended range operations covering not only two-engined aeroplanes but also aeroplanes with more than two engines; and
- as mentioned above, the planning minima for the ETOPS alternate aerodrome need to be updated to include APV operations.

XI: SPA.DG: Subpart G – Transport of dangerous goods

General

367. This Subpart contains the specific approval for the transport of dangerous goods as defined in the Technical Instructions of ICAO. It transposes EU-OPS / JAR-OPS 3 Subpart R and JAA NPA-OPS 70.

Comparison with EU-OPS/JAR-OPS 3

368. The Agency proposes a dynamic reference to the ICAO Technical Instructions. Therefore, extracts from the Technical Instructions are not repeated in the IRs. SPA.DG is therefore shorter than Subparts R of EU-OPS and JAR-OPS 3. Only requirements specifying particular operator responsibilities have been specified.

XII. SPA.NVIS: Subpart H - Helicopter operations with night vision imaging systems

General

369. This Subpart contains the specific approval for operations under VFR at night with the aid of night vision imaging systems (NVIS) in CAT operations of helicopters. It transposes JAR-OPS 3.005(j) and TGL-34.

370. TGL-34, when initially drafted, was partly based upon military experience and contained elements that were specific to military operations, e.g. a recommendation to use infrared lights. In CAT operations there is no need to conduct covert operations and such recommendations have been removed.

SPA.NVIS.100 Night vision imaging system (NVIS) operations

371. Text has been included to limit the application to those helicopter operators that hold an AOC for CAT operations.

SPA.NVIS.120 NVIS operating minima

372. The NVIS operating minima should not be lower than the VFR weather minima for the type of night operations conducted. NVIS is an aid to enhance visual cuing at night; therefore night VFR minima remain as defined for the activity in which NVIS are used, e.g. HEMS minima apply when HEMS is conducted with the aid of NVIS.

SPA.NVIS.130 Crew requirements for NVIS operations

373. The text has been adapted to differentiate, for crew composition purposes, between that required for certification, the specific types of operation and the operations manual. The rule has been adapted by splitting it into subparagraphs setting specific criteria and objectives for selection, experience, qualification, recency and crew composition. Training and checking requirements are set for flight crew and technical crew members.

SPA.NVIS.140 Information and documentation

374. This new paragraph, compared to TGL-34, specifies which NVIS-specific elements have to be addressed in the operations manual.

Future rulemaking tasks

375. The possibility of using NVIS for all types of aircraft was intended in NPA 2009-02b. However, TGL-34 was developed for helicopter CAT and the NPA proposals could be too restrictive for other operations. The issue of dedicated NVIS requirements for other-than CAT and other-than helicopter operations could be subject to a future rulemaking task (OPS.096). Currently there is no knowledge of such operations and the experts remain undecided on what might be proportionate for those types of operations. Subpart SPA.NVIS is therefore limited to helicopter CAT operations pending the outcome of this future rulemaking task.

XIII. SPA.HHO: Subpart I - Helicopter hoist operations

General

376. This Subpart contains the requirements for the specific approval of helicopter hoist operations (HHO). It transposes Appendix 1 to JAR-OPS 3.005(h) and draft JAA NPA-OPS 69.

377. The Agency noted that several comments have been made addressing hoist operations during search and rescue missions. Search and rescue as well as mountain rescue are considered to fall outside the remit of the Agency. These comments, which indicate that certain requirements should not apply to such operations, have therefore been set aside.

378. Search and rescue and similar services remain the responsibility of the individual Member States. States should ensure that such services are conducted, as far as practicable, to the objectives of the Basic Regulation.

379. A number of comments were concerned with the absence of appropriate regulations for aerial work. HHO, already specified in JAR-OPS 3, has always been considered as a CAT activity – hence the requirement for engine-failure accountability in accordance with human external cargo (HEC) Class D certification requirements. HEC Classes A, B and C (non-CAT activities) will be addressed under Part-SPO by requiring the operator to establish appropriate standard operating procedures (SOPs). Consensus for this approach was achieved within the review groups.

