COMPARISON

EASA OPS IMPLEMENTING RULES

FOR

NON-COMMERCIAL OPERATIONS WITH COMPLEX MOTOR-POWERED AIRCRAFT

AND

IS-BAO – AN INTERNATIONAL STANDARD FOR BUSINESS AIRCRAFT

International Business Aviation Council

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Disclaimer for Use of Document

The information contained in this comparative matrix is intended for the information of operators wishing to use the *IS-BAO – an International Standard for Business Aircraft Operations* as part of their means of complying with Regulation (EC) No 216/2008 and the associated Implementing Rules for the non-commercial operation of complex motor-powered aircraft, and to assist National Authorities in exercising regulatory oversight of such operators. It is provided for guidance only and must not be used as a definitive source of the Regulation and Implementing Rules. No one should act or rely on the basis of information contained in this document without referring to the applicable regulations and Implementing Rules. The International Business Aviation Council (IBAC) shall not be held responsible for any loss or damage caused in any way, including by errors, omissions, inaccuracy, interpretation or misinterpretation, whether negligent or not. IBAC hereby disclaims any and all liability to any person in respect of anything done or omitted to be done by any person purportedly in reliance on this document.

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USE OF IS-BAO BY EUROPEAN AIR OPERATORS

The *IS-BAO - An International Standard for Business Aircraft Operations* was developed by the business aviation and international helicopter communities for the benefit of those communities. The purpose is to promote global standardization and to assist operators in establishing quality flight operations using best practices of business aircraft and of commercial and non-commercial helicopter operations world-wide. It generally reflects the requirements of ICAO Annex 6, Part II and Part III, Section 2, plus other industry best practices. The IS-BAO was originally developed over two years (2000 – 2002) by the International Business Aviation Council (IBAC) and it member associations. In 2009 the IS-BAO officially recognized as a European Standard by the European Committee for Standardization https://www.cen.eu/cen/Sectors/TechnicalCommitteesWorkshops/Workshops/Pages/ws50-isbao.aspx.

In 2010 and 2011 IBAC worked with the Helicopter Association International (HAI), the British Helicopter Association (BHA) and the European Helicopter Association (EHA) to adapt the IS-BAO to include helicopter operations which resulted in the second edition of the IS-BAO.

The EASA Part NCC, which is the operating rules for non-commercial operation of complex motor-powered aircraft, along with some provisions in Part ORO, are also designed to reflect the requirements of Annex 6 Part II and Part III, Section 2, plus some general EASA provisions. EASA Part ARO is the rules and AMCs that apply to Competent Authorities who are responsible for oversight of the EASA rules. These, in most instances, are the EASA member National Authorities (NAs).

ORO.DEC.100 - Declaration requires the non-commercial operator of complex motor-powered aircraft to:

a) provide the competent authority with all relevant information prior to commencing operations, using the form contained in Appendix I to that rule;

b) notify to the competent authority a list of the alternative means of compliance used;

c) maintain compliance with the applicable requirements and with the information given in the declaration;

d) notify the competent authority without delay of any changes to its declaration or the means of compliance it uses through submission of an amended declaration using the form contained in Appendix I to this Annex; and

e) notify the competent authority when it ceases operation.

In the Operator Declaration Form appended to ORO.DEC.100 there is the question:

☐ (If applicable)

The operator has implemented and demonstrated conformance to an officially recognised industry standard.

Reference of the standard: _____

Certification body: _____

Date of the last conformance audit: _____

Because, according to the Basic Regulation, the alternative means of compliance used by non-commercial operators do not have to be approved, a Part NCC operator can list IS-BAO Implementation and Registration

as an alternative means of compliance used in meeting the requirements specified by the EASA rules for the non-commercial operation of complex motor-powered aircraft.

There then is a linkage to industry standards in the AMC to ARO.GEN.305 – Oversight Program. That AMC states that when determining the oversight programme for an organisation, the competent authority should consider the implementation by the organisation of industry standards, directly relevant to the organisation's activity subject to this Regulation.

While the use of the IS-BAO is directly applicable to non-commercial operators of complex motor-powered aircraft, the wording of the AMC to ARO.GEN.305 is not restricted to such operators but also can include certified operators. That means that CAT fixed and rotary wing operators, as well as aerial work operators, can receive oversight benefit from IS-BAO implementation. As regulatory oversight is a Member State responsibility it is up to each National Authority to determine the manner in which they will apply IS-BAO registration in their oversight program.

While it must be understood that operators to which the EASA rules apply must meet those requirements, the following matrix is intended to provide operators and national authorities with information on the manner in which the processes, procedures and programmes developed for IS-BAO implementation can be used by an operator to meet the requirements specified in the EASA Parts ORO and NCC Implementing Rules (and some of the Part SPA requirements) and to identify those requirements which are not fully addressed by the IS-BAO. Instances of EASA requirements that are not addressed in an equivalent manner in the IS-BAO are noted in the Comments column and highlighted in yellow in the Table of Contests as well as the body of the document. While some of these differences are significant many are relatively minor or may be simply be issues of level of detail. Where EASA requirements are not addressed in the IS-BAO standards, but there is relevant material in the IS-BAO Implementation Guidance, Generic Company Operation Manual (GCOM) or that operators can use to meet the EASA requirements, such material is identified. Additionally there are some EASA requirements, such as the fuel requirements, which are different than the IS-BAO requirements and are under review by ICAO. They are highlighted in turquoise and the IS-BAO requirements will be updated when the ICAO requirements are published.

To further assist operators and component authorities a comparison of the EASA AMCs related to the non-commercial operation of complex motor powered aircraft and the IS-BAO has also been prepared. It identifies where the IS-BAO implementation guidance and related material equates to the EASA AMCs and where the operator must go beyond the IS-BAO material to meet the regulatory requirements.

It should be noted that as of May 2014 some of the EASA cabin crew requirements are under review. When this review is completed this document will be updated. It will also be updated as the relevant rules and AMCs are updated.

Operators or National Authorities who note any discrepancies are requested to submit them to IBAC at info@ibac.org.

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
ANNEX II PART - ARO		
This part does not contain any requirements directed to operators		
ANNEX III PART - ORO		
SUBPART GEN - GENERAL REQUIREMENTS		
SECTION I - GENERAL		
ORO.GEN.105 Competent authority		
For the purpose of this Annex, the competent authority exercising oversight over operators subject to a certification or declaration obligation or specialised operation authorisation shall be for operators having their principal place of business in a Member State, the authority designated by that Member State.		This is EASA Implementing Rule administrative material it is not addressed in the IS-BAO.
ORO.GEN.110 Operator responsibilities		
(a) The operator is responsible for the operation of the aircraft in accordance with Annex IV to Regulation (EC) No 216/2008, the relevant requirements of this Annex and its air operator certificate (AOC) or specialised operation authorisation (SPO authorisation) or declaration..	3.3.1 Each aircraft operator must establish and maintain a system for identifying applicable regulations, standards, approvals and exemptions and demonstrating compliance with them. 6.7.1 An operator is responsible for identifying and complying with all aircraft operating rules that the operator is subject to, as required by the civil aviation authority of the State of Registry and the States in whose airspace the operations are being conducted.	
(b) Every flight shall be conducted in accordance with the provisions of the operations manual.	6.3.2 The operational control system shall also include procedures for ensuring that: a. all operating requirements specified in this standard have been met.	
(c) The operator shall establish and maintain a system for exercising operational control over any flight operated under the terms of its certificate, SPO authorisation or declaration.	6.3.1 An operator shall establish an operational control system that meets the needs of the operation considering the complexity and area of operations. The	

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	system shall be described in the company operations manual and may be a pilot self-dispatch system.	
(d) The operator shall ensure that its aircraft are equipped and its crews are qualified as required for the area and type of operation.	7.2.1 Operators shall maintain a process that ensures that flight crews are familiar with national, regional and international air navigation procedures and associated requirements prior to the commencement of flight into such airspaces. The process shall also ensure that flight crews comply with the requirements of their State of Registry or Operations, International Civil Aviation Organization (ICAO) Standards and Recommended Practices, published Regional Procedures and the regulations of each State in which they intend to land or overfly, as are pertinent to the performance of their respective duties in the operation of the aeroplane. 8.1.1 Aircraft shall be equipped in accordance with the requirements set out in ICAO Annex 6, Part II, or the applicable section of Annex 6 Part III, plus the requirements of this section, subject to any additional or more stringent requirements that may be imposed by the State of Registry or may be specified in State or Regional airspace rules. It is the responsibility of an operator to ensure that the aircraft is equipped and certified in accordance with these requirements.	
(e) The operator shall ensure that all personnel assigned to, or directly involved in, ground and flight operations are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.	5.1.1 Crew members must maintain a level of proficiency that will ensure their ability to operate the aircraft and cope with emergency situations. The operator shall establish and maintain a training programme that is designed to ensure that a person who receives training acquires the competence to perform their assigned duties. The training program shall include initial and recurrent training and include all equipment installed on the aircraft that the crew member flies.	

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EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
	5.5.1 National civil aviation regulations vary in the requirements and processes for proficiency certification for aircraft crew members. Operators must ensure that personnel meet national proficiency requirements and shall have processes to ensure that the training objectives for all crewmember training courses required by the national civil aviation authority are met.	
(f) The operator shall establish procedures and instructions for the safe operation of each aircraft type, containing ground staff and crew member duties and responsibilities for all types of operation on the ground and in flight. These procedures shall not require crew members to perform any activities during critical phases of flight other than those required for the safe operation of the aircraft.	6.7.1 An operator is responsible for identifying and complying with all aircraft operating rules that the operator is subject to, as required by the civil aviation authority of the State of Registry and the States in whose airspace the operations are being conducted.	
(g) The operator shall ensure that all personnel are made aware that they shall comply with the laws, regulations and procedures of those States in which operations are conducted and that are pertinent to the performance of their duties.	6.7.1 An operator is responsible for identifying and complying with all aircraft operating rules that the operator is subject to, as required by the civil aviation authority of the State of Registry and the States in whose airspace the operations are being conducted.	
(h) The operator shall establish a checklist system for each aircraft type to be used by crew members in all phases of flight under normal, abnormal and emergency conditions to ensure that the operating procedures in the operations manual are followed. The design and utilisation of checklists shall observe human factors principles and take into account the latest relevant documentation from the aircraft manufacturer.	6.12.1 An operator shall establish a checklist for each type of aircraft that it operates and shall make the checklist available to the crew members. The checklist shall cover normal, abnormal and emergency operations and be consistent with the aircraft flight manual and related SOPs and shall include an effective date or date of last revision. 6.12.2 Every crew member shall follow the checklist in the performance of their assigned duties.	
(i) The operator shall specify flight planning procedures to provide for the safe conduct of the flight based on considerations of aircraft performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes or operating sites concerned. These procedures shall be included in the	6.2.1.1 Before commencing a flight or series of flights, the pilot-in-command of an aircraft shall be familiar with the available flight information that is appropriate to the intended flight. The pilot-in-command shall not commence a flight unless it has been ascertained that the facilities available and directly required for such	

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operations manual.	flight and for the safe operation of the aircraft are adequate, including communication facilities and navigation aids. 6.2.1.2 Before commencing a flight or series of flights, the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for every flight shall include: a. a review of available current weather reports and forecasts; and b. the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions. 6.3.1 An operator shall establish an operational control system that meets the needs of the operation considering the complexity and area of operations. The system shall be described in the company operations manual and may be a pilot self-dispatch system. The operational control system shall a. identify the person responsible for release of the flight, b. specify flight planning requirements, and c. specify when the pilot must advise the operator of the aircraft's departure and arrival and the associated procedures.	
(j) The operator shall establish and maintain dangerous goods training programmes for personnel as required by the Technical Instructions which shall be subject to review and approval by the competent authority. Training programmes shall be commensurate with the responsibilities of personnel.	14.1.1 Operators shall not transport dangerous goods except where authorized under and in accordance with the provisions of the ICAO *Technical Instruction for the Safe Transport of Dangerous Goods* (hereafter called ICAO *Technical Instructions*) or the *IATA Dangerous Goods Regulations.* 14.1.2 An operator shall have a system to advise passengers of	

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	what constitutes dangerous goods, and whether and how those goods can be carried on aircraft. 14.1.3 Aircraft crew members shall receive training on these procedures at least every two years. 14.2.1 Prior to transporting dangerous goods an operator shall ensure that all State regulatory requirements have been met.	
ORO.GEN.120 Means of compliance		
(c) An operator required to declare its activity shall notify the competent authority when it uses alternative means of compliance to establish compliance with Regulation (EC) No 216/2008 and its Implementing Rules.	3.3.1 Each aircraft operator must establish and maintain a system for identifying applicable regulations, standards, approvals and exemptions and demonstrating compliance with them.	
ORO.GEN.140 Access		
(a) For the purpose of determining compliance with the relevant requirements of Regulation (EC) No 216/2008 and its Implementing Rules, the operator shall grant access at any time to any facility, aircraft, document, records, data, procedures or any other material relevant to its activity subject to certification, SPO authorisation or declaration, whether it is contracted or not, to any person authorised by one of the following authorities: (1) the competent authority defined in ORO.GEN.105; (2) the authority acting under the provisions of ARO.GEN.300(d), ARO.GEN.300(e) or ARO.RAMP.		This is EASA Implementing Rule applicability material it is not addressed in the IS-BAO.
ORO.GEN.150 Findings		
After receipt of notification of findings, the operator shall: (a) identify the root cause of the non-compliance; (b) define a corrective action plan; and (c) demonstrate corrective action implementation to the satisfaction of the competent authority within a period agreed with that authority as defined in ARO.GEN.350 (d).	3.3.1 Each aircraft operator must establish and maintain a system for identifying applicable regulations, standards, approvals and exemptions and demonstrating compliance with them.	

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ORO.GEN.155 Immediate reaction to a safety problem		
The operator shall implement: (b) any relevant mandatory safety information issued by the Agency, including airworthiness directives.		
ORO.GEN.160 Occurrence reporting		
(a) The operator shall report to the competent authority, and to any other organisation required by the State of the operator to be informed, any accident, serious incident and occurrence as defined in Regulation (EU) No 996/2010 of the European Parliament and of the Council and Directive 2003/42/EC. (b) Without prejudice to point (a) the operator shall report to the competent authority and to the organisation responsible for the design of the aircraft any incident, malfunction, technical defect, exceeding of technical limitations, occurrence that would highlight inaccurate, incomplete or ambiguous information contained in data established in accordance with Regulation (EU) No 748/2012 or other irregular circumstance that has or may have endangered the safe operation of the aircraft and that has not resulted in an accident or serious incident. (c) Without prejudice to Regulation (EU) No 996/2010, Directive 2003/42/EC, Commission Regulation (EC) No 1321/2007 and Commission Regulation (EC) No 1330/2007, the reports referred in paragraphs (a) and (b) shall be made in a form and manner established by the competent authority and contain all pertinent information about the condition known to the operator. (d) Reports shall be made as soon as practicable, but in any case within 72 hours of the operator identifying the condition to which the report relates, unless exceptional circumstances prevent this. (e) Where relevant, the operator shall produce a follow-up report to provide details of actions it intends to take to prevent similar occurrences in the future, as soon as these actions have been identified.	11.1 An operator shall have a plan detailing the procedures to be followed in the event of an accident, incident or other emergency. Compliance with the plan is mandatory in the case of accidents involving substantial damage to aircraft or injury to passengers, crew members or persons on the ground. In the case of other accidents, incidents or emergencies, compliance will be at the discretion of the operator, subject to any requirements imposed by law by the State of Registry or the law of State in which the accident or incident occurred. 11.2 The emergency response plan must address in-flight incidents involving injuries to, or serious medical problems suffered by, passengers or crew members. 11.3 The emergency response plan must also address accidents and incidents not involving aircraft flight operations, such as those occurring during aircraft maintenance activities. 11.4 The emergency response plan shall include, as applicable: a. depending on the nature and location of the accident, procedures for the flight crew or organization to notify the appropriate authority in the State where the accident occurred and to seek medical assistance, as required; b. c. procedures for the operator to notify State agencies	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
This report shall be produced in a form and manner established by the competent authority.	of the accident, as may be required by law;	
SECTION 2 - MANAGEMENT		
ORO.GEN.200 Management system	**3.2 Safety Management System Requirements**	
(a) The operator shall establish, implement and maintain a management system that includes: (1) clearly defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the accountable manager; (2) a description of the overall philosophies and principles of the operator with regard to safety, referred to as the safety policy; (3) the identification of aviation safety hazards entailed by the activities of the operator, their evaluation and the management of associated risks, including taking actions to mitigate the risk and verify their effectiveness; (4) maintaining personnel trained and competent to perform their tasks; (5) documentation of all management system key processes, including a process for making personnel aware of their responsibilities and the procedure for amending this documentation; (6) a function to monitor compliance of the operator with the relevant requirements. Compliance monitoring shall include a feedback system of findings to the accountable manager to ensure effective implementation of corrective actions as necessary; and (7) any additional requirements that are prescribed in the relevant subparts of this Annex or other applicable Annexes. b) The management system shall correspond to the size of the operator	An SMS is a management system for the management of safety by an organization. The framework includes four components and twelve elements representing the minimum requirements for SMS implementation. Every aircraft operator must establish and maintain a safety management system appropriate to the size and complexity of the operation and that consists of the following four components and twelve elements: **3.2.1. Safety Policy and Objectives** **a. Management commitment and responsibility** The organization shall define the organization's safety policy, which shall be in accordance with international and national requirements, and which shall be signed by the accountable executive of the organization. The safety policy shall reflect organizational commitments regarding safety; include a clear statement about the provision of the necessary resources for the implementation of the safety policy; and be communicated, with visible endorsement, throughout the organization. The safety policy shall include the safety reporting procedures; clearly indicate which types of operational behaviours are unacceptable, and include the conditions under which exemption from disciplinary action would be applicable. The safety policy shall be periodically reviewed to ensure it remains relevant and appropriate to the organization. **b. Safety accountabilities** The organization shall identify the accountable executive	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
and the nature and complexity of its activities, taking into account the hazards and associated risks inherent in these activities.	who, irrespective of other functions, has ultimate responsibility and accountability, on behalf of the organization, for the implementation and maintenance of the SMS. The organization shall also identify the accountabilities of all members of management, irrespective of other functions, as well as of employees, with respect to safety performance of the SMS. Safety responsibilities, accountabilities and authorities shall be documented and communicated throughout the organization and shall include a definition of the levels of management with authority to make decisions regarding safety risk tolerability. **c. Appointment of key safety personnel** The organization shall identify a safety manager to be the responsible individual and focal point for implementation and maintenance of an effective SMS. **d. Coordination of emergency response planning** The organization shall ensure that an emergency response plan that provides for the orderly and efficient transition from normal to emergency operations, and the return to normal operations, is properly coordinated with the emergency response plans of those organizations it must interface with during the provision of its services. **e. SMS documentation** The organization shall develop an SMS implementation plan, endorsed by senior management of the organization, that defines the organization's approach to the management of safety in a manner that meets the organization's safety objectives and maintain SMS documentation to describe the safety policy and objectives, the SMS requirements, the SMS processes and procedures, the accountabilities, responsibilities and authorities for processes and procedures, and the SMS outputs. Also as part of the SMS documentation, the	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
	organization shall develop and maintain a safety management system manual (SMSM), to communicate its approach to the management of safety throughout the organization. *Note: The SMSM may be a chapter in the operations manual.* **3.2.2. Safety Risk Management** **a. Hazard identification** The organization shall develop and maintain a formal process that ensures that hazards in operations are identified. Hazard identification shall be based on a combination of reactive, proactive and predictive methods of safety data collection. **b. Safety risk assessment and mitigation** The organization shall develop and maintain a formal process that ensures analysis, assessment and control of the safety risks in operations. **3.2.3. Safety Assurance** **a. Safety performance monitoring and measurement** The organization shall develop and maintain the means to verify the safety performance of the organization and to validate the effectiveness of safety risks controls. The safety performance of the organization shall be verified in reference to the safety performance indicators and safety performance targets of the SMS. *Note: The safety performance monitoring and measurement process should include an internal evaluation or audit program that assesses the performance of the SMS in relation to the stated safety objectives and ensures both the effective management of safety risks and a positive safety*	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
	culture. Information on internal evaluation and audit, to include Cultural Assessment Tools, is contained in the SMS Toolkit and the IS-BAO Internal Audit Manual. **b. The management of change** The organization shall develop and maintain a formal process to identify changes within the organization which may affect established processes and services, to describe the arrangements to ensure safety performance before implementing changes and to eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment. **c. Continuous improvement of the SMS** The organization shall develop and maintain a formal process to identify the causes of sub-standard performance of the SMS, determine the implications of sub-standard performance of the SMS in operations, and eliminate or mitigate such causes. **3.2.4. Safety Promotion** **a. Training and education** The organization shall develop and maintain a safety training programme that ensures that personnel are trained and competent to perform their SMS related duties. The scope of the safety training shall be appropriate to each individual's involvement in the SMS. **b. Safety communication** The organization shall develop and maintain formal means for safety communication that ensures that all personnel are fully aware of the SMS; conveys safety critical information; and explains why particular safety actions are taken and why safety procedures are introduced or changed. *Note: IG 3.2 and the SMS Toolkit (included with the IS-*	