SPA.HHO.100 Helicopter hoist operations (HHO)

380. This rule now contains only elements for the additional HHO approval; all other elements are covered by the issuance of the AOC, which is one of the conditions to be met. The requirement therefore addresses only variations to the AOC.

SPA.HHO.110 Equipment requirements for HHO

381. HHO addresses CAT operations (HEC Class D); the personnel carrying device system (PCDS) is therefore subject to airworthiness approval. The approval for the hoist and associated equipment will contain continuing airworthiness instructions and the operator is responsible for ensuring that these are carried out.

SPA.HHO.115 HHO communication

382. The text has been improved to clarify that the “ground personnel” should be at the HHO operating site. However, when conducting HHO at a HEMS operating site there might not be ground personnel on-site; an alleviation has therefore been included for HHO at a HEMS operating site.

SPA.HHO.125 Performance requirements for HHO

383. HHO do not rely upon the performance classes; the performance issue is therefore specifically addressed within the rule.

384. A number of comments were concerned with the applicability of engine-failure accountability. The fundamental requirement regarding HHO conducted as CAT is that the helicopter shall be capable of sustaining a critical engine failure without hazard to the suspended person/cargo, third parties or property. A fare-paying passenger is being transferred by hoist and not a crew member. Engine failure accountability precludes helicopters certificated in Category B from performing this type of CAT operation.

SPA.HHO.130 Crew requirements for HHO

385. The rule has been adapted by splitting it in subparagraphs setting specific criteria and objectives for selection, experience, qualification, recency and crew composition. Training and checking requirements are set for flight crew and the technical crew, as well as a requirement for a specific briefing for HHO passengers.

SPA.HHO.140 Information and documentation

386. Several comments requested the reintroduction of a requirement for an operations manual supplement. The requirement for a supplement would not be an objective rule, as it would prevent an integrated operations manual. However, this paragraph now defines which HHO-specific elements shall be addressed in the operations manual required by ORO.MLR. It is for the operator to decide how best to include these elements, which may be in the form of a supplement.

Future rulemaking tasks

387. Comments were received regarding HHO in non-CAT operations. A rulemaking task (OPS.067) will be initiated to examine further the rules included in Part-SPO and whether all HHO operations are to be addressed in Part-SPA.

XIV. SPA.HEMS: Subpart J - Helicopter emergency medical service operations

General

388. This Subpart contains the requirement for the specific approval for helicopter emergency medical services (HEMS). It transposes Appendix 1 to JAR-OPS 3.005(d) and partly the Working Paper HSST-WP-07-03.4.

Helicopter performance

389. The rule has been enhanced to better reflect the HEMS philosophy transposed from the JAA. The requirement now clearly makes a distinction between: the 'HEMS operating base' – where, in the case of a congested hostile environment, there should be 'zero risk'; the hospital located in a hostile environment - where the risk should be minimised to an acceptable safety target - hence the reference to the approval contained in CAT.POL.H.225; the hospital located outside congested hostile environment - where CAT.POL.H.305 already provides the alleviation; and 'HEMS operating sites' - where the risk is as low as reasonably practicable.

SPA.HEMS.100 Helicopter emergency medical services (HEMS)

390. This section now contains only elements for the additional HEMS approval; all other elements are covered by the issuance of the AOC, which is one of the conditions to be met. The requirement therefore addresses only variations to the AOC.

SPA.HEMS.120 HEMS operating minima

391. Since the minimum crew is always one pilot and one HEMS technical crew member, the one pilot operating minima apply to this crew composition. The two pilot operating minima apply only to those cases where the crew consists of two pilots. The HEMS technical crew member is not a pilot and therefore the operation cannot be credited as such. The fact that the one pilot operating minima are already lower than the standard operating minima is already taking into consideration the additional HEMS technical crew member (see also SPA.HEMS.130).

SPA.HEMS.125 Performance requirements for HEMS operations

392. Text has been added as a result of the consultation on HSST/WP-07/03.4. The requirements provide for exposure (this term is used to avoid the longer correct

term ‘operation without an assured safe forced landing capability’) during take-off and landing in the cases defined in (b).

SPA.HEMS.130 Crew requirements

393. The rule has been adapted by splitting it in subparagraphs setting specific criteria and objectives for selection, experience, qualification, recency and crew composition. Training and checking requirements are set for flight crew and the technical crew.

394. The 30 minutes’ flying by sole reference to instruments is intended as a mitigating procedure to prevent pilots from losing control when inadvertently entering instrument meteorological conditions (IMC). Since it is not a recognised procedure in the sense of FCL, there is no need to require this to be instructed by a flight instructor (FI).

395. Both for legal clarity and due to comments received, the exceptional circumstances under which the crew may be reduced have been spelled out in (e)(1).

SPA.HEMS.135 Passenger briefing

396. Within a HEMS operation it is quite common for patients to be unconscious or under the influence of drugs to the extent that they are severely incapacitated. Furthermore they might be strapped to a stretcher where it is impossible for them to move. In those cases it is impractical to give a safety briefing similar to that in a ‘normal’ passenger transport flight. It is for the commander and the medical personnel on the flight to assess to what extent the patient is capable of understanding the briefing, and to provide a briefing that is dependent upon the medical condition of that patient.

SPA.HEMS.140 Information and documentation

397. Several comments requested the reintroduction of a requirement for an operations manual supplement. The requirement for a supplement would not be an objective rule, as it would prevent an integrated operations manual. However, this paragraph now defines which HEMS specific elements shall be addressed in the operations manual required by ORO.MLR. It is for the operator to decide how best to include these elements, which may be in the form of a supplement.

398. Several elements initially contained in AMC/GM have now been included in IR to remain consistent throughout the specific approvals for helicopter operations.

SPA.HEMS.150 Fuel supply

399. This text has been included as a commentator addressed the need to make appropriate provisions for HEMS operations, suggesting that the alleviation contained originally in Appendix 1 to JAR-OPS 3.005(f) should also be applicable to HEMS.

SPA.HEMS.155 Refuelling with passengers embarking, on board or disembarking

400. This text has been reintroduced to address the specific case of HEMS operations, were a patient may be unable to evacuate himself/herself from the helicopter, in case of emergencies during a fuelling activity.

ACRONYMS / ABBREVIATIONS USED IN PART-CAT AND PART-SPA

- for reference only -

AAC	aeronautical administrative communication
AAD	assigned altitude deviation
AAL	above aerodrome level
AC	alternating current
ACAS II	airborne collision avoidance system II
ADF	automatic direction finder
ADG	air driven generator
ADS	automatic dependent surveillance
ADS-B	automatic dependent surveillance - broadcast
ADS-C	automatic dependent surveillance - contract
AeMC	aero-medical centre
AEO	all engines operating
AFCS	automatic flight control system
AFM	aircraft flight manual
AFN	aircraft flight notification
AFN	ATS Facilities Notification
AGL	above ground level
AHRS	attitude heading reference system
AIS	aeronautical information service
ALS	approach lighting system
ALSF	approach lighting system with sequenced flashing lights
AMC	acceptable means of compliance
AMSL	above mean sea level
ANP	actual navigation performance
AOC	air operator certificate
APCH	approach
APU	auxiliary power unit
APV	approach procedure with vertical guidance
AR	ATS route
AR	authorisation required
AR	Authority Requirements
ARA	airborne radar approach

ASC	Air Safety Committee
ASDA	accelerate-stop distance available
ATC	air traffic control
ATO	approved training organisation
ATPL	airline transport pilot licence
ATQP	alternative training and qualification programme
ATS	air traffic services
AVGAS	aviation gasoline
AVTAG	wide-cut fuel
B-RNAV	basic area navigation
BALS	basic approach lighting system
CAP	controller access parameters
CDFA	continuous descent final approach
CDL	configuration deviation list
CFIT	controlled flight into terrain
CG	centre of gravity
cm	centimetres
CM	configuration/context management
CMA	continuous monitoring approach
CMV	converted meteorological visibility
CMPA	complex motor-powered aircraft
CofA	certificate of airworthiness
CPA	closest point of approach
CPDLC	controller pilot data link communications
CPL	commercial pilot licence
CRM	crew resource management
CRT	comment response tool
CVR	cockpit voice recorder
DA	decision altitude
D-ATIS	Data Link - Automatic Terminal Information Service
DC	direct current
DCL	departure clearance
DDM	difference in depth of modulation
D-FIS	data link flight information service
DGOR	dangerous goods occurrence report
DH	decision height
DME	distance measuring equipment