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	BAO) contain guidance material to assist with the development and implementation of a SMS. **3.3 Compliance Monitoring** 3.3.1 Each aircraft operator must establish and maintain a system for identifying applicable regulations, standards, approvals and exemptions and demonstrating compliance with them.	
ORO.GEN.205 Contracted activities		
(a) The operator shall ensure that when contracting or purchasing any part of its activity, the contracted or purchased service or product conforms to the applicable requirements.		This is not specifically addressed in the IS-BAO. Operators must ensure that the specific requirement is addressed.
ORO.GEN.210 Personnel requirements		
(a) The operator shall appoint an accountable manager, who has the authority for ensuring that all activities can be financed and carried out in accordance with the applicable requirements. The accountable manager shall be responsible for establishing and maintaining an effective management system. (b) A person or group of persons shall be nominated by the operator, with the responsibility of ensuring that the operator remains in compliance with the applicable requirements. Such person(s) shall be ultimately responsible to the accountable manager. (c) The operator shall have sufficient qualified personnel for the planned tasks and activities to be performed in accordance with the applicable requirements. (d) The operator shall maintain appropriate experience, qualification and training records to show compliance with point (c). (e) The operator shall ensure that all personnel are aware of the rules and	**4.1 Organization and Personnel** 4.1.1 An organization shall be staffed by qualified, competent and effective management and line personnel to ensure the safe and efficient operation of the organization. An operator shall have an organization structure that clearly defines qualifications, duties, authorities and accountabilities and that is staffed by qualified managerial and operating personnel who are capable of effectively carrying out the identified duties. The minimum management personnel are: a. a person having overall management responsibilities for the flight operation (such as a "Flight Department Manager" or "Director of Operations"),	

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procedures relevant to the exercise of their duties.	b. a person responsible for managing the flying operations (such as a "Chief Pilot"), and c. a person responsible for managing aircraft maintenance. In the case of a small operation one person may occupy, or perform the functions of, two or more of the positions. 4.1.2 Where the organization has more than one operating base the management structure must address the exercise of the above responsibilities at all locations.	
ORO.GEN.215 Facility requirements		
The operator shall have facilities allowing the performance and management of all planned tasks and activities in accordance with the applicable requirements.	9.3.2 The operator shall provide the person who is responsible for its maintenance control system with the staff, facilities and other resources necessary to ensure that the maintenance is conducted in accordance with the civil aviation authority requirements and meets the safety management goals of the operator.	
ORO.GEN.220 Record-keeping		
(a) The operator shall establish a system of record–keeping that allows adequate storage and reliable traceability of all activities developed, covering in particular all the elements indicated in ORO.GEN.200. (b) The format of the records shall be specified in the operator's procedures. (c) Records shall be stored in a manner that ensures protection from damage, alteration and theft.	**3.2.2. Safety Risk Management** **a. Hazard identification** The organization shall develop and maintain a formal process that ensures that hazards in operations are identified. Hazard identification shall be based on a combination of reactive, proactive and predictive methods of safety data collection. **b. Safety risk assessment and mitigation** The organization shall develop and maintain a formal process that ensures analysis, assessment and control of the safety risks in operations.	The format and manner of storage of these records is not prescribed in the IS-BAO, but record storage is addressed in the training and maintenance chapters.

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SUBPART DEC - DECLARATION		
ORO.DEC.100 Declaration		
The operator of complex motor-powered aircraft engaged in non-commercial operations or in non-commercial specialised operations, and the commercial specialised operator shall: (a) provide the competent authority with all relevant information prior to commencing operations, using the form contained in Appendix I to this Annex; (b) provide the competent authority with a list of the alternative means of compliance used; (c) maintain compliance with the applicable requirements and with the information given in the declaration; (d) notify the competent authority without delay of any changes to its declaration or the means of compliance it uses through submission of an amended declaration using the form contained in Appendix I to this Annex; and (e) notify the competent authority when it ceases operation.		This is EASA IR administrative material for operator's action and is not addressed in the IS-BAO.
SUBPART MLR - MANUALS, LOGS AND RECORDS		
ORO.MLR.100 Operations manual - general	**10.0 COMPANY OPERATIONS MANUAL**	
(a) The operator shall establish an operations manual (OM) as specified under 8.b. of Annex IV to Regulation (EC) No 216/2008. (b) The content of the OM shall reflect the requirements set out in this	10.1 An operator shall establish and maintain a company operations manual, or manuals. It may be issued in separate parts corresponding to specific aspects of an	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
Annex, Annex IV (Part-CAT), Annex V (Part-SPA), Annex VI (Part-NCC) and Annex VIII (Part-SPO), as applicable, and shall not contravene the conditions contained in the operations specifications to the air operator certificate (AOC), the SPO authorisation or the declaration and the list of specific approvals, as applicable. (c) The OM may be issued in separate parts. (d) All operations personnel shall have easy access to the portions of the OM that are relevant to their duties. (e) The OM shall be kept up-to-date. All personnel shall be made aware of the changes that are relevant to their duties. (f) Each crew member shall be provided with a personal copy of the relevant sections of the OM pertaining to their duties. Each holder of an OM, or appropriate parts of it, shall be responsible for keeping their copy up-to-date with the amendments or revisions supplied by the operator. (g) – n/a (h) – n/a (i) – n/a (j) The operator shall ensure that information taken from approved documents, and any amendment thereof, is correctly reflected in the OM. This does not prevent the operator from publishing more conservative data and procedures in the OM. (k) The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.	operation. It shall include the instructions and information necessary to enable the personnel concerned to perform their duties safely. An operator shall provide a manual, or appropriate portions of the manual, to each person who requires those instructions and/or that information to perform their duties. The operations manual shall be amended or revised as is necessary to ensure that the information contained therein is kept up to date. All such amendments or revisions shall be issued to all personnel that are required to use this manual. 10.2 An operations manual for non-commercial aeroplane operations shall contain at least the following: a. table of contents; b. amendment control page and list of effective pages, unless the entire document is re-issued with each amendment and the document has an effective date on it; c. duties, responsibilities and succession of management and operating personnel; d. operator safety management system; e. operational control system; f. MEL procedures (where applicable); g. the normal operating requirements and procedures h. SOPs; i. weather limitations; j. fatigue management system; k. emergency equipment and operating procedures;	

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	l. accidents/incidents consideration; m. personnel qualifications and training; n. record keeping; o. a description of the maintenance control system ; p. security procedures; q. performance operating limitation r. use/protection of FDR/CVR records; and s. handling of dangerous goods. *Note: IG 10.0 provides guidance on meeting this requirement plus the Annex 6 Part III specifications for an operations manual for a helicopter operator. A generic operations manual is also available for guidance in developing a company operations manual for non-commercial aeroplane operators.* 10.3 An operator shall include in the company operations manual a description of the process to allow deviations from the provisions contained in it (if the operator allows deviations) and specify the person who may approve such deviations. Any deviation shall identify the associated conditions under which it is permitted or required, and should be based on a risk assessment process. 10.4 *The design of the company operations manual and all associated manuals should observe Human Factors principles*. *Note: Guidance material on the application of Human Factors principles can be found in the ICAO Human Factors Training Manual (Doc 9683).*	

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
ORO.MLR.105 Minimum equipment list (a) A minimum equipment list (MEL) shall be established as specified under 8.a.3. of Annex IV to Regulation (EC) No 216/2008, based on the relevant master minimum equipment list (MMEL) as defined in the data established in accordance with Regulation (EU) No 748/2012. (b) The MEL and any amendment thereto shall be approved by the competent authority. (c) The operator shall amend the MEL after any applicable change to the MMEL within the acceptable timescales. (d) In addition to the list of items, the MEL shall contain: (1) a preamble, including guidance and definitions for flight crews and maintenance personnel using the MEL; (2) the revision status of the MMEL upon which the MEL is based and the revision status of the MEL; (3) the scope, extent and purpose of the MEL. (e) The operator shall: (1) establish rectification intervals for each inoperative instrument, item of equipment or function listed in the MEL. The rectification interval in the MEL shall not be less restrictive than the corresponding rectification interval in the MMEL; (2) establish an effective rectification programme; (3) only operate the aircraft after expiry of the rectification interval specified in the MEL when: (i) the defect has been rectified; or (ii) the rectification interval has been extended in accordance with (f). (f) Subject to approval of the competent authority, the operator may use a procedure for the one time extension of category B, C and D	**8.15 MINIMUM EQUIPMENT LIST** 8.15.1 Where a master minimum equipment list (MMEL) is established for the aircraft type, the operator shall include in the operations manual a minimum equipment list (MEL) approved by the State of Registry of the aircraft which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. 8.15.2 Where an operator has developed a MEL, maintenance personnel and flight crews shall be trained in the use of it and a copy of the MEL shall be carried on the aircraft.	It is noted that the EASA rules contain considerable information on how the operator is to comply with the basic requirement within the EASA rules framework.

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rectification intervals, provided that: (1) the extension of the rectification interval is within the scope of the MMEL for the aircraft type; (2) the extension of the rectification interval is, as a maximum, of the same duration as the rectification interval specified in the MEL; (3) the rectification interval extension is not used as a normal means of conducting MEL item rectification and is used only when events beyond the control of the operator have precluded rectification; (4) a description of specific duties and responsibilities for controlling extensions is established by the operator; (5) the competent authority is notified of any extension of the applicable rectification interval; and (6) a plan to accomplish the rectification at the earliest opportunity is established. (g) The operator shall establish the operational and maintenance procedures referenced in the MEL taking into account the operational and maintenance procedures referenced in the MMEL. These procedures shall be part of the operator's manuals or the MEL. (h) The operator shall amend the operational and maintenance procedures referenced in the MEL after any applicable change to the operational and maintenance procedures referenced in the MMEL. (i) Unless otherwise specified in the MEL, the operator shall complete: (1) the operational procedures referenced in the MEL when planning for and/or operating with the listed item inoperative; and (2) the maintenance procedures referenced in the MEL prior to operating with the listed item inoperative.		

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EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
(j) Subject to a specific case-by-case approval by the competent authority, the operator may operate an aircraft with inoperative instruments, items of equipment or functions outside the constraints of the MEL but within the constraints of the MMEL, provided that: (1) the concerned instruments, items of equipment or functions are within the scope of the MMEL as defined in the data established in accordance with Regulation (EU) No 748/2012; (2) the approval is not used as a normal means of conducting operations outside the constraints of the approved MEL and is used only when events beyond the control of the operator have precluded the MEL compliance; (3) a description of specific duties and responsibilities for controlling the operation of the aircraft under such approval is established by the operator; and (4) a plan to rectify the inoperative instruments, items of equipment or functions or to return operating the aircraft under the MEL constraints at the earliest opportunity is established.		
ORO.MLR.110 Journey log		
Particulars of the aircraft, its crew and each journey shall be retained for each flight, or series of flights, in the form of a journey log, or equivalent.	4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the safety of all crew members, passengers and cargo on board. Specific duties and responsibilities shall include: q. completing the journey log book or the general declaration.	ICAO Annex 6 Part II states that the general declaration may be considered to be an acceptable form of journey log book.

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
ORO.MLR.115 Record-keeping		
(a) The following records shall be stored for at least 5 years: (1) - n/a; (2) for declared operators, a copy of the operator's declaration, details of approvals held and operations manual; (3) - n/a. (b) The following information used for the preparation and execution of a flight, and associated reports, shall be stored for 3 months: (1) the operational flight plan, if applicable; (2) route-specific notice(s) to airmen (NOTAM) and aeronautical information services (AIS) briefing documentation, if edited by the operator; (3) mass and balance documentation; (4) notification of special loads, including written information to the commander/pilot-in-command about dangerous goods, if applicable; (5) the journey log, or equivalent; and (6) flight report(s) for recording details of any occurrence, or any event that the commander/pilot-in-command deems necessary to report or record; (c) Personnel records shall be stored for the periods indicated below: Flight crew licence and cabin crew attestation — As long as the crew member is exercising the privileges of the licence or attestation for the aircraft operator Crew member training, checking and qualifications — 3 years	**5.6 Training and Qualification Records** 5.6.1 An operator shall meet the national requirements for training records and at least for each person who is required to receive training, establish and maintain a record of: a. the person's name and, where applicable, personnel licence number, type and ratings; b. if applicable, the person's medical category and the expiry date of that category; c. the dates on which the person successfully completed any required training, pilot proficiency check or examination; d. information relating to any failure of the person to successfully complete any required training, pilot proficiency check or to obtain any required qualification; and e. the type of aircraft or flight training equipment used for any training, pilot proficiency check or required qualification. 5.6.2 An operator shall retain these records and copies of pilot proficiency checks, or ensure that they are retained by the training service provider, for at least three years. The results of the most recent written examination completed by each pilot for each type of aircraft for which the pilot has a qualification shall also be retained. Note: *Given technological capabilities, electronic*	Operators must meet the specific EASA record retention requirements.

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
	records for training, as well as other purposes, may be most effective. In such cases, operators may wish to consider procedures to protect their integrity and make them verifiable.	

Records on crew member recent experience	15 months
Crew member route and aerodrome/task and area competence, as appropriate	3 years
Dangerous goods training, as appropriate	3 years
Training/qualification records of other personnel for whom a training programme is required	last 2 training records

(d) The operator shall:

(1) maintain records of all training, checking and qualifications of each crew member, as prescribed in Part-ORO; and

(2) make such records available, on request, to the crew member concerned.

(e) The operator shall preserve the information used for the preparation and execution of a flight and personnel training records, even if the operator ceases to be the operator of that aircraft or the employer of that crew member, provided this is within the timescales prescribed in (c).

(f) If a crew member becomes a crew member for another operator, the operator shall make the crew member's records available to the new operator, provided this is within the timescales prescribed in (c).

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
SUBPART SEC - SECURITY		
ORO.SEC.100 Flight crew compartment security - aeroplanes		
(a) In an aeroplane which is equipped with a flight crew compartment door, this door shall be capable of being locked, and means shall be provided by which the cabin crew can notify the flight crew in the event of suspicious activity or security breaches in the cabin. (b) – n/a (c) – n/a		Not addressed in the IS-BAO. Operators must ensure that the specific requirement is addressed.
ORO.SEC.105 Flight crew compartment security - helicopter		
If installed, the flight crew compartment door on a helicopter operated for the purpose of carrying passengers shall be capable of being locked from within the flight crew compartment in order to prevent unauthorised access.		Not addressed in the IS-BAO.
SUBPART FC - FLIGHT CREW		
ORO.FC.005 Scope		
This Subpart establishes requirements to be met by the operator related to flight crew training, experience and qualification and comprises: (a) Section 1 specifying common requirements applicable to both non-commercial operations of complex motor-powered aircraft and any commercial operation;		EASA IR applicability material.
(b) - n/a		
SECTION 1 — COMMON REQUIREMENTS		
ORO.FC.100 Composition of flight crew		
(a) The composition of the flight crew and the number of flight crew members at designated crew stations shall be not less than the minimum specified in the aircraft flight manual or operating	4.2.1 The minimum aircraft crew shall consist of the number of qualified flight crew as specified in the aircraft flight manual or other documents associated with the	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
limitations prescribed for the aircraft.	certificate of airworthiness. The minimum number of cabin crew members shall be in accordance with national requirements.	
(b) The flight crew shall include additional flight crew members when required by the type of operation and shall not be reduced below the number specified in the operations manual.	4.2.1 above references national requirements.	
(c) All flight crew members shall hold a licence and ratings issued or accepted in accordance with Regulation (EU) No 1178/2011[1] and appropriate to the duties assigned to them.	4.3.1 An operator shall ensure that: a. the flight crew of an aircraft: i. holds the licence, medical certificate and ratings (including radiotelephony licence unless it is included in the pilot licence) required by national regulations, ii. meets all recency requirements of the national regulations, iii. meets the licence, medical and rating requirements specified in *ICAO Annex 1* when operations are conducted outside of the national airspace of the State of issue of the flight crew licence, iv. has fulfilled the requirements of the operator's ground and flight training programme referred to in sections 5.1, 5.2, 5.3 and 5.4, v. have successfully completed the proficiency requirements specified in section 5.5 for that type of aircraft, and vi. can demonstrate the capability to speak and understand the language used for aeronautical	

[1] OJ L 311, 25.11.2011, p. 1

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
	radiotelephony communications as specified in ICAO *Annex 1*;	
(d) The flight crew member may be relieved in flight of his/her duties at the controls by another suitably qualified flight crew member.		The IS-BAO has not such provisions as it specifies that all crew members must be qualified.
(e) When engaging the services of flight crew members who are working on a freelance or part-time basis, the operator shall verify that all applicable requirements of this Subpart and the relevant elements of Annex I (Part-FCL) to Regulation (EU) No 1178/2011, including the requirements on recent experience, are complied with, taking into account all services rendered by the flight crew member to other operator(s) to determine in particular: (1) the total number of aircraft types or variants operated; and (2) the applicable flight and duty time limitations and rest requirements.		In the IS-BAO there are is no differentiation in the employment status of crew members – all must be qualified.
ORO.FC.105 Designation as pilot-in-command/commander		
(a) In accordance with 8.e of Annex IV to Regulation (EC) No 216/2008, one pilot amongst the flight crew, qualified as pilot-in-command in accordance with Annex I (Part-FCL) to Regulation (EU) No 1178/2011, shall be designated by the operator as pilot-in-command or, for commercial air transport operations, as commander.	4.2.2 An operator shall designate a pilot-in-command for each flight and, where the crew includes two pilots, a second-in-command.	
(b) The operator shall only designate a flight crew member to act as pilot-in-command/commander if he/she has: (1) the minimum level of experience specified in the operations manual; (2) adequate knowledge of the route or area to be flown and of the aerodromes, including alternate aerodromes, facilities and procedures to be used;	**6.2.1 General** 6.2.1.1 Before commencing a flight or series of flights, the pilot-in-command of an aircraft shall be familiar with the available flight information that is appropriate to the intended flight. The pilot-in-command shall not commence a flight unless it has been ascertained that	

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
(3) in the case of multi-crew operations, completed an operator's command course if upgrading from co-pilot to pilot-in-command/commander.	the facilities available and directly required for such flight and for the safe operation of the aircraft are adequate, including communication facilities and navigation aids. 6.2.1.2 Before commencing a flight or series of flights, the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for every flight shall include: a. a review of available current weather reports and forecasts; and b. the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions.	
(c) The pilot-in-command/commander or the pilot, to whom the conduct of the flight may be delegated, shall have had initial familiarisation training of the route or area to be flown and of the aerodromes, facilities and procedures to be used. This route/area and aerodrome knowledge shall be maintained by operating at least once on the route or area or to the aerodrome within a 12-month period.	Not included in the IS-BAO.	This is not a practical requirement for NCC ops especially for single pilot operations. Operators will have to work with their National Authority to determine appropriate alleviation.
(d) - Not applicable		
ORO.FC.110 Flight engineer		
When a separate flight engineer station is incorporated in the design of an aeroplane, the flight crew shall include one crew member who is suitably qualified in accordance with applicable national rules.	4.2.1 The minimum aircraft crew shall consist of the number of qualified flight crew as specified in the aircraft flight manual or other documents associated with the certificate of airworthiness. The minimum number of cabin crew members shall be in accordance with	

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
	national requirements.	
ORO.FC.115 Crew resource management (CRM) training		
(a) Before operating, the flight crew member shall have received CRM training, appropriate to his/her role, as specified in the operations manual.	5.2.1 "Human Factors" are always decisive wherever people perform highly responsible tasks in a high-tech setting. Crew resource management (CRM) training is a proven human factors tool for aviation personnel. Aircraft crew members shall be trained in, understand, and apply CRM because it is widely accepted that these principles improve the safety and efficiency of flight operations.	
(b) Elements of CRM training shall be included in the aircraft type or class training and recurrent training as well as in the command course.	**IG 5.0 - 11 - UPGRADE TRAINING FOR PILOTS** Upgrade training to pilot-in-command for pilots who have qualified and served as a co-pilot on that aircraft type should include the following: a. Crew Resource Management;	
ORO.FC.120 Operator conversion training		
(a) In the case of aeroplane or helicopter operations, the flight crew member shall complete the operator conversion training course before commencing unsupervised line flying: (1) when changing to an aircraft for which a new type or class rating is required; (2) when joining an operator. (b) The operator conversion training course shall include training on the equipment installed on the aircraft as relevant to flight crew members' roles.	5.1.1 Crew members must maintain a level of proficiency that will ensure their ability to operate the aircraft and cope with emergency situations. The operator shall establish and maintain a training programme that is designed to ensure that a person who receives training acquires the competence to perform their assigned duties. The training program shall include initial and recurrent training and include all equipment installed on the aircraft that the crew member flies. *Note: Additional guidance material on development of training and proficiency programs is contained in IG 5.1. Also, the NBAA Prototypical Business*	
ORO.FC.125 Differences training and familiarisation training		
(a) Flight crew members shall complete differences or familiarisation training when required by Annex I (Part-FCL) to Regulation (EU) No		

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
1178/2011 and when changing equipment or procedures requiring additional knowledge on types or variants currently operated. (b) The operations manual shall specify when such differences or familiarisation training is required. **ORO.FC.130 Recurrent training and checking** (a) Each flight crew member shall complete annual recurrent flight and ground training relevant to the type or variant of aircraft on which he/she operates, including training on the location and use of all emergency and safety equipment carried. (b) Each flight crew member shall be periodically checked to demonstrate competence in carrying out normal, abnormal and emergency procedures.	*Aviation Safety Program Manual and related attachments that can be found at http://web.nbaa.org/public/ops/safety/manual may provide operators with assistance.* 5.1.2 An operator shall ensure that ground and flight training programmes have been established, either through an internal programme or through a training service provider, and shall include or make reference to, a course outline for those training programmes in its operations manual. 5.1.3 The operator's ground and flight training programme shall include: a. for flight crew members: i. initial and annual aircraft type and systems training including emergency and abnormal procedures related to the aircraft category and type, ii. initial and every two years thereafter: A. emergency procedures training, (see section 5.3.1) B. aircraft surface contamination training, and C. dangerous goods training, (see section 14.1.3) iii. upgrading training, and iv. *it is recommended that operators that do not use cabin crew members provide periodic first aid training for flight crew member;*	

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
ORO.FC.135 Pilot qualification to operate in either pilot's seat		
Flight crew members who may be assigned to operate in either pilot's seat shall complete appropriate training and checking as specified in the operations manual.	4.3.2.A *It is recommended that where it is the operator's practice to normally fly two crew aeroplanes from the left seat, that the operator establish right seat landing and take-off recency/training and recency requirement for pilots.* 4.3.2.H *It is recommended that where it is the operator's practice to normally fly two crew helicopters from the right seat, that the operator establish left seat landing and take-off recency/training and recency requirement for pilots..*	EASA operators can comply with the EASA requirements by implementing the IS-BAO recommended practice.
ORO.FC.140 Operation on more than one type or variant		
(a) Flight crew members operating more than one type or variant of aircraft shall comply with the requirements prescribed in this Subpart for each type or variant, unless credits related to the training, checking, and recent experience requirements are defined in the data established in accordance with Regulation (EU) No 748/2012 for the relevant types or variants.	5.1.3 The operator's ground and flight training programme shall include: b. for flight crew members: i. initial and annual aircraft type and systems training including emergency and abnormal procedures related to the aircraft category and type,	
(b) Appropriate procedures and/or operational restrictions shall be specified in the operations manual for any operation on more than one type or variant.		Not addressed in the IS-BAO. Operators must ensure that the specific requirement is addressed.
ORO.FC.145 Provision of training		
(a) All the training required in this Subpart shall be conducted: (1) in accordance with the training programmes and syllabi established by the operator in the operations manual; (2) by appropriately qualified personnel. In the case of flight and flight simulation training and checking, the personnel providing	5.1.2 An operator shall ensure that ground and flight training programmes have been established, either through an internal programme or through a training service provider, and shall include or make reference to, a course outline for those training programmes in its	

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the training and conducting the checks shall be qualified in accordance with Annex I (Part-FCL) to Regulation (EU) No 1178/2011.	operations manual.	
(b) When establishing the training programmes and syllabi, the operator shall include the mandatory elements for the relevant type as defined in the data established in accordance with Regulation (EC) No 748/2012.		Not addressed in IS-BAO. Operators must ensure that the specific requirement is addressed.
(c) - n/a		
(d) The FSTD shall replicate the aircraft used by the operator, as far as practicable. Differences between the FSTD and the aircraft shall be described and addressed through a briefing or training, as appropriate.		Not addressed in IS-BAO. Operators must ensure that the specific requirements are addressed.
(e) The operator shall establish a system to adequately monitor changes to the FSTD and to ensure that those changes do not affect the adequacy of the training programmes.		
SUBPART CC - CABIN CREW		
ORO.CC.005 Scope		
This Subpart establishes the requirements to be met by the operator when operating an aircraft with cabin crew and comprises: (a) Section 1 specifying common requirements applicable to all operations, and (b) Section 2 specifying additional requirements only applicable to commercial air transport operations	Not applicable. EASA IR applicability material.	
SECTION 1 — COMMON REQUIREMENTS		
ORO.CC.100 Number and composition of cabin crew		
(a) The number and composition of cabin crew shall be determined in accordance with 7.a. of Annex IV to Regulation (EC) No 216/2008, taking into account operational factors or circumstances of the particular flight to be operated. Except for balloons, at least one	4.2.1 The minimum aircraft crew shall consist of the number of qualified flight crew as specified in the aircraft flight manual or other documents associated with the certificate of airworthiness. The minimum number of	

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cabin crew member shall be assigned for the operation of aircraft with an MOPSC of more than 19 when carrying one or more passenger(s). (b) For the purpose of complying with (a), the minimum number of cabin crew shall be the greater of the following: (1) the number of cabin crew members established during the aircraft certification process in accordance with the applicable certification specifications, for the aircraft cabin configuration used by the operator; or (2) if the number under (1) has not been established, the number of cabin crew established during the aircraft certification process for the maximum certified passenger seating configuration reduced by 1 for every whole multiple of 50 passenger seats of the aircraft cabin configuration used by the operator falling below the maximum certified seating capacity; or (3) one cabin crew member for every 50, or fraction of 50, passenger seats installed on the same deck of the aircraft to be operated. (c) For operations where more than one cabin crew member is assigned, the operator shall nominate one cabin crew member to be responsible to the pilot-in-command/commander.	cabin crew members shall be in accordance with national requirements. 4.2.5 Cabin crew and other crew members assigned to perform duties onboard, are responsible to the pilot-in-command to carry out specified safety duties in the event of an onboard emergency. The requirement for cabin crew for each type of aircraft shall be determined by the operator, and in accordance with national regulations, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aircraft, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation. The operator shall assign these functions for each type of aircraft.	
ORO.CC.110 Conditions for assignment to duties		
(a) Cabin crew members shall only be assigned to duties on an aircraft if they: (1) are at least 18 years of age; (2) have been assessed, in accordance with the applicable requirements of Annex IV (Part-MED) to Regulation (EU) No 1178/2011, as physically and mentally fit to perform their duties and discharge their responsibilities safely; and (3) have successfully completed all applicable training and checking	4.3.1 An operator shall ensure that: a. ….: b. each cabin crew member has fulfilled the requirements of the national regulations and the operator's ground and flight training programme referred to in sections 5.1, 5.2 and 5.3, and recommended in section 5.4; and c. each crew member or task specialist, other than a	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
required by this Subpart and are competent to perform the assigned duties in accordance with the procedures specified in the operations manual. (b) Before assigning to duties cabin crew members who are working on a freelance or part-time basis, the operator shall verify that all applicable requirements of this Subpart are complied with, taking into account all services rendered by the cabin crew member to any other operator(s), to determine in particular: (1) the total number of aircraft types and variants operated; and (2) the applicable flight and duty time limitations and rest requirements.	flight crew member or a cabin crew member, who is assigned duties onboard an aircraft during flight time has fulfilled the requirements of the operator's ground and flight training programme referred to in section 5.1.	
(c) Operating cabin crew members, as well as their role with regard to the safety of passengers and flight, shall be clearly identified to the passengers.	Addressed in the GCOM Section A as guidance material as follows: **1.6.3 OTHER PERSONNEL SERVING ONBOARD THE AIRCRAFT** Flight departments may elect to carry additional personnel such as a cabin person providing in-flight service duties, or a flight technician. It is important that the roles and responsibilities of these other persons be clearly defined and communicated so that passengers understand any limits of safety qualification and do not wait in an emergency situation or rely on a person for safety direction, who is not trained or qualified for that function. Personnel should be trained for their assigned duties and responsibilities.	Operators must ensure that the specific requirement is addressed.
ORO.CC.115 Conduct of training courses and associated checking		
(a) A detailed programme and syllabus shall be established by the operator for each training course in accordance with the applicable requirements of this Subpart, and of Annex V (Part-CC) to Regulation (EU) No 1178/2011 where applicable, to cover the duties and	**5.1 TRAINING PROGRAMMES** 5.1.1 Crew members must maintain a level of proficiency that will ensure their ability to operate the aircraft and	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
responsibilities to be discharged by the cabin crew members.	cope with emergency situations. The operator shall establish and maintain a training programme that is designed to ensure that a person who receives training acquires the competence to perform their assigned duties. The training program shall include initial and recurrent training and include all equipment installed on the aircraft that the crew member flies.	
(b) Each training course shall include theoretical and practical instruction together with individual or collective practice, as relevant to each training subject, in order that the cabin crew member achieves and maintains the adequate level of proficiency in accordance with this Subpart.		
(c) Each training course shall be: (1) conducted in a structured and realistic manner; and (2) performed by personnel appropriately qualified for the subject to be covered.	5.1.2 An operator shall ensure that ground and flight training programmes have been established, either through an internal programme or through a training service provider, and shall include or make reference to, a course outline for those training programmes in its operations manual. 5.1.3 The operator's ground and flight training programme shall include: a. ….: b. for cabin crew members: i. initial and annual training, including: A. aircraft type training, and B. safety procedures training, (see section 5.3.2), and ii. initial and every two years thereafter: A. emergency procedures training, (see section 5.3.1) B. first aid training, C. aircraft surface contamination training, and D. dangerous goods training; (see section 14.1.3)	

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
(d) During or following completion of all training required by this Subpart, each cabin crew member shall undergo a check covering all training elements of the relevant training programme, except for crew resource management (CRM) training. Checks shall be performed by personnel appropriately qualified to verify that the cabin crew member has achieved and/or maintains the required level of proficiency.	**5.5 PROFICIENCY CERTIFICATION** 5.5.1 National civil aviation regulations vary in the requirements and processes for proficiency certification for aircraft crew members. Operators must ensure that personnel meet national proficiency requirements and shall have processes to ensure that the training objectives for all crewmember training courses required by the national civil aviation authority are met.	
(e) CRM training courses and CRM modules where applicable shall be conducted by a cabin crew CRM instructor. When CRM elements are integrated in other training, a cabin crew CRM instructor shall manage the definition and implementation of the syllabus.	This is not a practical requirement for non-commercial ops where CRM is structured to involve all crew members and is not segmented.	These items are under review in RMT 0516 and 0517.
ORO.CC.120 Initial training course		
(a) Each new entrant who does not already hold a valid cabin crew attestation issued in accordance with Annex V (Part-CC) to Regulation (EU) No 1178/2011: (1) shall be provided with an initial training course as specified in CC.TRA.220 of that Annex; and (2) shall successfully undergo the associated examination before undertaking other training required by this Subpart. (b) Elements of the initial training programme may be combined with the first aircraft type specific training and operator conversion training, provided that the requirements of CC.TRA.220 are met and any such element(s) are recorded as elements of the initial training course in the training records of the cabin crew members concerned.	Cabin crew attestations are not required only for commercial ops – see article 8 para 4 of the Basic Regulation!	These items are under review in RMT 0516 and 0517.

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
ORO.CC.125 Aircraft type specific training and operator conversion training		
(a) Each cabin crew member shall have completed appropriate aircraft type specific training and operator conversion training, as well as the associated checks, before being: (1) first assigned by the operator to operate as a cabin crew member; or (2) assigned by that operator to operate on another aircraft type. (b) When establishing the aircraft type specific and the operator conversion training programmes and syllabi, the operator shall include, where available, the mandatory elements for the relevant type as defined in the data established in accordance with Regulation (EU) No 748/2012. (c) The aircraft type specific training programme shall: (1) involve training and practice on a representative training device or on the actual aircraft; and (2) cover at least the following aircraft type specific training elements: (i) aircraft description as relevant to cabin crew duties; (ii) all safety equipment and systems installed relevant to cabin crew duties; (iii) operation and actual opening, by each cabin crew member, of each type or variant of normal and emergency doors and exits in the normal and emergency modes; (iv) demonstration of the operation of the other exits including flight crew compartment windows; (v) fire and smoke protection equipment where installed; (vi) evacuation slide training, where fitted; (vii) operation of the seat, restraint system and oxygen system	4.3.1 An operator shall ensure that: a. ….: b. each cabin crew member has fulfilled the requirements of the national regulations and the operator's ground and flight training programme referred to in sections 5.1, 5.2 and 5.3, and recommended in section 5.4; and c. each crew member or task specialist, other than a flight crew member or a cabin crew member, who is assigned duties onboard an aircraft during flight time has fulfilled the requirements of the operator's ground and flight training programme referred to in section 5.1.	Additional training syllabi are included in the IS-BAO guidance material

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
equipment relevant to pilot incapacitation. (d) The operator conversion training programme for each aircraft type to be operated shall: (1) involve training and practice on a representative training device or on the actual aircraft; (2) include training in the operator's standard operating procedures for cabin crew members to be first assigned to duties by the operator; (3) cover at least the following operator specific training elements as relevant to the aircraft type to be operated: (i) description of the cabin configuration; (ii) location, removal and use of all portable safety and emergency equipment carried on-board; (iii) all normal and emergency procedures; (iv) passenger handling and crowd control; (v) fire and smoke training including the use of all related fire-fighting and protective equipment representative of that carried on-board; (vi) evacuation procedures; (vii) pilot incapacitation procedures; (viii) applicable security requirements and procedures; (ix) crew resource management.		
ORO.CC.130 Differences training		
(a) In addition to the training required in ORO.CC.125, the cabin crew member shall complete appropriate training and checking covering any differences before being assigned on: (1) a variant of an aircraft type currently operated; or	4.3.1 An operator shall ensure that: a. ….: b. each cabin crew member has fulfilled the requirements of the national regulations and the	Not all items are addressed in the IS-BAO. Also, these items are under review in RMT 0516 and 0517.

Comparison EASA IR Requirements for Non-commercial Ops to IS-BAO		
EASA IR Requirements – PART - ORO	**IS-BAO Requirements**	**Comments**
(2) a currently operated aircraft type or variant with different: (i) safety equipment; (ii) safety and emergency equipment location; or (iii) normal and emergency procedures. (b) The differences training programme shall: (1) be determined as necessary on the basis of a comparison with the training programme completed by the cabin crew member, in accordance with ORO.CC.125 (c) and (d), for the relevant aircraft type; and (2) involve training and practice in a representative training device or the actual aircraft as relevant to the difference training element to be covered. (c) When establishing a differences training programme and syllabus for a variant of an aircraft type currently operated, the operator shall include, where available, the mandatory elements for the relevant aircraft type and its variants as defined in the data established in accordance with Regulation (EU) No 748/2012.	operator's ground and flight training programme referred to in sections 5.1, 5.2 and 5.3, and recommended in section 5.4; and c. each crew member or task specialist, other than a flight crew member or a cabin crew member, who is assigned duties onboard an aircraft during flight time has fulfilled the requirements of the operator's ground and flight training programme referred to in section 5.1.	
ORO.CC.135 Familiarisation		
After completion of aircraft type specific training and operator conversion training on an aircraft type, each cabin crew member shall complete appropriate supervised familiarisation on the type before being assigned to operate as a member of the minimum number of cabin crew required in accordance with ORO.CC.100.	In most cases this is not appropriate for non-commercial ops as in many cases there will be only one cabin crew member in the organization.	These items are under review in RMT 0516 and 0517.
ORO.CC.140 Recurrent training (a) Each cabin crew member shall complete annually recurrent training and checking. (b) Recurrent training shall cover the actions assigned to each member of the cabin crew in normal and emergency procedures and drills relevant	5.1.3 The operator's ground and flight training programme shall include: a. ….: b. for cabin crew members: i. initial and annual training, including:	These items are under review in RMT 0516 and 0517.

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
to each aircraft type and/or variant to be operated. (c) Aircraft type specific training elements: (1) Recurrent training shall include annually touch-drills by each cabin crew member for simulating the operation of each type or variant of normal and emergency doors and exits for passenger evacuation. (2) Recurrent training shall also include at intervals not exceeding 3 years: (i) operation and actual opening by each cabin crew member, in a representative training device or in the actual aircraft, of each type or variant of normal and emergency exits in the normal and emergency modes; (ii) actual operation by each cabin crew member, in a representative training device or in the actual aircraft, of the flight crew compartment security door, in both normal and emergency modes, and of the seat and restraint system, and a practical demonstration of the oxygen system equipment relevant to pilot incapacitation; (iii) demonstration of the operation of all other exits including the flight crew compartment windows; and (iv) demonstration of the use of the life raft, or slide raft, where fitted. (d) Operator specific training elements: (1) Recurrent training shall include annually: (i) by each cabin crew member: (A) location and handling of all safety and emergency equipment installed or carried on board; and (B) the donning of life-jackets, portable oxygen and	A. aircraft type training, and B. safety procedures training, (see section 5.3.2), and ii. initial and every two years thereafter: A. emergency procedures training, (see section 5.3.1) B. first aid training, C. aircraft surface contamination training, and D. dangerous goods training; (see section 14.1.3) **5.5 PROFICIENCY CERTIFICATION** 5.5.1 National civil aviation regulations vary in the requirements and processes for proficiency certification for aircraft crew members. Operators must ensure that personnel meet national proficiency requirements and shall have processes to ensure that the training objectives for all crewmember training courses required by the national civil aviation authority are met. Also 4.3.1 An operator shall ensure that: a. ….: b. each cabin crew member has fulfilled the requirements of the national regulations and the operator's ground and flight training programme referred to in sections 5.1, 5.2 and 5.3, and recommended in section 5.4; and	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
protective breathing equipment (PBE); (ii) stowage of articles in the passenger compartment; (iii) procedures related to aircraft surface contamination; (iv) emergency procedures; (v) evacuation procedures; (vi) incident and accident review; (vii) crew resource management; (viii) aero-medical aspects and first aid including related equipment; (ix) security procedures. (2) Recurrent training shall also include at intervals not exceeding 3 years: (i) use of pyrotechnics (actual or representative devices); (ii) practical demonstration of the use of flight crew checklists; (iii) realistic and practical training in the use of all fire-fighting equipment, including protective clothing, representative of that carried in the aircraft; (iv) by each cabin crew member: (A) extinguishing a fire characteristic of an aircraft interior fire; (B) donning and use of PBE in an enclosed simulated smoke-filled environment. (e) Validity periods: (1) The annual recurrent training validity period shall be 12 calendar months counted from the end of the month when the check was taken. (2) If the recurrent training and checking required in (a) are	c. each crew member or task specialist, other than a flight crew member or a cabin crew member, who is assigned duties onboard an aircraft during flight time has fulfilled the requirements of the operator's ground and flight training programme referred to in section 5.1.	

EASA IR Requirements – PART - ORO	IS-BAO Requirements	Comments
undertaken within the last 3 calendar months of the validity period, the new validity period shall be counted from the original expiry date. (3) For the additional triennial training elements specified in (c)(2) and (d)(2), the validity period shall be 36 calendar months counted from the end of the month when the checks were taken.		
ORO.CC.145 Refresher training		
(a) When a cabin crew member, during the preceding 6 months within the validity period of the last relevant recurrent training and checking: (1) has not performed any flying duties, he/she shall, before being reassigned to such duties, complete refresher training and checking for each aircraft type to be operated; or (2) has not performed flying duties on one particular aircraft type, he/she shall, before being reassigned to duties, complete on that aircraft type: (i) refresher training and checking; or (ii) two familiarisation flights in accordance with ORO.CC.135. (b) The refresher training programme for each aircraft type shall at least cover: (1) emergency procedures; (2) evacuation procedures; (3) operation and actual opening, by each cabin crew member, of each type or variant of normal and emergency exits and of the flight crew compartment security door in the normal and emergency modes; (4) demonstration of the operation of all other exits including the flight crew compartment windows; (5) location and handling of all relevant safety and emergency	4.3.1 An operator shall ensure that: a. ….: b. each cabin crew member has fulfilled the requirements of the national regulations and the operator's ground and flight training programme referred to in sections 5.1, 5.2 and 5.3, and recommended in section 5.4; and c. each crew member or task specialist, other than a flight crew member or a cabin crew member, who is assigned duties onboard an aircraft during flight time has fulfilled the requirements of the operator's ground and flight training programme referred to in section 5.1.	These items are under review in RMT 0516 and 0517.

equipment installed or carried on-board. (c) The operator may elect to replace refresher training by recurrent training if the re-instatement of the cabin crew member's flying duties commences within the validity period of the last recurrent training and checking. If that validity period has expired, refresher training may only be replaced by aircraft type specific and operator conversion training as specified in ORO.CC.125.		