D-OTIS	Data Link - Operational Terminal Information Service
DR	decision range
DSTRK	desired track
EASP	European Aviation Safety Programme
EC	European Commission
EFB	electronic flight bag
EFIS	electronic flight instrument system
EGT	exhaust gas temperature
ELT(AD)	emergency locator transmitter (automatically deployable)
ELT(AF)	emergency locator transmitter (automatic fixed)
ELT(AP)	emergency locator transmitter (automatic portable)
ELT(S)	survival emergency locator transmitter
EPE	estimate of position error
EPR	engine pressure ratio
EPU	estimate of position uncertainty
ERA	en-route alternate (aerodrome)
ESSG	European SAFA Steering Group
ETOPS	extended range operations with two-engined aeroplanes
ETSO	European technical standards order
EUROCAE	European Organisation for Civil Aviation Equipment
EVS	enhanced vision system
FAA	Federal Aviation Administration
FAF	final approach fix
FAK	first-aid kit
FALS	full approach lighting system
FANS	future air navigation system
FAP	final approach point
FATO	final approach and take-off area
FDM	flight data monitoring
FDR	flight data recorder
FFS	full flight simulator
FI	flight instructor
FL	flight level
FM	frequency modulator
FMS	flight management system
FOR	field of regard
FOV	field of view

FSTD	flight simulation training device
ft	feet
FTD	flight training device
g	gram
g	gravity
GBAS	ground-based augmentation system
GCAS	ground collision avoidance system
GIDS	ground ice detection system
GLS	GBAS landing system
GM	Guidance Material
GNSS	global navigation satellite system
GPS	global positioning system
GPWS	ground proximity warning system
HEMS	helicopter emergency medical service
HF	high frequency
HI/MI	high intensity / medium intensity
HIALS	high intensity approach lighting system
HLL	helideck limitations list
HoT	hold-over time
hPa	hectopascal
HUD	head-up display
HUDLS	head-up guidance landing system
IAF	initial approach fix
IALS	intermediate approach lighting system
ICAO	International Civil Aviation Organisation
IF	intermediate fix
IFR	instrument flight rules
IGE	in ground effect
ILS	instrument landing system
IMC	instrument meteorological conditions
inHg	inches of mercury
INS	inertial navigation system
IORS	internal occurrence reporting system
IP	intermediate point
IR	Implementing Rule
IRNAV/IAN	integrated area navigation
IRS	inertial reference system

ISA	international standard atmosphere
IV	intra-venous
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirements
JET 1 / A / A1	kerosene
JET B	wide-cut fuel
JIP	Joint Implementing Procedure
JP-4	wide-cut fuel
km	kilometres
kN	kilonewton
KSS	Ktitorov, Simin, Sindalovskii formula
kt	knot
LAT/LONG	latitude/longitude
LED	light-emitting diode
LIFUS	line flying under supervision
LNAV	lateral navigation
LoA	letter of agreement
LOC	localiser
LOE	line oriented evaluation
LOFT	line oriented flight training
LOS	limited obstacle surface
LOUT	lowest operational use temperature
LP	localiser performance
LPV	lateral precision with vertical guidance approach
LRNS	long range navigation system
LVO	low visibility operations
LVP	low visibility procedures
LVTO	low visibility take-off
m	metres
MALS	medium intensity approach lighting system
MALSF	medium intensity approach lighting system with sequenced flashing lights
MALSR	medium intensity approach lighting system with runway alignment indicator lights
MAPt	missed approach point
MCTOM	maximum certificated take-off mass
MDA	minimum descent altitude
MDA/H	minimum descent altitude/height