Appendix I to Annex III

DECLARATION

in accordance with Commission Regulation (EC) No 965/2012 on Air operations

Operator

Name:

Place in which the operator is established or residing:

Name and contact details of the accountable manager:

Continuing airworthiness management organisation in accordance with Regulation (EC) No 2042/2003

Name and address of the organisation and approval reference (as per EASA Form 14)

Aircraft operation

Starting date of operation/applicability date of the change:

Type(s) of operation:

 Part-NCC: (specify if passenger and/or cargo)

 Part-SPO: (specify which type of activity)

Type(s) of aircraft, registration(s) and base(s):

Details of approvals held (attach list of specific approvals to the declaration, if applicable)

Details of specialised operations authorisation held (attach authorisations, if applicable)

List of alternative means of compliance with references to the AMCs they replace (attach to the declaration)

Statements

 The management system documentation including the operations manual reflect the applicable requirements set out in Part-NCC, Part-SPO and Part-SPA.
All flights will be carried out in accordance with the procedures and instructions specified in the operations manual.

 All aircraft operated hold a valid certificate of airworthiness and comply with Commission Regulation (EC) No 2042/2003.

 All flight crew members, cabin crew members, as applicable, are trained in accordance with the applicable requirements.

 (If applicable)

The operator has implemented and demonstrated conformance to an officially recognised industry standard.

Reference of the standard:

Certification body:

Date of the last conformance audit :

 Any change in the operation that affects the information disclosed in this declaration will be notified to the competent authority.

 The operator confirms that the information disclosed in this declaration is correct.

Date, name and signature of the accountable manager

ANNEX IV PART - NCC

ANNEX I

'Appendix V

LIST OF SPECIFIC APPROVALS

Non-commercial operations

(subject to the conditions specified in the approval and contained in the operations manual or pilot's operating handbook)

Issuing Authority ([1]):

List of Specific Approvals # ([2]): Name of Operator:

Date ([3]): Signature:

Aircraft Model and Registration Marks ([4]):

Types of specialised operation (SPO), if applicable:

☐ ([5]) . . . . . .

Specific Approvals ([6]):	Specification ([7])	Remarks
…		
…		
…		
…		

(1) Insertion of name and contact details.
(2) Insertion of the associated number.
(3) Issue date of the specific approvals (dd-mm-yyyy) and signature of the competent authority representative.
(4) Insertion of the Commercial Aviation Safety Team (CAST)/ICAO designation of the aircraft make, model and series, or master series, if a series has been designated (e.g. Boeing-737-3K2 or Boeing-777-232). The CAST/ICAO taxonomy is available at: http://www.intlaviationstandards.org/
(5) The registration marks should be either listed in the List of Specific Approvals or in the operations manual. In the latter case the List of Specific Approvals shall refer to the related page in the operation manual.
(6) Specify the type of operation, e.g., agriculture, construction, photography, surveying, observation and patrol, aerial advertisement.
(7) List in this column any approved operations, e.g., Dangerous goods, LVO, RVSM, RNP, MNPS.
(8) List in this column the most permissive criteria for each approval, e.g. the decision height and RVR minima for CAT II.

Note - The two foregoing forms are EASA procedural matters that operators must follow.

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
SUBPART A - GENERAL REQUIREMENTS		
NCC.GEN.100 Competent authority		
The competent authority shall be the authority designated by the Member State in which the operator has its principal place of business or is residing.	Not applicable. EASA IR applicability material.	
NCC.GEN.105 Crew responsibilities		
(a) The crew member shall be responsible for the proper execution of his/her duties that are: (1) related to the safety of the aircraft and its occupants; and (2) specified in the instructions and procedures in the operations manual.	4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the safety of all crew members, passengers and cargo on board. 4.2.4 The second-in-command, when required, reports to the pilot-in-command and will carry out any duties delegated by that person. 4.2.5 Cabin crew and other crew members assigned to perform duties onboard, are responsible to the pilot-in-command to carry out specified safety duties in the event of an onboard emergency.	
(b) During critical phases of flight or whenever deemed necessary by the pilot-in-command in the interest of safety, the crew member shall be seated at his/her assigned station and shall not perform any activities other than those required for the safe operation of the aircraft. (c) During flight, the flight crew member shall keep his/her safety belt fastened while at his/her station. (d) During flight, at least one qualified flight crew member shall remain at the controls of the aircraft at all times.	**6.15.1 FLIGHT CREW MEMBERS AT DUTY STATIONS** a. *Take-off and landing*. All flight crew members required to be on flight deck duty shall be at their stations. b. *En route*. All flight crew members required to be on flight deck duty shall remain at their stations except when their absence is necessary for the performance of duties in connection with the operation of the aeroplane or for physiological needs. c. *Seat belts*. All flight crew members shall keep their seat belts fastened when at their stations. d. *Safety harness*. When safety harnesses are	

	provided, any flight crew member occupying a pilot's seat shall keep the safety harness fastened during the take-off and landing phases. All other flight crew members shall keep their safety harnesses fastened during the take-off and landing phases unless the shoulder straps interfere with the performance of their duties, in which case the shoulder straps may be unfastened but the seat belt must remain fastened. *Note: Safety harness includes shoulder strap(s) and a seat belt which may be used independently.* 6.15.2 Each cabin crew member shall be seated with seat belt or, when provided, safety harness fastened during take-off and landing and whenever the pilot-in-command so directs.	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
(e) The crew member shall not undertake duties on an aircraft: (1) if he/she knows or suspects that he/she is suffering from fatigue as referred to in 7.f. of Annex IV to Regulation (EC) No 216/2008[2] or feels otherwise unfit, to the extent that the flight may be endangered; or (2) when under the influence of psychoactive substances or alcohol or for other reasons as referred to in 7.g. of Annex IV to Regulation (EC) No 216/2008. (f) The crew member who undertakes duties for more than one operator shall: (1) maintain his/her individual records regarding flight and duty times and rest periods as referred to in Annex III (Part-ORO), Subpart FTL to Regulation (EU) No 965/2012; and (2) provide each operator with the data needed to schedule activities in accordance with the applicable FTL requirements. (g) The crew member shall report to the pilot-in-command: (1) any fault, failure, malfunction or defect, which he/she believes may affect the airworthiness or safe operation of the aircraft, including emergency systems; and (2) any incident that was endangering, or could endanger, the safety of the operation.	The IS-BAO contains requirements for operators not individuals, however the following is included. 4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the safety of all crew members, passengers and cargo on board. Specific duties and responsibilities shall include: a. ensuring that a flight will not be commenced if a flight crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, or the effects of any psychoactive substance, b. ensuring that the flight will not be continued beyond the nearest suitable aerodrome or heliport[3], when a flight crew member's capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness or lack of oxygen,	Operates must ensure that the highlighted EASA requirements are addressed in their Ops manual
NCC.GEN.106 Pilot-in-command responsibilities and authority		
(a) The pilot-in-command shall be responsible for: (1) the safety of the aircraft and of all crew members, passengers	4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the	

[2] 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, 19.3.2008, p. 1). Regulation as last amended by Regulation (EC) No 1108/2009 of the European Parliament and of the Council of 21 October 2009 (OJ L 309, 24.11.2009, p. 51).

[3] Heliports may include temporary landing sites or operating areas.

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
and cargo on board during aircraft operations as referred to in 1.c of Annex IV to Regulation (EC) No 216/2008; (2) the initiation, continuation, termination or diversion of a flight in the interest of safety; (3) ensuring that all instructions, operational procedures and checklists are complied with in accordance with the operations manual and as referred to in 1.b of Annex IV to Regulation (EC) No 216/2008; (4) only commencing a flight if he/she is satisfied that all operational limitations referred to in 2.a.3. of Annex IV to Regulation (EC) No 216/2008 are complied with, as follows: (i) the aircraft is airworthy; (ii) the aircraft is duly registered; (iii) instruments and equipment required for the execution of that flight are installed in the aircraft and are operative, unless operation with inoperative equipment is permitted by the minimum equipment list (MEL) or equivalent document, as required in NCC.IDE.A.105 or NCC.IDE.H.105; (iv) the mass of the aircraft and centre of gravity location are such that the flight can be conducted within the limits prescribed in the airworthiness documentation; (v) all cabin baggage, hold luggage and cargo are properly loaded and secured; (vi) the aircraft operating limitations as specified in the aircraft flight manual (AFM) will not be exceeded at	safety of all crew members, passengers and cargo on board. Specific duties and responsibilities shall include: a. ensuring that a flight will not be commenced if a flight crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, or the effects of any psychoactive substance, b. ensuring that the flight will not be continued beyond the nearest suitable aerodrome or heliport[5], when a flight crew member's capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness or lack of oxygen, c. responsibility for operational control. An operator shall describe the operational control system in the operations manual and identify the roles and responsibilities of those involved with the system, d. responsibility for the security of the aircraft during its operation, e. checking and assessing weather and all applicable NOTAMs where available, f. determining fuel, oil and oxygen requirements, g. determining the aircraft weight/mass and balance limits, h. ensuring that all flight planning requirements have	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
any time during the flight; (vii) each flight crew member holds a valid licence in accordance with Regulation (EC) No 1178/2011[4]; and (viii) flight crew members are properly rated and meet competency and recency requirements; (5) not commencing a flight if any flight crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue or the effects of any psychoactive substance; (6) not continuing a flight beyond the nearest weather-permissible aerodrome or operating site, when the capacity of any flight crew member to perform duties is significantly reduced from causes such as fatigue, sickness or lack of oxygen; (7) deciding on acceptance of the aircraft with unserviceabilities in accordance with the configuration deviation list (CDL) or minimum equipment list (MEL), as applicable; (8) recording utilisation data and all known or suspected defects in the aircraft at the termination of the flight, or series of flights, in the aircraft technical log or journey log for the aircraft; and (9) ensuring that flight recorders: (i) are not disabled or switched off during flight; and (ii) in the event of an accident or an incident that is subject to mandatory reporting: (A) are not intentionally erased;	been met, i. ensuring that the aircraft is airworthy, duly registered and that the documentation and operational information specified in section 8.3.1 are onboard the aircraft. j. completing an aircraft pre-flight inspection as per the aircraft flight manual, before each departure, k. briefing the passengers in accordance with the requirements specified in section 6.11, l. operating the aircraft in accordance with operator procedures and aircraft limitations, m. completing all post flight duties as specified in the company operations manual, recording flight times and aircraft defects, n. notifying the nearest appropriate authority by the quickest available means of any accident involving the aircraft, resulting in serious injury or death of any person or substantial damage to the aircraft or property, o. ensuring that a suspected communicable disease is reported promptly to air traffic control, in order to facilitate provision for the presence of any special medical personnel and equipment necessary for the management of public health risks on arrival, p. submitting a report to the designated local	

[5] Heliports may include temporary landing sites or operating areas.

[4] Commission Regulation (EC) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council. *OJ L 311, 25.11.2011, p. 1*.

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
(B) are deactivated immediately after the flight is completed; and (C) are reactivated only with the agreement of the investigating authority. (b) The pilot-in-command shall have the authority to refuse carriage of or disembark any person, baggage or cargo that may represent a potential hazard to the safety of the aircraft or its occupants.	authority following an act of unlawful interference, q. completing the journey log book or the general declaration, and *Note: By virtue of Resolution A10-36 of the Tenth Session of the Assembly (Caracas, June–July 1956) "the General Declaration, [described in Annex 9] when prepared so as to contain all the information required by Article 34 [of the Convention on International Civil Aviation] with respect to the journey log book, may be considered to be an acceptable form of journey log book".*	
(c) The pilot-in-command shall, as soon as possible, report to the appropriate air traffic services (ATS) unit any hazardous weather or flight conditions encountered that are likely to affect the safety of other aircraft.	r. as soon as possible, report to the appropriate air traffic services (ATS) unit any hazardous weather or flight conditions encountered that are likely to affect the safety of other aircraft.	
(d) Notwithstanding the provision of (a)(6), in a multi-crew operation the pilot-in-command may continue a flight beyond the nearest weather-permissible aerodrome when adequate mitigating procedures are in place.		Such alleviation is not included in the IS-BAO as this is at the discretion of the regulatory authority.
(e) The pilot-in-command shall, in an emergency situation that requires immediate decision and action, take any action he/she considers necessary under the circumstances in accordance with 7.d. of Annex IV to Regulation (EC) No 216/2008. In such cases he/she may deviate from rules, operational procedures and methods in the interest of safety.		Such alleviation is not included in the IS-BAO as this is at the discretion of the regulatory authority.
(f) The pilot-in-command shall submit a report of an act of unlawful interference without delay to the competent authority and shall	See (p) above	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
inform the designated local authority.		
(g) The pilot-in-command shall notify the nearest appropriate authority by the quickest available means of any accident involving the aircraft that results in serious injury or death of any person or substantial damage to the aircraft or property.	See (n) above	
NCC.GEN.110 Compliance with laws, regulations and procedures		
(a) The pilot-in-command shall comply with the laws, regulations and procedures of those States where operations are conducted.	6.7.1 An operator is responsible for identifying and complying with all aircraft operating rules that the operator is subject to, as required by the civil aviation authority of the State of Registry and the States in whose airspace the operations are being conducted. 4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the safety of all crew members, passengers and cargo on board. Specific duties and responsibilities shall include: a. …. l. operating the aircraft in accordance with operator procedures and aircraft limitations,	
(b) The pilot-in-command shall be familiar with the laws, regulations and procedures, pertinent to the performance of his/her duties, prescribed for the areas to be traversed, the aerodromes or operating sites to be used and the related air navigation facilities as referred to in 1.a. of Annex IV to Regulation (EC) No 216/2008.	6.2.1.1 Before commencing a flight or series of flights, the pilot-in-command of an aircraft shall be familiar with the available flight information that is appropriate to the intended flight. The pilot-in-command shall not commence a flight unless it has been ascertained that the facilities available and directly required for such flight and for the safe operation of the aircraft are adequate, including communication facilities and navigation aids.	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.GEN.115 Common language		
The operator shall ensure that all crew members can communicate with each other in a common language.	4.3.1 An operator shall ensure that: a. the flight crew of an aircraft: vi. demonstrate the capability to speak and understand the language used for aeronautical radiotelephony communications as specified in ICAO *Annex 1*;	
NCC.GEN.120 Taxiing of aeroplanes		
The operator shall ensure that an aeroplane is only taxied on the movement area of an aerodrome if the person at the controls: (a) is an appropriately qualified pilot; or (b) has been designated by the operator and: (1) is trained to taxi the aeroplane; (2) is trained to use the radio telephone, if radio communications are required; (3) has received instruction in respect of aerodrome layout, routes, signs, marking, lights, air traffic control (ATC) signals and instructions, phraseology and procedures; and (4) is able to conform to the operational standards required for safe aeroplane movement at the aerodrome.	**6.18A PERSONNEL QUALIFIED TO TAXI AEROPLANE** An operator shall have a procedure to ensure that an aeroplane is not taxied on the movement area of an aerodrome unless the person at the controls is an appropriately qualified pilot or: a. has been duly authorized by the operator; b. is fully competent to taxi the aeroplane; c. is qualified to use the radio if radio communications are required; and d. has received instruction from a competent person in respect of aerodrome layout, and where appropriate, information on routes, signs, marking, lights, ATC signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aeroplane movement at the aerodrome.	
NCC.GEN.125 Rotor engagement		
A helicopter rotor shall only be turned under power for the purpose of flight with a qualified pilot at the controls.	**6.19H HELICOPTER ROTOR TURNING UNDER POWER** An operator shall have a procedure to ensure that the helicopter	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
	rotor shall not be turned under power for the purpose of flight without a qualified pilot at the controls.	
NCC.GEN.130 Portable electronic devices		
The operator shall not permit any person to use a portable electronic device (PED) on board an aircraft that could adversely affect the performance of the aircraft's systems and equipment.	**6.11 PASSENGER SAFETY BRIEFING** The pilot-in-command shall ensure that passengers are given a safety briefing appropriate to the passenger's needs; and covers at least the items specified in this section as applicable for the type of operation. **6.11.1 NORMAL OPERATIONS** a. Prior to loading passengers …: b. Prior to take-off: i. …. ix. the operator's procedures regarding the use of portable electronic devices,	
NCC.GEN.135 Information on emergency and survival equipment carried		
The operator shall at all times have available for immediate communication to rescue coordination centres (RCCs) lists containing information on the emergency and survival equipment carried on board.	**8.5.5 INFORMATION FOR RESCUE COORDINATION** a. An operator shall have available for immediate communication to rescue coordination centres, lists containing information on the emergency and survival equipment carried on board the aeroplane engaged in international air navigation. b. The information shall include, as applicable, the number, colour and type of life rafts and pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of the emergency portable radio equipment.	

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NCC.GEN.140 Documents, manuals and information to be carried		
(a) The following documents, manuals and information shall be carried on each flight as originals or copies unless otherwise specified: (1) the AFM, or equivalent document(s); (2) the original certificate of registration; (3) the original certificate of airworthiness (CofA); (4) the noise certificate; (5) the declaration as specified in Annex III (Part-ORO), ORO.DEC.100, to Regulation (EU) No 965/2012; (6) the list of specific approvals, if applicable; (7) the aircraft radio licence, if applicable; (8) the third party liability insurance certificate(s); (9) the journey log, or equivalent, for the aircraft; (10) details of the filed ATS flight plan, if applicable; (11) current and suitable aeronautical charts for the route of the proposed flight and all routes along which it is reasonable to expect that the flight may be diverted; (12) procedures and visual signals information for use by intercepting and intercepted aircraft; (13) information concerning search and rescue services for the area of the intended flight; (14) the current parts of the operations manual that are relevant to the duties of the crew members, which shall be easily accessible to the crew members; (15) the MEL or CDL; (16) appropriate notices to airmen (NOTAMs) and aeronautical information service (AIS) briefing documentation;	**8.3 OPERATIONAL INFORMATION AND DOCUMENTATION** 8.3.1 The following documentation and information (in written or electronic form) shall be carried onboard the aircraft and the operational information shall be accessible on the flight deck: a. pertinent aeronautical charts; b. pertinent en route, terminal area, and instrument approach procedure charts; c. aircraft performance data; d. aircraft checklists; e. the Company Operations Manual; f. Standard Operating Procedures, where an SOP has been established for the aircraft; g. the aircraft flight manual; h. the aircraft minimum equipment list (MEL) for aircraft being operated in accordance with a MEL; i. aircraft certificate of airworthiness or other flight authority and certificate of registration; j. aircraft radio licence; k. insurance certificate; l. other documents required of the area of operation; m. procedures for pilots-in-command of intercepted aircraft and visual signals for use by intercepting and intercepted aircraft, as contained in ICAO	

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(17) appropriate meteorological information; (18) cargo and/or passenger manifests, if applicable; and (19) any other documentation that may be pertinent to the flight or is required by the States concerned with the flight.	Annex 2, and n. for international commercial air transport operations, a certified true copy of the air operator certificate including the authorizations, conditions and limitations relevant to the air. 6.3.3 *It is recommended that the operational control system also include procedures for ensuring that the pilot-in-command has access to appropriate information concerning the search and rescue services in the area over which the aircraft will be flown.*	
(b) In case of loss or theft of documents specified in (a)(2) to (a)(8), the operation may continue until the flight reaches its destination or a place where replacement documents can be provided.		Such alleviation is not included in the IS-BAO as this is at the discretion of the regulatory authority.
NCC.GEN.145 Preservation, production and use of flight recorder recordings		
(a) Following an accident or an incident that is subject to mandatory reporting, the operator of an aircraft shall preserve the original recorded data for a period of 60 days unless otherwise directed by the investigating authority.	8.14.6 The pilot-in-command, and/or the owner/operator, shall ensure, to the extent possible, in the event an aeroplane becomes involved in an accident or incident, the preservation of all related flight recorder records, and if necessary the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with ICAO Annex 13.	

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(b) The operator shall conduct operational checks and evaluations of flight data recorder (FDR) recordings, cockpit voice recorder (CVR) recordings and data link recordings to ensure the continued serviceability of the recorders. (c) The operator shall save the recordings for the period of operating time of the FDR as required by NCC.IDE.A.165 or NCC.IDE.H.165, except that, for the purpose of testing and maintaining the FDR, up to 1 hour of the oldest recorded material at the time of testing may be erased. (d) The operator shall keep and maintain up-to-date documentation that presents the necessary information to convert FDR raw data into parameters expressed in engineering units.	Functional checks are not addressed in the IS-BAO.	Operators must ensure that the specific requirements are addressed.
(e) The operator shall make available any flight recorder recording that has been preserved, if so determined by the competent authority.		This is a regulatory authority issue
(f) Without prejudice to Regulation (EU) No 996/2010: (1) CVR recordings shall only be used for purposes other than for the investigation of an accident or an incident subject to mandatory reporting, if all crew members and maintenance personnel concerned consent; and (2) FDR recordings or data link recordings shall only be used for purposes other than for the investigation of an accident or an incident that is subject to mandatory reporting, if such records are: (i) used by the operator for airworthiness or maintenance purposes only; (ii) de-identified; or	8.14.8 *It is recommended that the operator include in their operations manual procedures on the post-flight protection and use of flight and cockpit voice recorder data.*	Operators must ensure that the specific requirements are addressed.

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(iii) disclosed under secure procedures.		
NCC.GEN.150 Transport of dangerous goods		
(a) The transport of dangerous goods by air shall be conducted in accordance with Annex 18 to the Chicago Convention as last amended and amplified by the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (ICAO Doc 9284-AN/905), including its supplements and any other addenda or corrigenda. (b) Dangerous goods shall only be transported by the operator approved in accordance with Annex V (Part-SPA), Subpart G, to Regulation (EC) No 956/2012 except when: (1) they are not subject to the Technical Instructions in accordance with Part 1 of those Instructions; or (2) they are carried by passengers or crew members, or are in baggage, in accordance with Part 8 of the Technical Instructions. (c) The operator shall establish procedures to ensure that all reasonable measures are taken to prevent dangerous goods from being carried on board inadvertently. (d) The operator shall provide personnel with the necessary information enabling them to carry out their responsibilities, as required by the Technical Instructions. (e) The operator shall, in accordance with the Technical Instructions, report without delay to the competent authority and the appropriate authority of the State of occurrence in the event of any dangerous goods accidents or incidents. (f) The operator shall ensure that passengers are provided with information about dangerous goods in accordance with the Technical Instructions. (g) The operator shall ensure that notices giving information about the	**14.1 CONSIDERATIONS FOR ALL OPERATORS** 14.1.1 Dangerous goods are defined as those articles or substances that are capable of posing significant risks to health, safety or property when transported by air. Operators shall not transport dangerous goods except where authorized under and in accordance with the provisions of the ICAO *Technical Instruction for the Safe Transport of Dangerous Goods* (hereafter called ICAO *Technical Instructions*) or the *IATA Dangerous Goods Regulations.* 14.1.2 An operator shall have a system to advise passengers of what constitutes dangerous goods, and whether and how those goods can be carried on aircraft. 14.1.3 Aircraft crew members shall receive training on these procedures at least every two years. **14.2 DANGEROUS GOODS TRANSPORTATION REQUIREMENTS** 14.2.1 Prior to transporting dangerous goods an operator shall ensure that all State regulatory requirements have been met. 14.2.2 In particular, operators that transport dangerous goods, whether it is organization's property, the property of organization personnel, or the property of a third party, shall ensure that the goods are: a. classified,	

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transport of dangerous goods are provided at acceptance points for cargo as required by the Technical Instructions.	b. packed, c. labelled and marked, d. loaded, e. stowed, f. accompanied by documentation, and g. transported in accordance with the provisions of the ICAO *Technical Instructions,* or the *IATA Dangerous Goods Regulations and the rules specified by the State of the operator.* 14.2.3 An operator shall ensure that all personnel involved in the transportation of dangerous goods are trained and certified in accordance with the ICAO *Technical Instructions* or the *IATA Dangerous Goods Regulations and the rules specified by the State of the operator*. 14.2.4 An operator shall also have a system to advise their shipping departments of what constitutes dangerous goods and whether and how those goods can be carried on aircraft. 14.2.5 An operator shall not accept dangerous goods for transport from third parties unless those parties have complied with all relevant provisions of the ICAO *Technical Instructions* or the *IATA Dangerous Goods Regulations and the rules specified by the State of the operator*. 14.2.6 An operator shall ensure that the pilots-in-command of their aircraft are informed of what dangerous goods are being carried on board the aircraft, as early as	

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	practicable before the departure of the aircraft. 14.2.7 In the event an aircraft carrying dangerous goods is involved in an accident or serious incident, the operator of an aircraft carrying dangerous goods shall provide information, without delay, to emergency personnel responding to the accident or serious incident about the dangerous goods on board, as shown in the written information to the pilot in command. As soon as possible the operator shall also provide this information to the appropriate authorities of the State of the Operator and the State in which the accident or serious incident occurred. 14.2.8 In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods shall, if requested to do so, provide information without delay to the emergency services personnel responding to the incident and to the appropriate authority of the State in which the incident occurred, about the dangerous goods on board, as shown on the written information to the pilot-in-command.	
SUBPART B - OPERATIONAL PROCEDURES		
NCC.OP.100 Use of aerodromes and operating sites		
The operator shall only use aerodromes and operating sites that are adequate for the type of aircraft and operation concerned.	6.2.8.1 An aircraft shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual. 6.2.8.2 The pilot-in-command shall determine that aircraft performance will permit the take-off and departure to be carried out safely.	

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NCC.OP.105 Specification of isolated aerodromes — aeroplanes		
For the selection of alternate aerodromes and the fuel policy, the operator shall consider an aerodrome as an isolated aerodrome if the flying time to the nearest adequate destination alternate aerodrome is more than: (a) for aeroplanes with reciprocating engines, 60 minutes; or (b) for aeroplanes with turbine engines, 90 minutes.		The IS-BAO fuel requirements will be reviewed when the related Annex 6 Part II amendment is finalized.
NCC.OP.110 Aerodrome operating minima — general		
(a) For instrument flight rules (IFR) flights the operator shall specify aerodrome operating minima for each departure, destination and alternate aerodrome to be used. Such minima shall: (1) not be lower than those established by the State in which the aerodrome is located, except when specifically approved by that State; and (2) when undertaking low visibility operations, be approved by the competent authority in accordance with Annex V (Part SPA), Subpart E to Regulation (EU) No 965/2012. (b) When establishing aerodrome operating minima, the operator shall take the following into account: (1) the type, performance and handling characteristics of the aircraft; (2) the composition, competence and experience of the flight crew; (3) the dimensions and characteristics of the runways and final approach and take-off areas (FATOs) that may be selected for use; (4) the adequacy and performance of the available visual and non-visual ground aids; (5) the equipment available on the aircraft for the purpose of	**6.4 WEATHER MINIMA** 6.4.1 The weather minima used for IFR departures and approaches shall be those specified in the instrument approach procedures approved for use by the operator. 6.4.2 No take-off minima: a. Operators shall specify a procedure in their operations manual for the determination of take-off minima from runways or heliports, where no take-off minima are specified. b. Such procedures shall include a risk analysis. 6.4.3 An operator shall not operate to or from an aerodrome or heliport, using operating minima lower than those which may be established for that aerodrome or heliport, by the State in which it is located, except with the specific approval of that State. 6.4.4 A flight shall not be continued towards the aerodrome or heliport of intended landing unless the latest available meteorological information indicates that conditions at that aerodrome, or heliport, or at least one destination alternate aerodrome or heliport, will, at the estimated time of arrival, be at or above the specified	Much of the material in NCC.OP.110 to NCC.OP.115 is detailed EASA requirements that are addressed by IS-BAO 6.4.

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navigation and/or control of the flight path, during the take-off, the approach, the flare, the landing, the rollout and the missed approach; (6) the obstacles in the approach, the missed approach and the climb-out areas required for the execution of contingency procedures; (7) the obstacle clearance altitude/height for the instrument approach procedures; (8) the means to determine and report meteorological conditions; and (9) the flight technique to be used during the final approach. (c) The minima for a specific type of approach and landing procedure shall only be used if all the following conditions are met: (1) the ground equipment required for the intended procedure is operative; (2) the aircraft systems required for the type of approach are operative; (3) the required aircraft performance criteria are met; and (4) the crew is qualified appropriately.	aerodrome or heliport, operating minima. 6.4.5 Aerodrome Operating Minima a. Operators shall establish procedures to restrict continuing an approach beyond the outer marker for precision approach or below 1000 feet above the aerodrome for a non-precision approach if the reported visibility is less than the specified minima. b. These procedures shall include actions for the flight crew to take if the visibility is reported less than specified minima after passing the outer marker for precision approaches or below 1000 feet above the aerodrome for non-precision approaches. c. The operator may allow deviations from these procedures if the State of Registry and State of Operation allows. However, in any case, the aircraft shall not continue its approach-to-land beyond a point at which the limits of the aerodrome or heliport operating minima would be infringed. d. Whenever such deviations occur, the flight crew shall file a safety occurrence report to include the details of the event and the outcome.	
NCC.OP.111 Aerodrome operating minima — NPA, APV, CAT I operations		
(a) The decision height (DH) to be used for a non-precision approach (NPA) flown with the continuous descent final approach (CDFA) technique, approach procedure with vertical guidance (APV) or category I (CAT I) operation shall not be lower than the highest of: (1) the minimum height to which the approach aid can be used without the required visual reference; (2) the obstacle clearance height (OCH) for the category of	6.5.1 An operator shall not permit an aircraft to conduct instrument approach or departures below standard Category I weather minima unless all equipment, training and operating requirements and regulatory requirements have been met.	Operators must ensure that the specific EASA requirements are met.

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aircraft; (3) the published approach procedure DH where applicable; (4) the system minimum specified in Table 1; or (5) the minimum DH specified in the AFM or equivalent document, if stated. (b) The minimum descent height (MDH) for an NPA operation flown without the CDFA technique shall not be lower than the highest of: (1) the OCH for the category of aircraft; (2) the system minimum specified in Table 1; or (3) the minimum MDH specified in the AFM, if stated.		

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Table 1: System minima

Facility	Lowest DH/MDH (ft)
Instrument landing system (ILS)	200
Global navigation satellite system (GNSS)/ Satellite-based augmentation system (SBAS) (Lateral precision with vertical guidance approach (LPV))	200
GNSS (Lateral Navigation (LNAV))	250
GNSS/Baro-vertical navigation (VNAV) (LNAV/ VNAV)	250
Localiser (LOC) with or without distance measuring equipment (DME)	250
Surveillance radar approach (SRA) (terminating at ½ NM)	250
SRA (terminating at 1 NM)	300
SRA (terminating at 2 NM or more)	350
VHF omnidirectional radio range (VOR)	300
VOR/DME	250
Non-directional beacon (NDB)	350
NDB/DME	300
VHF direction finder (VDF)	350

NCC.OP.112 Aerodrome operating minima — circling operations with aeroplanes

(a) The MDH for a circling operation with aeroplanes shall not be lower than the highest of:

(1) the published circling OCH for the aeroplane category;

(2) the minimum circling height derived from Table 1; or

Operators must ensure that the specific EASA requirements are met.

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(3) the DH/MDH of the preceding instrument approach procedure.		
(b) The minimum visibility for a circling operation with aeroplanes shall be the highest of: (1) the circling visibility for the aeroplane category, if published; (2) the minimum visibility derived from Table 2; or (3) the runway visual range/converted meteorological visibility (RVR/CMV) of the preceding instrument approach procedure.		
Table 1: MDH and minimum visibility for circling vs. aeroplane category Aeroplane category: A / B / C / D MDH (ft): 400 / 500 / 600 / 700 Minimum meteorological visibility (m): 1 500 / 1 600 / 2 400 / 3 600		Operators must ensure that the specific EASA requirements are met.
NCC.OP.113 Aerodrome operating minima — onshore circling operations with helicopters		
The MDH for an onshore circling operation with helicopters shall not be lower than 250 ft and the meteorological visibility not less than 800 m.		Operators must ensure that the specific EASA requirements are met.
NCC.OP.115 Departure and approach procedures		
(a) The pilot-in-command shall use the departure and approach procedures established by the State of the aerodrome, if such procedures have been published for the runway or FATO to be used.		Operators must ensure that the specific EASA requirements are met.
(b) Notwithstanding (a), the pilot-in-command shall only accept an ATC clearance to deviate from a published procedure: (1) provided that obstacle clearance criteria are observed and full		

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account is taken of the operating conditions; or (2) when being radar-vectored by an ATC unit.		
(c) In any case, the final approach segment shall be flown visually or in accordance with the published approach procedures.		
NCC.OP.120 Noise abatement procedures		
The operator shall develop operating procedures taking into account the need to minimise the effect of aircraft noise while ensuring that safety has priority over noise abatement.	**6.8 NOISE CERTIFICATION AND ABATEMENT** 6.8.2 An operator shall ensure that the aircraft adheres to all published noise abatement procedures consistent with safety.	
NCC.OP.125 Minimum obstacle clearance altitudes — IFR flights		
(a) The operator shall specify a method to establish minimum flight altitudes that provide the required terrain clearance for all route segments to be flown in IFR. (b) The pilot-in-command shall establish minimum flight altitudes for each flight based on this method. The minimum flight altitudes shall not be lower than that published by the State overflown.	6.4.6 An instrument approach shall be planned and conducted so as to ensure that the aircraft adheres to the minimum safe altitudes while in transition or on approach	
NCC.OP.130 Fuel and oil supply — aeroplanes		
(a) The pilot-in-command shall only commence a flight if the aeroplane carries sufficient fuel and oil for the following: (1) for visual flight rules (VFR) flights: (i) by day, to fly to the aerodrome of intended landing and thereafter to fly for at least 30 minutes at normal cruising altitude; or (ii) by night, to fly to the aerodrome of intended landing and thereafter to fly for at least 45 minutes at normal cruising altitude; (2) for IFR flights: (i) when no destination alternate is required, to fly to the	**6.2.5.A FUEL AND OIL SUPPLY REQUIREMENTS (AEROPLANES)** An operator shall establish policies and procedures to ensure that the following fuel requirements are met and in-flight fuel checks and fuel management are performed. a. An IFR flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the aeroplane carries sufficient fuel to ensure that it can safely complete the flight and land with the planned final reserve fuel. The final reserve fuel shall allow for:	The IS-BAO fuel requirements will be reviewed when the new fuel SARP is published in Annex 6 Part II in 2014. The addition of VFR fuel requirements will be considered at that time.

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aerodrome of intended landing, and thereafter to fly for at least 45 minutes at normal cruising altitude; or (ii) when a destination alternate is required, to fly to the aerodrome of intended landing, to an alternate aerodrome and thereafter to fly for at least 45 minutes at normal cruising altitude. (b) In computing the fuel required including to provide for contingency, the following shall be taken into consideration: (1) forecast meteorological conditions; (2) anticipated ATC routings and traffic delays; (3) procedures for loss of pressurisation or failure of one engine while en-route, where applicable; and (4) any other condition that may delay the landing of the aeroplane or increase fuel and/or oil consumption. (c) Nothing shall preclude amendment of a flight plan in-flight, in order to re-plan the flight to another destination, provided that all requirements can be complied with from the point where the flight is re-planned.	i. when no alternate aerodrome is required, to fly to the destination aerodrome and thereafter for a period of 45 minutes at normal cruising altitude, or ii. when an alternate aerodrome is required, to fly to the destination aerodrome, then to the alternate aerodrome and thereafter for a period of 45 minutes at normal cruising altitude. *b. It is* recommended *that operators determine one final reserve fuel value for each aeroplane type and variant in their fleet rounded up to an easily recalled figure.* c. The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining upon landing. d. The pilot-in-command shall advise ATC of a minimum fuel state by declaring **MINIMUM FUEL** when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than planned final reserve fuel. e. The pilot-in-command shall declare a situation of fuel emergency by broadcasting **MAYDAY MAYDAY MAYDAY FUEL**, when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.	

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	Note: Specific State requirements may vary in the application of this requirement. Operators must meet the specific requirements of the State of Registry and the State in which the operation is being conducted.	
NCC.OP.131 Fuel and oil supply — helicopters		
(a) The pilot-in-command shall only commence a flight if the helicopter carries sufficient fuel and oil for the following: (1) for VFR flights, to fly to the aerodrome/operating site of intended landing and thereafter to fly for at least 20 minutes at best-range-speed; and (2) for IFR flights: (i) when no alternate is required or no weather-permissible alternate aerodrome is available, to fly to the aerodrome/operating site of intended landing, and thereafter to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the destination aerodrome/operating site under standard temperature conditions and approach and land; or (ii) when an alternate is required, to fly to and execute an approach and a missed approach at the aerodrome/operating site of intended landing, and thereafter: (A) to fly to the specified alternate; and (B) to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate aerodrome/operating site under standard temperature conditions and approach and land.	**6.2.5.H FUEL AND OIL SUPPLY REQUIREMENTS (HELICOPTERS)** 6.2.5.1 A flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the helicopter carries sufficient fuel and oil to ensure that it can safely complete the flight. In addition, a reserve shall be carried to provide for contingencies. 6.2.5.2 *VFR operations.* The fuel and oil carried in order to comply with 6.2.6.1 shall, in the case of VFR operations, be at least the amount sufficient to allow the helicopter: a. to fly to the heliport to which the flight is planned; b. to fly thereafter for a period of 20 minutes at best-range speed; and c. to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator. 6.2.5.2 *IFR operations.* The fuel and oil carried in order to comply with 6.2.6.1 shall, in the case of IFR operations, be at least the amount sufficient to allow the helicopter:	The IS-BAO fuel requirements will be reviewed when the related Annex 6 Part III amendment is finalized.

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(b) In computing the fuel required including to provide for contingency, the following shall be taken into consideration: (1) forecast meteorological conditions; (2) anticipated ATC routings and traffic delays; (3) procedures for loss of pressurisation or failure of one engine while en-route, where applicable; and (4) any other condition that may delay the landing of the aircraft or increase fuel and/or oil consumption. (c) Nothing shall preclude amendment of a flight plan in-flight, in order to re-plan the flight to another destination, provided that all requirements can be complied with from the point where the flight is re-planned.	a. When an alternate is not required, to fly to the heliport to which the flight is planned, and thereafter: i to fly 30 minutes at holding speed at 450 m (1 500 ft) above the destination heliport under standard temperature conditions and approach and land; and ii to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of potential contingencies. b. When an alternate is required, to fly to and execute an approach, and a missed approach, at the heliport to which the flight is planned, and thereafter: i to fly to the alternate specified in the flight plan; and then ii to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate under standard temperature conditions, and approach and land; and iii to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of potential contingencies. c. When no alternate is required, sufficient fuel shall be carried to enable the helicopter to fly to the destination to which the flight is planned and thereafter for a period that will, based on geographic and environmental considerations, enable a safe landing to be made. d. In computing the fuel and oil required in 6.2.6.1 at least the following shall be considered: i meteorological conditions forecast; ii expected air traffic control routings and traffic	

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	delays; iii for IFR flight, one instrument approach at the destination heliport, including a missed approach; iv the procedures prescribed in the operations manual for loss of pressurization, where applicable, or failure of one engine while en route; and v any other conditions that may delay the landing of the helicopter or increase fuel and/or oil consumption.	
NCC.OP.135 Stowage of baggage and cargo		
The operator shall establish procedures to ensure that: (a) only hand baggage that can be adequately and securely stowed is taken into the passenger compartment; and (b) all baggage and cargo on board that might cause injury or damage, or obstruct aisles and exits if displaced, is stowed so as to prevent movement.	**6.16 CABIN BAGGAGE** An operator shall specify procedures to ensure that all baggage carried onto an aircraft and taken into the passenger cabin is adequately and securely stowed.	
NCC.OP.140 Passenger briefing		
The pilot-in-command shall ensure that: (a) prior to take-off passengers have been made familiar with the location and use of the following: (1) seat belts, (2) emergency exits, and (3) passenger emergency briefing cards, and if applicable: (4) life-jackets, (5) oxygen dispensing equipment, (6) life-rafts, and	**6.11 PASSENGER SAFETY BRIEFING** The pilot-in-command shall ensure that passengers are given a safety briefing appropriate to the passenger's needs; and covers at least the items specified in this section as applicable for the type of operation. **6.11.1 NORMAL OPERATIONS** a. Prior to loading passengers, the safest direction and most hazard-free route for passenger movement to the aircraft and any dangers associated with the aircraft type such as pitot tube locations, propellers, main and tail rotor blades, or engine intakes. b. Prior to take-off:	

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(7) other emergency equipment provided for individual passenger use; and (b) in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.	i. when, where, why and how carry-on baggage is required to be stowed, ii. the fastening, unfastening, tightening and general use of safety belts or safety/shoulder harnesses, iii. when seat backs must be secured in the upright position and seats and tables must be stowed, iv. the location and operation of emergency exits, v. the location and use of the passenger oxygen system and masks, vi. the location, purpose of, and advisability of reading the passenger safety briefing card, vii. the requirement to obey crew instructions regarding safety belts and no smoking or fasten seat belt signs and the location of these signs, viii. the location of any emergency equipment the passenger may have a need for in an emergency situation such as the Emergency Location Transmitter, fire extinguisher, survival equipment (including the means to access if in a locked compartment), first aid kit, life preserver or flotation device and life raft, ix. the operator's procedures regarding the use of portable electronic devices, and x. other considerations based on the configuration of the aircraft cabin and equipment. c. After take-off, if not included in the pre take-off briefing: i. on flights where smoking is permitted, when and where smoking is permitted on board the aircraft, and ii. the advisability of using safety-belts or safety harnesses during flight.	