MDH	minimum descent height
MEA	minimum safe en-route altitude
MEL	minimum equipment list
METAR	meteorological aerodrome report
MGA	minimum safe grid altitude
MHz	Megahertz
MID	midpoint
ml	millilitres
MLS	microwave landing system
MMEL	master minimum equipment list
MNPS	minimum navigation performance specifications
MOC	minimum obstacle clearance
MOCA	minimum obstacle clearance altitude
MOPS	minimum operational performance standard
MORA	minimum off-route altitude
MPSC	maximum passenger seating configuration
mSv	millisievert
NADP	noise abatement departure procedure
NALS	no approach lighting system
NAV	navigation
NDB	non-directional beacon
N_F	free power turbine speed
NM	nautical miles
NOTAM	Notice to Airmen
NPA	non-precision approach
NVG	night vision goggles
OAT	outside air temperature
OCH	obstacle clearance height
OCL	oceanic clearance
ODALS	omnidirectional approach lighting system
OEI	one-engine-inoperative
OFS	obstacle-free surface
OGE	out of ground effect
OIP	offset initiation point
OM	operations manual
ONC	operational navigation chart
OSD	operational suitability data

otCMPA	other-than-complex motor-powered aircraft
PAPI	precision path approach indicator
PAR	precision approach radar
PBE	protective breathing equipment
PBN	performance-based navigation
PCDS	personnel carrying device system
PDP	predetermined point
PNR	point of no return
POH	pilot's operating handbook
PRM	person with reduced mobility
QFE	atmospheric pressure at aerodrome elevation (or at runway threshold)
QNH	question nil height, atmospheric pressure at nautical height
R/T	radio/telephony
RA	resolution advisory
RAT	ram air turbine
RCC	rescue coordination centre
RCF	reduced contingency fuel
RCLL	runway centreline lights
RFC	route facility chart
RNAV	area navigation
RNAV 5	B-RNAV, basic area navigation
RNP	required navigation performance
RNPX	required navigation performance X
ROD	rate of descent
RTCA	Radio Technical Commission for Aeronautics
RTZL	runway touchdown zone lights
RVR	runway visual range
RVSM	reduced vertical separation minima
SACA	safety assessment of community aircraft
SAFA	safety assessment of foreign aircraft
SAE ARP	Society of Automotive Engineers Aerospace Recommended Practice
SALS	simple approach lighting system
SALSF	short approach lighting system with sequenced flashing lights
SAp	stabilised approach
SAP	system access parameters
SAR	search and rescue

SBAS	satellite-based augmentation system
SCP	special categories of passenger
SID	standard instrument departure
SMS	safety management system
SPECI	aviation selected SPECIal aviation report
SRA	surveillance radar approach
SRE	surveillance radar element
SSALF	simplified short approach lighting system with sequenced flashing lights
SSALR	simplified short approach lighting system with runway alignment indicator lights
SSALS	simplified short approach lighting system
SSP	State Safety Programme
SSR	secondary surveillance radar (pressure-altitude-reporting)
STC	supplemental type certificate
SVS	synthetic vision system
TA	traffic advisory
TAC	terminal approach chart
TAFS	aerodrome forecasts
TAS	true airspeed
TAWS	terrain awareness warning system
TCAS	traffic alert and collision avoidance system
TCCA	Transport Canada Civil Aviation
TDP	take-off decision point
TDZ	touchdown zone
THR	threshold
TODA	take-off distance available
TORA	take-off run available
TRI	type rating instructor
TSE	total system error
TVE	total vertical error
TWIP	terminal weather information for pilots
UMS	usage monitoring system
UTC	coordinated universal time
UTR	upper torso restraint
V_{AT}	indicated airspeed at threshold
VDF	VHF direction finder
VFR	visual flight rules

VHF	very high frequency
VIS	visibility
VMC	visual meteorological conditions
V_{MO}	maximum operating speed
VNAV	vertical navigation
VOR	VHF omnidirectional radio range
V_{S1G}	1 g stall speed
V_{SO}	stalling speed
V_Y	best rate of climb speed
WAC	world aeronautical chart
WXR	weather radar
ZFT	zero flight time
ZFTT	zero flight time training

Cologne, 1 June 2011

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