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	d. In-flight when the "Fasten Seat Belt" sign has been turned on for reasons of turbulence: i. when the use of seat belts is required, and ii. the requirement to stow carry-on baggage. e. Prior to passenger disembarking, the safest direction and most hazard-free route for passenger movement away from the aircraft following deplaning; and any dangers associated with the aircraft type such as pitot tube locations, propellers, main and tail rotor blades, or engine intakes. 6.11.2 The standard safety briefing may be modified for: a. regular/recurring passengers who are familiar with the aircraft, route and have repeated exposure (e.g. company president) to that type of flight, b. for EMS operations where a passenger briefing is not appropriate or c. for operations where conducting a passenger briefing may interfere with the safety of the aircraft. 6.11.3 Where the foregoing safety briefing is insufficient for a passenger because of that passenger's physical, sensory or comprehension limitations or because that passenger is responsible for the care of another person on board the aircraft, the pilot-in-command shall ensure that the passenger is given an individual safety briefing that meets their individual needs. **6.11.4 EMERGENCY OPERATIONS** The pilot-in-command shall ensure that, in the event of an emergency, where circumstances permit, all passengers are given an emergency briefing covering the following items: a. safety belts or safety/shoulder harnesses;	

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	b. seat backs, seats and tables; c. carry-on baggage; d. passenger safety briefing cards; e. brace position (when to assume, how long to remain) and considerations for side facing seats; f. evacuation procedures; g. if applicable, life preservers; flotation devices and life rafts; and h. if applicable, evacuation procedures for an occupant of a child restraint system.	
NCC.OP.145 Flight preparation		
(a) Before commencing a flight, the pilot-in-command shall ascertain by every reasonable means available that the ground and/or water facilities including communication facilities and navigation aids available and directly required on such flight, for the safe operation of the aircraft, are adequate for the type of operation under which the flight is to be conducted. (b) Before commencing a flight, the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for a flight away from the vicinity of the place of departure, and for every flight under IFR, shall include: (1) a study of available current weather reports and forecasts; and (2) the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions.	6.2.1.1 Before commencing a flight or series of flights, the pilot-in-command of an aircraft shall be familiar with the available flight information that is appropriate to the intended flight. The pilot-in-command shall not commence a flight unless it has been ascertained that the facilities available and directly required for such flight and for the safe operation of the aircraft are adequate, including communication facilities and navigation aids. 6.2.1.2 Before commencing a flight or series of flights, the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for every flight shall include: a. a review of available current weather reports and forecasts; and b. the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions.	

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NCC.OP.150 Take-off alternate aerodromes — aeroplanes		
(a) For IFR flights, the pilot-in-command shall specify at least one weather-permissible take-off alternate aerodrome in the flight plan if the weather conditions at the aerodrome of departure are at or below the applicable aerodrome operating minima or it would not be possible to return to the aerodrome of departure for other reasons. (b) The take-off alternate aerodrome shall be located within the following distance from the aerodrome of departure: (1) for aeroplanes having two engines, not more than a distance equivalent to a flight time of 1 hour at the single-engine cruise speed in still air standard conditions; and (2) for aeroplanes having three or more engines, not more than a distance equivalent to a flight time of 2 hours at the one-engine-inoperative (OEI) cruise speed according to the AFM in still air standard conditions. (c) For an aerodrome to be selected as a take-off alternate aerodrome the available information shall indicate that, at the estimated time of use, the conditions will be at or above the aerodrome operating minima for that operation.	**6.2.3 IFR Flight** The operator shall establish procedures to ensure that: a. A flight to be conducted in accordance with the instrument flight rules shall not be commenced unless the available information indicates that conditions, at the aerodrome or heliport[6], of intended landing or at least one destination alternate will, at the estimated time of arrival, be at or above the aerodrome or heliport, operating minima. b. A take-off alternate aerodrome/heliport shall be selected and specified in the flight plan if the weather conditions at the aerodrome/heliport of departure are at or below the applicable operating minima or it would not be possible to return to the point of departure for other reasons. c. For an aerodrome/heliport to be selected as a take-off alternate the available information shall indicate that, at the estimated time of use, the conditions will be at or above the applicable operating minima for that operation.	The distance criteria as per para (b) of NCC.OP.150 and Annex 6 Part II para 3.4.3.4.1.2 is not included in the IS-BAO standard, but is included in the GCOM section A 8.8.1. Operators must ensure that the specific EASA requirements are met.
NCC.OP.151 Destination alternate aerodromes — aeroplanes		
For IFR flights, the pilot-in-command shall specify at least one weather-	**6.2.3 IFR FLIGHT**	

[6] Heliports may include temporary landing sites or operating areas.

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permissible destination alternate aerodrome in the flight plan, unless: (a) the available current meteorological information indicates that, for the period from 1 hour before until 1 hour after the estimated time of arrival, or from the actual time of departure to 1 hour after the estimated time of arrival, whichever is the shorter period, the approach and landing may be made under visual meteorological conditions (VMC); or (b) the place of intended landing is isolated and: (1) an instrument approach procedure is prescribed for the aerodrome of intended landing; and (2) available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival: (i) a cloud base of at least 300 m (1 000 ft) above the minimum associated with the instrument approach procedure; and (ii) visibility of at least 5.5 km or of 4 km more than the minimum associated with the procedure.	a. The operator shall establish procedures to ensure that a flight to be conducted in accordance with the instrument flight rules shall not be commenced unless the available information indicates that conditions, at the aerodrome or heliport[7], of intended landing or at least one destination alternate will, at the estimated time of arrival, be at or above the aerodrome or heliport, operating minima. **6.2.4 DESTINATION ALTERNATE AERODROME** For a flight to be conducted in accordance with the instrument flight rules, at least one destination alternate aerodrome or heliport, shall be selected and specified in the flight plan, unless: a. the duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the estimated time of arrival at the aerodrome *or heliport,* of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions; or b. the aerodrome or heliport, of intended landing is isolated and there is no suitable destination alternate aerodrome; and. i. an instrument approach procedure is prescribed for the aerodrome or heliport, of intended landing; and ii. available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two hours after the estimated time of arrival:	

[7] Heliports may include temporary landing sites or operating areas.

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
	A. a cloud base of at least 300 m (1,000 ft) above the minimum associated with the instrument approach procedure, and B. visibility of at least 5.5 km (3 miles) or of 4 km (2 miles) more than the minimum associated with the procedure, whichever is greater.	
NCC.OP.152 Destination alternate aerodromes — helicopters		
For IFR flights, the pilot-in-command shall specify at least one weather-permissible destination alternate in the flight plan, unless: (a) an instrument approach procedure is prescribed for the aerodrome of intended landing and the available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival, or from the actual time of departure to 2 hours after the estimated time of arrival, whichever is the shorter period: (1) a cloud base of at least 120 m (400 ft) above the minimum associated with the instrument approach procedure; and (2) visibility of at least 1 500 m more than the minimum associated with the procedure; or (b) the place of intended landing is isolated and: (1) an instrument approach procedure is prescribed for the aerodrome of intended landing; (2) available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival: (i) the cloud base is at least 120 m (400 ft) above the minimum associated with the instrument approach procedure;	Included in above	

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(ii) visibility is at least 1 500 m more than the minimum associated with the procedure; and (3) a point of no return (PNR) is determined in case of an offshore destination.		
NCC.OP.155 Refuelling with passengers embarking, on board or disembarking		
(a) The aircraft shall not be refuelled with aviation gasoline (AVGAS) or wide-cut type fuel or a mixture of these types of fuel, when passengers are embarking, on board or disembarking. (b) For all other types of fuel, necessary precautions shall be taken and the aircraft shall be properly manned by qualified personnel ready to initiate and direct an evacuation of the aircraft by the most practical and expeditious means available.	**6.2.9 Refuelling with Passengers On Board** An operator shall develop procedures to ensure that aircraft are not refuelled when passengers are embarking, on board or disembarking unless: a. all fuelling safety procedures are complied with, b. the aircraft is attended by qualified personnel ready to initiate and direct an evacuation of the aircraft by the most practical and expeditious means available c. two-way communication is maintained by the aircraft's intercom system or other suitable means, between the ground crew supervising the refuelling and the qualified personnel on board the aircraft. *Note 1: Additional precautions are required when refuelling with fuels other than aviation kerosene or when refuelling results in a mixture of aviation kerosene with other aviation turbine fuels, or when an open line is used.* *Note 2: There may be airport restrictions on the use of radio communications during refuelling operations.* *Note 3:Helicopters should not be refueled with*	

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	passengers on board. A safety alert for operators highlighting current guidance and best-practices for operators that conduct fueling with the engines running (hot fueling) can be found at http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo/all_safos/media/2010/SAFO10020.pdf.	
NCC.OP.160 Use of headset		
(a) Each flight crew member required to be on duty in the flight crew compartment shall wear a headset with boom microphone or equivalent. The headset shall be used as the primary device for voice communications with ATS: (1) when on the ground: (i) when receiving the ATC departure clearance via voice communication; and (ii) when engines are running; (2) when in flight: (i) below transition altitude; or (ii) 10 000 ft, whichever is higher; and (3) whenever deemed necessary by the pilot in command. (b) In the conditions of (a), the boom microphone or equivalent shall be in a position that permits its use for two-way radio communications.	**6.17 MICROPHONES AND HEADSETS** An operator shall ensure that all flight crew members of: a. large and turbojet aircraft who are required to be on flight deck duty communicate through boom microphones below the transition level/altitude. See section 8.2.4. b. helicopters use headsets and communicate through a boom microphone at all times.	The EASA requirements are more specific than the IS-BAO. Operators must ensure that the specific EASA requirements are met.
NCC.OP.165 Carriage of passengers		
The operator shall establish procedures to ensure that: (a) passengers are seated where, in the event that an emergency evacuation is required, they are able to assist and not hinder evacuation of the aircraft;	6.15.3 During take-off and landing and whenever considered necessary, by reason of turbulence or any emergency occurring during flight, all passengers on board an aircraft shall be secured in their seats by means of the	The EASA requirements are more specific than the IS-BAO.

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(b) prior to and during taxiing, take-off and landing, and whenever deemed necessary in the interest of safety by the pilot-in-command, each passenger on board occupies a seat or berth and has his/her safety belt or restraint device properly secured; and (c) multiple occupancy is only allowed on specified aircraft seats occupied by one adult and one infant properly secured by a supplementary loop belt or other restraint device.	seat belts or harnesses provided.	Operators must ensure that the specific EASA requirements are met.
NCC.OP.170 Securing of passenger compartment and galley(s)		
The pilot-in-command shall ensure that: (a) before taxiing, take-off and landing, all exits and escape paths are unobstructed; and (b) before take-off and landing, and whenever deemed necessary in the interest of safety, all equipment and baggage are properly secured.	Contained in the GCOM as guidance material.	Operators must ensure that the specific EASA requirements are met.
NCC.OP.175 Smoking on board		
The pilot-in-command shall not allow smoking on board: (a) whenever considered necessary in the interest of safety; (b) during refuelling of the aircraft; (c) while the aircraft is on the surface unless the operator has determined procedures to mitigate the risks during ground operations; (d) outside designated smoking areas, in the aisle(s) and lavatory(ies); (e) in cargo compartments and/or other areas where cargo is carried that is not stored in flame-resistant containers or covered by flame-resistant canvas; and (f) in those areas of the passenger compartments where oxygen is being supplied.	**6.11 Passenger Safety Briefing** The pilot-in-command shall ensure that passengers are given a safety briefing appropriate to the passenger's needs; and covers at least the items specified in this section as applicable for the type of operation. a. Prior to loading passengers …. b. Prior to take-off: i. …. vii. the requirement to obey crew instructions regarding safety belts and no smoking or fasten seat belt signs and the location of these signs, c. After take-off, if not included in the pre take-off briefing:	

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
	i. on flights where smoking is permitted, when and where smoking is permitted on board the aircraft, and ii. ….	
NCC.OP.180 Meteorological conditions		
(a) The pilot-in-command shall only commence or continue a VFR flight if the latest available meteorological information indicates that the weather conditions along the route and at the intended destination at the estimated time of use will be at or above the applicable VFR operating minima.	**6.2.2 VFR FLIGHT** A flight, to be conducted in accordance with visual flight rules shall not be commenced unless available weather information indicates that the meteorological conditions along the route, or that part of the route to be flown under the visual flight rules, will permit flight under visual flight rules.	
(b) The pilot-in-command shall only commence or continue an IFR flight towards the planned destination aerodrome if the latest available meteorological information indicates that, at the estimated time of arrival, the weather conditions at the destination or at least one destination alternate aerodrome are at or above the applicable aerodrome operating minima.	6.4.4 A flight shall not be continued towards the aerodrome or heliport of intended landing unless the latest available meteorological information indicates that conditions at that aerodrome, or heliport, or at least one destination alternate aerodrome or heliport, will, at the estimated time of arrival, be at or above the specified aerodrome or heliport, operating minima.	
(c) If a flight contains VFR and IFR segments, the meteorological information referred to in (a) and (b) shall be applicable as far as relevant.		Not addressed in IS-BAO. Operators must ensure that the specific EASA requirements are met.

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.OP.185 Ice and other contaminants — ground procedures		
(a) The operator shall establish procedures to be followed when ground de-icing and anti-icing and related inspections of the aircraft are necessary to allow the safe operation of the aircraft. (b) The pilot-in-command shall only commence take-off if the aircraft is clear of any deposit that might adversely affect the performance or controllability of the aircraft, except as permitted under the procedures referred to in (a) and in accordance with the AFM.	**6.2.10 SURFACE CONTAMINATION** An operator shall develop procedures to ensure that an aircraft does not take off or attempt to take off, that has frost, ice, or snow adhering to any critical surface except that take-off may be made with frost under the wing in the area of the fuel tanks if such operations are conducted in accordance with the aircraft manufactures instructions and are authorized by the civil aviation authority.	
NCC.OP.190 Ice and other contaminants — flight procedures		
(a) The operator shall establish procedures for flights in expected or actual icing conditions. (b) The pilot-in-command shall only commence a flight or intentionally fly into expected or actual icing conditions if the aircraft is certified and equipped to cope with such conditions as referred to in 2.a.5 of Annex IV to Regulation (EC) No 216/2008.	6.4.7 A flight to be operated in known or expected icing conditions shall not be commenced unless the aircraft is certificated and equipped to cope with such conditions.	
(c) If icing exceeds the intensity of icing for which the aircraft is certified or if an aircraft not certified for flight in known icing conditions encounters icing, the pilot-in-command shall exit the icing conditions without delay, by a change of level and/or route, and if necessary by declaring an emergency to ATC.	Included in the GCOM as guidance material.	Operators must ensure that the specific EASA requirements are met.
NCC.OP.195 Take-off conditions		
Before commencing take-off, the pilot-in-command shall be satisfied that: (a) according to the information available, the weather at the aerodrome or operating site and the condition of the runway or FATO intended to be used would not prevent a safe take-off and departure; and (b) applicable aerodrome operating minima will be complied with.	Included in the GCOM as guidance material.	Operators must ensure that the specific EASA requirements are met.

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.OP.200 Simulated abnormal situations in flight		
(a) The pilot-in-command shall, when carrying passengers or cargo, not simulate: (1) situations that require the application of abnormal or emergency procedures; or (2) flight in instrument meteorological conditions (IMC). (b) Notwithstanding (a), when training flights are conducted by an approved training organisation, such situations may be simulated with student pilots on-board.	5.1.4 No emergency or abnormal situations shall be simulated during flight when passengers are being carried.	
NCC.OP.205 In-flight fuel management		
(a) The operator shall establish a procedure to ensure that in-flight fuel checks and fuel management are performed. (b) The pilot-in-command shall check at regular intervals that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to a weather-permissible aerodrome or operating site and the planned reserve fuel as required by NCC.OP.130 or NCC.OP.131.	**6.2.5A FUEL REQUIREMENTS (AEROPLANES)** c. The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining upon landing.	
NCC.OP.210 Use of supplemental oxygen		
The pilot-in-command shall ensure that he/she and flight crew members engaged in performing duties essential to the safe operation of an aircraft in flight use supplemental oxygen continuously whenever the cabin altitude exceeds 10 000 ft for a period of more than 30 minutes and whenever the cabin altitude exceeds 13 000 ft.	**6.10 USE OF OXYGEN** 6.10.1 Where an aircraft is operated at cabin-pressure-altitudes above 10,000 ft. (700 hPa) but not exceeding 13,000 ft. (620 hPa) each crew member shall wear an oxygen mask and use supplemental oxygen for any part of the flight at those altitudes that is more than 30 minutes in duration. 6.10.2 Where an aircraft is operated at cabin-pressure-altitudes above 13,000 ft. (620 hPa) each person on board the aircraft shall wear an oxygen mask and use	

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	supplemental oxygen for the duration of the flight at those altitudes. 6.10.3 The pilot at the flight controls of an aircraft shall use an oxygen mask if: a. the aircraft is not equipped with quick-donning oxygen masks, and b. it is operated at or above FL 250. 6.10.4 *It is recommended that the pilot at the flight controls of an aircraft shall use an oxygen mask if:* *a. the aircraft is operated above FL 410, or* *b. if one pilot leaves the flight deck for any reason above FL 350.*	
NCC.OP.215 Ground proximity detection		
When undue proximity to the ground is detected by a flight crew member or by a ground proximity warning system, the pilot flying shall take corrective action immediately in order to establish safe flight conditions.	Included in the GCOM as guidance material.	Operators must ensure that the specific EASA requirements are met.
NCC.OP.220 Airborne collision avoidance system (ACAS)		
The operator shall establish operational procedures and training programs to ensure that when ACAS is installed and serviceable, it shall be used in accordance with Regulation (EU) No 1332/2011[8].	Included in the GCOM as guidance material.	Operators must ensure that the specific EASA requirements are met.
NCC.OP.225 Approach and landing conditions		
Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the runway or FATO intended to be used would not prevent a safe approach, landing or missed approach.	Included in the GCOM as guidance material.	Operators must ensure that the specific EASA requirements are met.

[8] Regulation (EU) No 1332/2011 laying down common airspace usage requirements and operating procedures for airborne collision avoidance, OJ L 336 , 20.12.2011 p. 20.

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.OP.230 Commencement and continuation of approach		
(a) The pilot-in-command may commence an instrument approach regardless of the reported runway visual range/visibility (RVR/VIS). (b) If the reported RVR/VIS is less than the applicable minimum the approach shall not be continued: (1) below 1 000 ft above the aerodrome; or (2) into the final approach segment in the case where the decision altitude/height (DA/H) or minimum descent altitude/height (MDA/H) is more than 1 000 ft above the aerodrome. (c) Where the RVR is not available, RVR values may be derived by converting the reported visibility. (d) If, after passing 1 000 ft above the aerodrome, the reported RVR/VIS falls below the applicable minimum, the approach may be continued to DA/H or MDA/H. (e) The approach may be continued below DA/H or MDA/H and the landing may be completed provided that the visual reference adequate for the type of approach operation and for the intended runway is established at the DA/H or MDA/H and is maintained. (f) The touchdown zone RVR shall always be controlling.	**6.4 WEATHER MINIMA** 6.4.4 A flight shall not be continued towards the aerodrome or heliport of intended landing unless the latest available meteorological information indicates that conditions at that aerodrome, or heliport, or at least one destination alternate aerodrome or heliport, will, at the estimated time of arrival, be at or above the specified aerodrome or heliport, operating minima. 6.4.5 An aircraft shall not continue its approach-to-land beyond a point at which the limits of the aerodrome or heliport, operating minima would be infringed.	
SUBPART C - AIRCRAFT PERFORMANCE AND OPERATING LIMITATIONS		
NCC.POL.100 Operating limitations — all aircraft		
(a) During any phase of operation, the loading, the mass and the centre of gravity (CG) position of the aircraft shall comply with any limitation specified in the AFM, or the operations manual, if more restrictive. (b) Placards, listings, instrument markings, or combinations thereof, containing those operating limitations prescribed by the AFM for	6.3.2 The operational control system shall also include procedures for ensuring that: a. all operating requirements specified in this standard have been met b. the aircraft is operated within weight/mass and balance	

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
visual presentation, shall be displayed in the aircraft.	limits,	
NCC.POL.105 Mass and balance, loading		
(a) The operator shall establish the mass and the CG of any aircraft by actual weighing prior to initial entry into service. The accumulated effects of modifications and repairs on the mass and balance shall be accounted for and properly documented. Aircraft shall be reweighed if the effect of modifications on the mass and balance is not accurately known. (b) The weighing shall be accomplished by the manufacturer of the aircraft or by an approved maintenance organisation. (c) The operator shall determine the mass of all operating items and crew members included in the aircraft dry operating mass by actual weighing, including any crew baggage, or by using standard masses. The influence of their position on the aircraft's CG shall be determined. When using standard masses the following mass values for crew members shall be used to determine the dry operating mass: (1) 85 kg, including hand baggage, for flight crew/technical crew members; and (2) 75 kg for cabin crew members. (d) The operator shall establish procedures to enable the pilot-in-command to determine the mass of the traffic load, including any ballast, by: (1) actual weighing; (2) determining the mass of the traffic load in accordance with standard passenger and baggage masses; or (3) calculating passenger mass on the basis of a statement by, or on behalf of, each passenger and adding to it a predetermined mass to account for hand baggage and clothing, when the number of passenger seats available on the aircraft is:	6.3.2 The operational control system shall also include procedures for ensuring that: a. all operating requirements specified in this standard have been met b. the aircraft is operated within weight/mass and balance limits, 4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the safety of all crew members, passengers and cargo on board. Specific duties and responsibilities shall include: … g. determining the aircraft weight/mass and balance limits, … l. operating the aircraft in accordance with operator procedures and aircraft limitations,	

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(i) less than 10 for aeroplanes; or

(ii) less than six for helicopters.

(e) When using standard masses the following mass values shall be used:

(1) for passengers, those in Tables 1 and 2, where hand baggage and the mass of any infant carried by an adult on one passenger seat are included:

Table 1: Standard masses for passengers — aircraft with a total number of passenger seats of 20 or more

Passenger seats:	20 and more		30 and more
	Male	Female	All adult
Adults	88 kg	70 kg	84 kg
Children	35 kg	35 kg	35 kg

Table 2: Standard masses for passengers — aircraft with a total number of passenger seats of 19 or less

Passenger seats	1 – 5	6 – 9	10 – 19
Male	104 kg	96 kg	92 kg
Female	86 kg	78 kg	74 kg
Children	35 kg	35 kg	35 kg

(2) for baggage:

(i) for aeroplanes, when the total number of passenger seats available on the aeroplane is 20 or more, standard mass values for checked baggage in Table 3;

Table 3: Standard masses for baggage — aeroplanes with a total number of passenger seats of 20 or more

Type of flight	Baggage standard mass
Domestic	11 kg
Within the European region	13 kg

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Intercontinental: 15 kg All other: 13 kg (ii) for helicopters, when the total number of passenger seats available on the helicopters is 20 or more, the standard mass value for checked baggage of 13 kg;		
(f) For aircraft with 19 passenger seats or less, the actual mass of checked baggage shall be determined: (1) by weighing; or (2) by calculation on the basis of a statement by, or on behalf of, each passenger. Where this is impractical, a minimum standard mass of 13 kg shall be used.	6.3.2 The operational control system shall also include procedures for ensuring that: a. all operating requirements specified in this standard have been met b. the aircraft is operated within weight/mass and balance limits,	
(g) The operator shall establish procedures to enable the pilot-in-command to determine the mass of the fuel load by using the actual density or, if not known, the density calculated in accordance with a method specified in the operations manual.	4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the safety of all crew members, passengers and cargo on board. Specific duties and responsibilities shall include: … g. determining the aircraft weight/mass and balance limits, … l. operating the aircraft in accordance with operator procedures and aircraft limitations,	
(h) The pilot-in-command shall ensure that the loading of: (1) the aircraft is performed under the supervision of qualified personnel; and (2) traffic load is consistent with the data used for the calculation of the aircraft mass and balance.		
(i) The operator shall establish procedures to enable the pilot-in-command to comply with additional structural limits such as the floor strength limitations, the maximum load per running metre, the maximum mass per cargo compartment and the maximum seating limit.		
(j) The operator shall specify, in the operations manual, the principles and methods involved in the loading and in the mass and balance system that meet the requirements contained in (a) to (i). This system shall cover all types of intended operations.		

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.POL.110 Mass and balance data and documentation		
(a) The operator shall establish mass and balance data and produce mass and balance documentation prior to each flight specifying the load and its distribution in such a way that the mass and balance limits of the aircraft are not exceeded. The mass and balance documentation shall contain the following information: (1) aircraft registration and type, (2) flight identification, number and date, as applicable, (3) name of the pilot-in-command;, (4) name of the person who prepared the document, (5) dry operating mass and the corresponding CG of the aircraft, (6) mass of the fuel at take-off and the mass of trip fuel, (7) mass of consumables other than fuel, if applicable, (8) load components including passengers, baggage, freight and ballast, (9) take-off mass, landing mass and zero fuel mass, (10) applicable aircraft CG positions, and (11) the limiting mass and CG values. (b) Where mass and balance data and documentation are generated by a computerised mass and balance system, the operator shall verify the integrity of the output data. (c) When the loading of the aircraft is not supervised by the pilot-in-command, the person supervising the loading of the aircraft shall confirm by hand signature or equivalent that the load and its distribution are in accordance with the mass and balance documentation established by the pilot-in-command. The pilot-in-command shall indicate his/her acceptance by hand signature or equivalent.	Mass and balance procedures are included in the GCOM as guidance material.	Operators must ensure that the specific EASA requirements are met.

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
(d) The operator shall specify procedures for last minute changes to the load to ensure that: (1) any last minute change after the completion of the mass and balance documentation is entered in the flight planning documents containing the mass and balance documentation; (2) the maximum last minute change allowed in passenger numbers or hold load is specified; and (3) new mass and balance documentation is prepared if this maximum number is exceeded.		
NCC.POL.111 Mass and balance data and documentation — alleviations		
Notwithstanding NCC.POL.110 (a)(5), the CG position may not need to be on the mass and balance documentation, if the load distribution is in accordance with a pre-calculated balance table or if it can be shown that for the planned operations a correct balance can be ensured, whatever the real load is.	Mass and balance procedures are included in the GCOM as guidance material.	Operators must ensure that the specific EASA requirements are met.

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.POL.115 Performance — general		
The pilot-in-command shall only operate the aircraft if the performance is adequate to comply with the applicable rules of the air and any other restrictions applicable to the flight, the airspace or the aerodromes or operating sites used, taking into account the charting accuracy of any charts and maps used.	**6.2.8 Aircraft Performance** In applying the Standards of this section, account shall be taken of all factors that significantly affect the performance of the aircraft (such as: mass, operating procedures, the pressure altitude appropriate to the elevation of the aerodrome or heliport, temperature, wind and considerations such as:. a. for landplanes - runway gradient and condition of runway, i.e. presence of slush, water and/or ice, b. for seaplanes - water surface condition, and c. for helicopters sand, gravel, snow or ice on the operating surface. Such factors shall be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the aircraft is being operated. 6.2.8.1 An aircraft shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual. 6.2.8.2 The pilot-in-command shall determine that aircraft performance will permit the take-off and departure to be carried out safely.	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.POL.120 Take-off mass limitations — aeroplanes		
The operator shall ensure that: (a) the mass of the aeroplane at the start of take-off shall not exceed the mass limitations: (1) at take-off as required in NCC.POL.125; (2) en-route with one engine inoperative (OEI) as required in NCC.POL.130; and (3) at landing as required in NCC.POL.135, allowing for expected reductions in mass as the flight proceeds and for fuel jettisoning; (b) the mass at the start of take-off shall never exceed the maximum take-off mass specified in the AFM for the pressure altitude appropriate to the elevation of the aerodrome or operating site, and if used as a parameter to determine the maximum take-off mass, any other local atmospheric condition; and (c) the estimated mass for the expected time of landing at the aerodrome or operating site of intended landing and at any destination alternate aerodrome shall never exceed the maximum landing mass specified in the AFM for the pressure altitude appropriate to the elevation of those aerodromes or operating sites, and if used as a parameter to determine the maximum landing mass, any other local atmospheric condition.	6.2.8.3.A *Aeroplanes* - All multi-engine turbojet-powered aeroplanes or those with a maximum takeoff mass exceeding 5 700 kg. shall conform to the following standards: a. **Take-off**. The aeroplane shall be able, in the event of a critical power-unit failing at any point in the take-off, either to discontinue the take-off and stop within either the accelerate-stop distance available or the runway available, or to continue the take-off and clear all obstacles along the flight path by an adequate margin until the aeroplane is in a position to comply with 6.2.8.3.b. *Note - "An adequate margin" referred to in this provision is illustrated by examples included in Attachment C to ICAO Annex 6, Part I.* i. In determining the length of the runway available, account shall be taken of the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.	
NCC.POL.125 Take-off — aeroplanes		
(a) When determining the maximum take-off mass, the pilot-in-command shall take the following into account: (1) the calculated take-off distance shall not exceed the take-off distance available with a clearway distance not exceeding half of the take-off run available; (2) the calculated take-off run shall not exceed the take-off run	See above	

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
available; (3) a single value of V_1 shall be used for the rejected and continued take-off, where a V_1 is specified in the AFM; and (4) on a wet or contaminated runway, the take-off mass shall not exceed that permitted for a take-off on a dry runway under the same conditions.		
(b) In the event of an engine failure during take-off, the pilot-in-command shall ensure that: (1) for the aeroplane where a V_1 is specified in the AFM, the aeroplane shall be able to discontinue the take-off and stop within the accelerate-stop distance available; and (2) for the aeroplane where a net take-off flight path is specified in the AFM, the aeroplane shall be able to continue the take-off and clear all obstacles along the flight path by an adequate margin until the aeroplane is in a position to comply with NCC.POL.130.	See above	
NCC.POL.130 En-route — one engine inoperative — aeroplanes		
The pilot-in-command shall ensure that in the event of an engine becoming inoperative at any point along the route, a multi-engined aeroplane shall be able to continue the flight to an adequate aerodrome or operating site without flying below the minimum obstacle clearance altitude at any point.	6.2.8.3.A *Aeroplanes* - All multi-engine turbojet-powered aeroplanes or those with a maximum takeoff mass exceeding 5 700 kg. shall conform to the following standards: b. **En route - one power-unit inoperative**. The aeroplane shall be able, in the event of the critical engine becoming inoperative at any point along the route or planned diversions from, to continue the flight to an aerodrome at which the Standard of 6.2.8.3.c. can be met, without flying below the minimum obstacle clearance altitude at any point.	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.POL.135 Landing — aeroplanes		
The pilot-in-command shall ensure that at any aerodrome or operating site, after clearing all obstacles in the approach path by a safe margin, the aeroplane shall be able to land and stop, or a seaplane to come to a satisfactorily low speed, within the landing distance available. Allowance shall be made for expected variations in the approach and landing techniques, if such allowance has not been made in the scheduling of performance data.	6.2.8.3.A *Aeroplanes* - All multi-engine turbojet-powered aeroplanes or those with a maximum takeoff mass exceeding 5 700 kg. shall conform to the following standards: c. **Landing**. The aeroplane shall, at the aerodrome of intended landing and at any alternate aerodrome, after clearing all obstacles in the approach path by a safe margin, be able to land, with assurance that it can come to a stop or, for a seaplane, to a satisfactorily low speed, within the landing distance available. Allowance shall be made for expected variations in the approach and landing techniques, if such allowance has not been made in the scheduling of performance data.	
SUBPART D - INSTRUMENTS, DATA AND EQUIPMENT		
SECTION 1 - AEROPLANES		
NCC.IDE.A.100 Instruments and equipment — general		
(a) Instruments and equipment required by this Subpart shall be approved in accordance with the applicable airworthiness requirements if they are: (1) used by the flight crew to control the flight path, to comply with NCC.IDE.A.245 and NCC.IDE.A.250; (2) used to comply with NCC.IDE.A.245; (3) used to comply with NCC.IDE.A.250; or (4) installed in the aeroplane. (b) The following items, when required by this Subpart, do not need an	**AIRCRAFT EQUIPMENT REQUIREMENTS** **8.1 General** 8.1.1 Aircraft shall be equipped in accordance with the requirements set out in ICAO Annex 6, Part II, or the applicable section of Annex 6 Part III, plus the requirements of this section, subject to any additional or more stringent requirements that may be imposed by the State of Registry or may be specified in State or Regional airspace rules. It is the responsibility of an	

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
equipment approval: (1) spare fuses, (2) independent portable lights, (3) an accurate time piece, (4) chart holder, (5) first-aid kits, (6) survival and signalling equipment, (7) sea anchor and equipment for mooring, and (8) child restraint device. (c) Instruments and equipment not required by this Subpart as well as any other equipment which is not required by other applicable Annexes, but is carried on a flight, shall comply with the following: (1) the information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply with Annex I to Regulation (EC) No 216/2008 or NCC.IDE.A.245 and NCC.IDE.A.250; and (2) the instruments and equipment shall not affect the airworthiness of the aeroplane, even in the case of failures or malfunction. (d) Instruments and equipment shall be readily operable or accessible from the station where the flight crew member that needs to use it is seated. (e) Those instruments that are used by a flight crew member shall be so arranged as to permit the flight crew member to see the indications readily from his/her station, with the minimum practicable deviation from the position and line of vision which he/she normally assumes when looking forward along the flight path. (f) All required emergency equipment shall be easily accessible for immediate use.	operator to ensure that the aircraft is equipped and certified in accordance with these requirements. 8.1.2 All equipment required must be approved or otherwise meet the technical specifications prescribed by the State of Registry.	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.IDE.A.105 Minimum equipment for flight		
A flight shall not be commenced when any of the aeroplane's instruments, items of equipment, or functions, required for the intended flight are inoperative or missing, unless: (a) the aeroplane is operated in accordance with the operator's minimum equipment list (MEL); (b) the operator is approved by the competent authority to operate the aeroplane within the constraints of the master minimum equipment list (MMEL); or (c) the aeroplane is subject to a permit to fly issued in accordance with the applicable airworthiness requirements.	4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the safety of all crew members, passengers and cargo on board. Specific duties and responsibilities shall include: a. …. i. ensuring that the aircraft is airworthy, duly registered and that the documentation and operational information specified in section 8.3.1 are onboard the aircraft. **8.15 MINIMUM EQUIPMENT LIST** 8.15.1 Where a master minimum equipment list (MMEL) is established for the aircraft type, the operator shall include in the operations manual a minimum equipment list (MEL) approved by the State of Registry of the aircraft which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. 8.15.2 Where an operator has developed a MEL, maintenance personnel and flight crews shall be trained in the use of it and a copy of the MEL shall be carried on the aircraft.	
NCC.IDE.A.110 Spare electrical fuses		
Aeroplanes shall be equipped with spare electrical fuses, of the ratings	See 8.1.1 above	

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
required for complete circuit protection, for replacement of those fuses that are allowed to be replaced in flight.		
NCC.IDE.A.115 Operating lights		
Aeroplanes operated at night shall be equipped with: (a) an anti-collision light system; (b) navigation/position lights; (c) a landing light; (d) lighting supplied from the aeroplane's electrical system to provide adequate illumination for all instruments and equipment essential to the safe operation of the aeroplane; (e) lighting supplied from the aeroplane's electrical system to provide illumination in all passenger compartments; (f) an independent portable light for each crew member station; and (g) lights to conform with the International Regulations for Preventing Collisions at Sea if the aeroplane is operated as a seaplane.	8.2.3 All aeroplanes when operated at night shall in addition to the equipment specified in 8.2.2, be equipped with: a. the lights required by ICAO Annex 2 for night operation; b. illumination for all flight instruments and associated equipment; c. lights in all passenger compartments; d. a flashlight for each crew member station; and e. a landing light.	
NCC.IDE.A.120 Operations under VFR — flight and navigational instruments and associated equipment		
(a) Aeroplanes operated under VFR by day shall be equipped with a means of measuring and displaying the following: (1) magnetic-heading, (2) time in hours, minutes and seconds, (3) pressure altitude, (4) indicated airspeed, (5) slip, and (6) Mach number whenever speed limitations are expressed in terms of Mach number.	8.2.1 All aeroplanes when operated VFR shall be equipped with a means of measuring and displaying a. magnetic heading; b. the time in hours, minutes and seconds; c. pressure altitude; and d. airspeed.	
(b) Aeroplanes operated under VMC over water and out of sight of the land, or under VMC at night, or in conditions where the aeroplane	8.2.2 All aeroplanes when operated IFR or when the aeroplane cannot be maintained in a desired attitude	

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
cannot be maintained in a desired flight path without reference to one or more additional instruments, shall be, in addition to (a), equipped with: (1) a means of measuring and displaying the following: (i) turn and slip, (ii) attitude, (iii) vertical speed, and (iv) stabilised heading, (2) a means of indicating when the supply of power to the gyroscopic instruments is not adequate; and (3) a means of preventing malfunction of the airspeed indicating system required in (a)(4) due to condensation or icing.	without reference to one or more flight instruments shall be equipped with a means of measuring and displaying: a. magnetic heading (standby compass); b. the time in hours, minutes and seconds; c. pressure altitude; d. indicated airspeed (which includes a means of preventing malfunctioning due to condensation or icing); e. turn and slip; f. aircraft attitude; g. stabilised heading; h. adequate supply of power to the stabilised instruments; i. outside temperature; j. vertical climb or descent; and k. in addition to the above requirements aeroplanes operated by two pilots in accordance with the instrument flight rules or when the aeroplane cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with two independent attitude measuring and display systems.	
(c) Whenever two pilots are required for the operation, aeroplanes shall be equipped with an additional separate means of displaying the following: (1) pressure altitude, (2) indicated airspeed, (3) slip, or turn and slip, as applicable, (4) attitude, if applicable,	See 8.1.1 above	Operators must ensure that the specific EASA requirements are met.

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
(5) vertical speed, if applicable, (6) stabilised heading, if applicable, and (7) Mach number whenever speed limitations are expressed in terms of Mach number, if applicable.		
NCC.IDE.A.125 Operations under IFR — flight and navigational instruments and associated equipment		
Aeroplanes operated under IFR shall be equipped with: (a) a means of measuring and displaying the following: (1) magnetic heading, (2) time in hours, minutes and seconds, (3) pressure altitude, (4) indicated airspeed, (5) vertical speed, (6) turn and slip, (7) attitude, (8) stabilised heading, (9) outside air temperature, and (10) Mach number whenever speed limitations are expressed in terms of Mach number;	8.2.2 All aeroplanes when operated IFR or when the aeroplane cannot be maintained in a desired attitude without reference to one or more flight instruments shall be equipped with a means of measuring and displaying: a. magnetic heading (standby compass); b. the time in hours, minutes and seconds; c. pressure altitude; d. indicated airspeed (which includes a means of preventing malfunctioning due to condensation or icing); e. turn and slip; f. aircraft attitude; g. stabilised heading; h. adequate supply of power to the stabilised instruments; i. outside temperature; and j. vertical climb or descent.	
(b) a means of indicating when the supply of power to the gyroscopic instruments is not adequate;	See 8.2.2.h above	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
(c) whenever two pilots are required for the operation, an additional separate means of displaying for the second pilot: (1) pressure altitude, (2) indicated airspeed, (3) vertical speed, (4) turn and slip, (5) attitude, (6) stabilised heading, and (7) Mach number whenever speed limitations are expressed in terms of Mach number, if applicable;	See 8.1.1 above k. in addition to the above requirements aeroplanes operated by two pilots in accordance with the instrument flight rules or when the aeroplane cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with two independent attitude measuring and display systems.	Operators must ensure that the specific EASA requirements are met.
(d) a means for preventing malfunction of the airspeed indicating systems required in (a)(4) and (c)(2) due to condensation or icing;	See 8.2.2.d above	
(e) an alternate source of static pressure;	Not specified in the IS-BAO.	Operators must ensure that the specific EASA requirement is met.
(f) a chart holder in an easily readable position that can be illuminated for night operations;	Not specified in the IS-BAO.	Operators must ensure that the specific EASA requirement is met.
(g) a second independent means of measuring and displaying altitude; and	**8.2A INSTRUMENTS AND ASSOCIATED EQUIPMENT - AEROPLANES** 8.2.2 (k) in addition to the above requirements aeroplanes operated by two pilots in accordance with the instrument flight rules or when the aeroplane cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with two independent attitude measuring and display systems.	
(h) an emergency power supply, independent of the main electrical	**8.2.4 Emergency power supply for electrically operated**	

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
generating system, for the purpose of operating and illuminating an attitude indicating system for a minimum period of 30 minutes. The emergency power supply shall be automatically operative after the total failure of the main electrical generating system and clear indication shall be given on the instrument that the attitude indicator is being operated by emergency power.	**attitude indicating instruments** Aeroplanes of a maximum certificated take-off mass of over 5 700 kg newly introduced into service after 1 January 1975 shall be fitted with an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating, for a minimum period of 30 minutes, an attitude indicating instrument (artificial horizon), clearly visible to the pilot-in-command. The emergency power supply shall be automatically operative after the total failure of the main electrical generating system and clear indication shall be given on the instrument panel that the attitude indicator(s) is being operated by emergency power.	
NCC.IDE.A.130 Additional equipment for single-pilot operations under IFR		
Aeroplanes operated under IFR with a single pilot shall be equipped with an autopilot with at least altitude hold and heading mode.	See 8.1.1 above	Operators must ensure that the specific EASA requirement is met.
NCC.IDE.A.135 Terrain awareness warning system (TAWS)		
Turbine-powered aeroplanes with a maximum certified take-off mass (MCTOM) of more than 5 700 kg or a maximum operational passenger seating configuration (MOPSC) of more than nine shall be equipped with a TAWS that meets the requirements for: (a) class A equipment, as specified in an acceptable standard, in the case of aeroplanes for which the individual certificate of airworthiness (CofA) was first issued after 1 January 2011; or (b) class B equipment, as specified in an acceptable standard, in the case of aeroplanes for which the individual CofA was first issued on or before 1 January 2011.	8.11.1 All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers shall be equipped with a ground proximity warning system which has a forward-looking terrain avoidance function. 8.11.2 A ground proximity warning system shall provide automatically a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth's surface. 8.11.3 A ground proximity warning system shall provide, as a	

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
	minimum, warnings of at least the following circumstances: a. excessive descent rate; b. excessive altitude loss after take-off or go-around; and c. unsafe terrain clearance. 8.11.4 GPWS Data Management a. Operators shall have a process to ensure that the data base for ground proximity warning systems with predictive terrain hazard warning is kept current. b. Pilots shall be trained in use of the system.	
NCC.IDE.A.140 Airborne collision avoidance system (ACAS)		
Unless otherwise provided for by Regulation (EU) No 1332/2011, turbine-powered aeroplanes with an MCTOM of more than 5 700 kg or an MOPSC of more than 19 shall be equipped with ACAS II.	8.12.1 All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 15 000 kg or authorized to carry more than 30 passengers, for which the individual airworthiness certificate is first issued after 1 January 2007, shall be equipped with an airborne collision avoidance system (ACAS II). *8.12.2 It is recommended that all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 15 000 kg, or authorized to carry more than 30 passengers, for which the individual airworthiness certificate is first issued after 24 November 2005, be equipped with an airborne collision avoidance system (ACAS II).* *8.12.3 It is recommended that all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg, or authorized to carry more than 19 passengers, for which the individual airworthiness*	

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
	certificate is first issued after 1 January 2008, be equipped with an airborne collision avoidance system (ACAS II).	
NCC.IDE.A.145 Airborne weather detecting equipment		
The following aeroplanes shall be equipped with airborne weather detecting equipment when operated at night or in IMC in areas where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather detecting equipment, may be expected to exist along the route: (a) pressurised aeroplanes; (b) non-pressurised aeroplanes with an MCTOM of more than 5 700 kg; and (c) non-pressurised aeroplanes with an MOPSC of more than nine.	8.9.2.A Pressurized aeroplanes when carrying passengers shall be equipped with operative weather-detecting equipment capable of detecting thunderstorms whenever such aeroplanes are being operated in areas where such conditions may be expected to exist along the route either at night or under instrument meteorological conditions.	
NCC.IDE.A.150 Additional equipment for operations in icing conditions at night		
(a) Aeroplanes operated in expected or actual icing conditions at night shall be equipped with a means to illuminate or detect the formation of ice. (b) The means to illuminate the formation of ice shall not cause glare or reflection that would handicap flight crew members in the performance of their duties.	See 8.1.1 above	Operators must ensure that the specific EASA requirement is met.
NCC.IDE.A.155 Flight crew interphone system		
Aeroplanes operated by more than one flight crew member shall be equipped with a flight crew interphone system, including headsets and microphones for use by all flight crew members.	**6.17 MICROPHONES AND HEADSETS** An operator shall ensure that all flight crew members of: a. large and turbojet aircraft who are required to be on flight deck duty communicate through boom microphones below the transition level/altitude. See section 8.16.4.	

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.IDE.A.160 Cockpit voice recorder		
(a) The following aeroplanes shall be equipped with a CVR: (1) aeroplanes with an MCTOM of more than 27 000 kg and first issued with an individual CofA on or after 1 January 2016; and (2) aeroplanes with an MCTOM of more than 2 250 kg: (i) certified for operation with a minimum crew of at least two pilots; (i) equipped with turbojet engine(s) or more than one turboprop engine; and (iii) for which a type certificate is first issued on or after 1 January 2016. (b) The CVR shall be capable of retaining data recorded during at least the preceding 2 hours. (c) The CVR shall record with reference to a timescale: (1) voice communications transmitted from or received in the flight crew compartment by radio; (2) flight crew members' voice communications using the interphone system and the public address system, if installed; (3) the aural environment of the flight crew compartment, including, without interruption, the audio signals received from each boom and mask microphone in use; and (4) voice or audio signals identifying navigation or approach aids introduced into a headset or speaker. (d) The CVR shall start automatically to record prior to the aeroplane moving under its own power and shall continue to record until the termination of the flight when the aeroplane is no longer capable of moving under its own power.	8.14.4 All aeroplanes for which the individual certificate of airworthiness was first issued on or after January 1, 1987 and that have a maximum take-off mass over 27 000 kg shall be equipped with a cockpit voice recorder. 8.14.5 *It is recommended that all aeroplanes that have a maximum certificated take-off mass of more than 5 700 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 1987, should be equipped with a cockpit voice recorder.*	Operators must ensure that the specific EASA requirement is met.

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(e) In addition to (d), depending on the availability of electrical power, the CVR shall start to record as early as possible during the cockpit checks prior to engine start at the beginning of the flight until the cockpit checks immediately following engine shutdown at the end of the flight. (f) The CVR shall have a device to assist in locating it in water.		
NCC.IDE.A.165 Flight data recorder		
(a) Aeroplanes with an MCTOM of more than 5 700 kg and first issued with an individual CofA on or after 1 January 2016 shall be equipped with an FDR that uses a digital method of recording and storing data and for which a method of readily retrieving that data from the storage medium is available. (b) The FDR shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power, configuration and operation and be capable of retaining data recorded during at least the preceding 25 hours. (c) Data shall be obtained from aeroplane sources that enable accurate correlation with information displayed to the flight crew. (d) The FDR shall start automatically to record the data prior to the aeroplane being capable of moving under its own power and shall stop automatically after the aeroplane is incapable of moving under its own power. (e) The FDR shall have a device to assist in locating it in water.	8.14.1 All aeroplanes for which the individual certificate of airworthiness was first issued on or after January 1, 1989 and that have a maximum certificated take-off mass over 27 000 kg, shall be equipped with a Type I flight data recorder. 8.14.2 All aeroplanes for which the individual certificate of airworthiness was first issued on or after January 1, 2005 that have a maximum certificated take-off mass of over 5 700 kg shall be equipped with a Type IA flight data recorder. 8.14.3 *It is recommended that all aircraft for which the individual certificate of airworthiness was first issued on or after January 1, 1989 and that have a maximum certificated take-off mass over 5 700 kg should be equipped with a Type II flight data recorder.*	Operators must ensure that the specific EASA requirement is met.
NCC.IDE.A.170 Data link recording		
(a) Aeroplanes first issued with an individual CofA on or after 1 January 2016 that have the capability to operate data link communications and are required to be equipped with a CVR shall record on a recorder, where applicable: (1) data link communication messages related to ATS		Will be introduced into the IS-BAO before 2016. Operators must ensure that the specific EASA requirement is met.

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
communications to and from the aeroplane, including messages applying to the following applications: (i) data link initiation; (ii) controller–pilot communication; (iii) addressed surveillance; (iv) flight information; (v) as far as is practicable, given the architecture of the system, aircraft broadcast surveillance; (vi) as far as is practicable, given the architecture of the system, aircraft operational control data; and (vii) as far as is practicable, given the architecture of the system, graphics; (2) information that enables correlation to any associated records related to data link communications and stored separately from the aeroplane; and (3) information on the time and priority of data link communications messages, taking into account the system's architecture. (b) The recorder shall use a digital method of recording and storing data and information and a method for readily retrieving that data. The recording method shall allow the data to match the data recorded on the ground. (c) The recorder shall be capable of retaining data recorded for at least the same duration as set out for CVRs in NCC.IDE.A.160. (d) The recorder shall have a device to assist in locating it in water. (e) The requirements applicable to the start and stop logic of the recorder are the same as the requirements applicable to the start and		

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
stop logic of the CVR contained in NCC.IDE.A.160 (d) and (e).		
NCC.IDE.A.175 Flight data and cockpit voice combination recorder		
Compliance with CVR requirements and FDR requirements may be achieved by: (a) one flight data and cockpit voice combination recorder if the aeroplane has to be equipped with a CVR or an FDR; or (b) two flight data and cockpit voice combination recorders if the aeroplane has to be equipped with a CVR and an FDR.	**8.14A FLIGHT DATA RECORDERS AND COCKPIT VOICE RECORDERS - AEROPLANES** *Note 2: All aeroplanes of a maximum certificated take-off mass over 5 700 kg, required to be equipped with an FDR and a CVR, may alternatively be equipped with two combination recorders (FDR/CVR).*	
NCC.IDE.A.180 Seats, seat safety belts, restraint systems and child restraint devices		
(a) Aeroplanes shall be equipped with: (1) a seat or berth for each person on board who is aged 24 months or more; (2) a seat belt on each passenger seat and restraining belts for each berth; (3) a child restraint device (CRD) for each person on board younger than 24 months; (4) a seat belt with upper torso restraint system incorporating a device that will automatically restrain the occupant's torso in the event of rapid deceleration: (i) on each flight crew seat and on any seat alongside a pilot's seat; and (ii) on each observer's seat located in the flight crew compartment; and (5) a seat belt with upper torso restraint system on the seats for the minimum required cabin crew, in the case of aeroplanes first	8.4.1 Except as provided in 8.4.2.H below, aircraft shall be equipped with: a. a seat for each occupant of the aircraft, except for infants under an age specified by the State of Registry; b. a safety belt, having a metal-to-metal latching device, for each passenger (other than infants); c. a safety/shoulder harness for each flight crew member and any other person occupying a flight deck seat or a sideways facing seat; and d. a safety/shoulder harness for each cabin crew member seat that is not a regular passenger seat.	

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issued with an individual CofA after 31 December 1980. (b) A seat belt with upper torso restraint system shall: (1) have a single point release; and (2) on flight crew seats, on any seat alongside a pilot's seat and on the seats for the minimum required cabin crew, include two shoulder straps and a seat belt that may be used independently.		
NCC.IDE.A.185 Fasten seat belt and no smoking signs		
Aeroplanes in which not all passenger seats are visible from the flight crew seat(s) shall be equipped with a means of indicating to all passengers and cabin crew when seat belts shall be fastened and when smoking is not allowed.	**8.5 EMERGENCY EQUIPMENT - GENERAL** 8.5.4 An aeroplane shall be equipped with means of ensuring that the following information and instructions are conveyed to passengers: a. when seat belts are to be fastened; b. when and how oxygen equipment is to be used if the carriage of oxygen is required; c. restrictions on smoking; d. location and use of life jackets or equivalent individual flotation devices where their carriage is required; e. location of emergency equipment; and f. location and method of opening emergency exits.	
NCC.IDE.A.190 First-aid kit		
(a) Aeroplanes shall be equipped with first-aid kits in accordance with Table 1. **Table 1: Number of first-aid kits required** **Number of passenger seats installed** / **Number of first-aid kits required** 0 – 100 / 1 101 – 200 / 2	8.5.1 All aircraft shall be equipped with: a. first aid kit; b. fire extinguishers for use in the crew, passenger and cargo compartments; and c. for aircraft with a seating configuration of more than 19 passengers, a crash axe.	

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201 – 300	3
301 – 400	4
401 – 500	5
501 or more	6

(b) First-aid kits shall be:

(1) readily accessible for use; and

(2) kept up-to-date.

NCC.IDE.A.195 Supplemental oxygen — pressurised aeroplanes

(a) Pressurised aeroplanes operated at flight altitudes for which the oxygen supply is required in accordance with (b) shall be equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the required oxygen supplies.

(b) Pressurised aeroplanes operated above flight altitudes at which the pressure altitude in the passenger compartments is above 10 000 ft shall carry enough breathing oxygen to supply:

(1) all crew members and:

(i) 100 % of the passengers for any period when the cabin pressure altitude exceeds 15 000 ft, but in no case less than 10 minutes' supply;

(ii) at least 30 % of the passengers, for any period when, in the event of loss of pressurisation and taking into account the circumstances of the flight, the pressure altitude in the passenger compartment will be between 14 000 ft and 15 000 ft; and

(iii) at least 10 % of the passengers for any period in excess of 30 minutes when the pressure altitude in the passenger compartment will be between 10 000 ft and

8.8.1.A All aeroplanes intended to be operated at altitudes where the use of oxygen has been prescribed, shall be equipped with sufficient oxygen storage and dispensing apparatus capable of storing and dispensing the oxygen supplies required under section 6.2.6.

6.2.6 Oxygen Supply Requirements

The operator shall have a procedure to ensure that a flight is not commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all crew members and passengers in accordance with the national regulations of the State of Registry.

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14 000 ft; (2) all the occupants of the passenger compartment for no less than 10 minutes, in the case of aeroplanes operated at pressure altitudes above 25 000 ft, or operated below that altitude, but under conditions that will not allow them to descend safely to a pressure altitude of 13 000 ft within 4 minutes.		
(c) Pressurised aeroplanes operated at flight altitudes above 25 000 ft shall, in addition, be equipped with: (1) a device to provide a warning indication to the flight crew of any loss of pressurisation; and (2) quick donning masks for flight crew members;	See 8.1.1 and 6.2.6 above	
NCC.IDE.A.200 Supplemental oxygen — non-pressurised aeroplanes		
(a) Non-pressurised aeroplanes operated at flight altitudes when the oxygen supply is required in accordance with (b) shall be equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the required oxygen supplies. (b) Non-pressurised aeroplanes operated above flight altitudes at which the pressure altitude in the passenger compartments is above 10 000 ft shall carry enough breathing oxygen to supply: (1) all crew members and at least 10 % of the passengers for any period in excess of 30 minutes when the pressure altitude in the passenger compartment will be between 10 000 ft and 13 000 ft; and (2) all crew members and passengers for any period that the pressure altitude in the passenger compartments will be above 13 000 ft.	8.8.1.A All aeroplanes intended to be operated at altitudes where the use of oxygen has been prescribed, shall be equipped with sufficient oxygen storage and dispensing apparatus capable of storing and dispensing the oxygen supplies required under section 6.2.6. Also see 6.2.6 above.	
NCC.IDE.A.205 Hand fire extinguishers		
(a) Aeroplanes shall be equipped with at least one hand fire extinguisher:	8.5.1 All aircraft shall be equipped with: a. first aid kit;	

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(1) in the flight crew compartment; and (2) in each passenger compartment that is separate from the flight crew compartment, except if the compartment is readily accessible to the flight crew. (b) The type and quantity of extinguishing agent for the required fire extinguishers shall be suitable for the type of fire likely to occur in the compartment where the extinguisher is intended to be used and to minimise the hazard of toxic gas concentration in compartments occupied by persons.	b. fire extinguishers for use in the crew, passenger and cargo compartments; and c. for aircraft with a seating configuration of more than 19 passengers, a crash axe.	
NCC.IDE.A.206 Crash axe and crowbar		
(a) Aeroplanes with an MCTOM of more than 5 700 kg or with an MOPSC of more than nine shall be equipped with at least one crash axe or crowbar located in the flight crew compartment. (b) In the case of aeroplanes with an MOPSC of more than 200, an additional crash axe or crowbar shall be installed in or near the rearmost galley area. (c) Crash axes and crowbars located in the passenger compartment shall not be visible to passengers.	See 8.5.1 above	
NCC.IDE.A.210 Marking of break-in points		
If areas of the aeroplane's fuselage suitable for break-in by rescue crews in an emergency are marked, such areas shall be marked as shown in Figure 1. **Figure 1: Marking of break-in points**		Operators must ensure that the specific EASA requirement is met.

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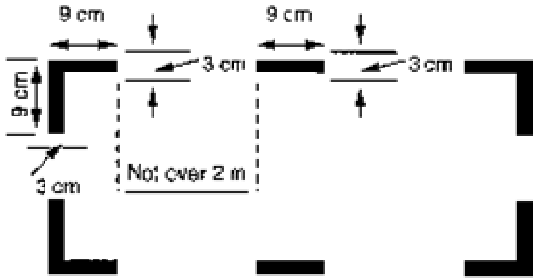		
NCC.IDE.A.215 Emergency locator transmitter (ELT)		
(a) Aeroplanes shall be equipped with: (1) an ELT of any type when first issued with an individual CofA on or before 1 July 2008; (2) an automatic ELT when first issued with an individual CofA after 1 July 2008. (b) ELTs of any type shall be capable of transmitting simultaneously on 121,5 MHz and 406 MHz.	**8.10.A ELT - Aeroplanes** 8.10.1 Except as provided in 8.10.2, all aeroplanes shall be equipped with at least one ELT of any type. 8.10.2 All aeroplanes for which the individual Certificate of Airworthiness was first issued after 1 July 2008 shall be equipped with at least one automatic ELT. 8.10.3 *It is recommended that all aircraft carry an automatic ELT.* 8.10.4 ELTs carried to satisfy the requirements of 8.10.1 and 8.10.2 shall be capable of operation on both 406 MHz and 121.5 MHz simultaneously in accordance with the relevant provisions of Annex 10, Volume III.	
NCC.IDE.A.220 Flight over water		
(a) The following aeroplanes shall be equipped with a life-jacket for each person on board or equivalent individual floatation device for	8.6.1 All aeroplanes operated on extended flights over water[9] shall be equipped with, at a minimum, one life jacket	

[9] ICAO Annex 6, Part II: A flight operated over water at a distance of more than 93 km (50 NM), or 30 minutes at normal cruising speed, whichever is the lesser, away from land suitable for making an emergency landing.

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each person on board younger than 24 months, stowed in a position that is readily accessible from the seat or berth of the person for whose use it is provided: (1) landplanes operated over water at a distance of more than 50 NM from land or taking off or landing at an aerodrome or operating site where, in the opinion of the pilot-in-command, the take-off or approach path is so disposed over water that there would be a likelihood of a ditching; and (2) seaplanes operated over water. (b) Each life-jacket or equivalent individual flotation device shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons. (c) Seaplanes operated over water shall be equipped with: (1) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the aeroplane on water, appropriate to its size, weight and handling characteristics; and (2) equipment for making the sound signals as prescribed in the International Regulations for Preventing Collisions at Sea, where applicable. (d) The pilot-in-command of an aeroplane operated at a distance away from land where an emergency landing is possible greater than that corresponding to 30 minutes at normal cruising speed or 50 NM, whichever is the lesser, shall determine the risks to survival of the occupants of the aeroplane in the event of a ditching, based on which he/she shall determine the carriage of: (1) equipment for making the distress signals; (2) life-rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency; and (3) life-saving equipment to provide the means of sustaining life,	or equivalent individual floatation device for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided. Each life jacket shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons. 8.6.2 The operator of an aeroplanes operated on an extended flight over water shall determine the risks to survival of the occupants of the aircraft in the event of ditching. The operator shall take into account the operating environment and conditions such as, but not limited to, sea state and sea and air temperatures, the distance from land suitable for making an emergency landing, and the availability of search and rescue facilities. Based upon the assessment of these risks, the operator shall, in addition to the equipment required in 8.6.1, ensure that the aircraft is appropriately equipped with: a. life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such lifesaving equipment, including means of sustaining life, as is appropriate to the flight to be undertaken; and b. equipment for signalling distress. *Note 1: When both VHF and HF communications equipment are required for the route and the aircraft has two VHF communications units, only one HF communications unit is required.*	

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as appropriate to the flight to be undertaken.		
NCC.IDE.A.230 Survival equipment		
(a) Aeroplanes operated over areas in which search and rescue would be especially difficult shall be equipped with: (1) signalling equipment to make the distress signals; (2) at least one survival ELT(S); and (3) additional survival equipment for the route to be flown taking account of the number of persons on board. (b) The additional survival equipment specified in (a)(3) does not need to be carried when the aeroplane: (1) remains within a distance from an area where search and rescue is not especially difficult corresponding to: (i) 120 minutes at one-engine-inoperative (OEI) cruising speed for aeroplanes capable of continuing the flight to an aerodrome with the critical engine(s) becoming inoperative at any point along the route or planned diversion routes; or (ii) 30 minutes at cruising speed for all other aeroplanes; or (2) remains within a distance no greater than that corresponding to 90 minutes at cruising speed from an area suitable for making an emergency landing, for aeroplanes certified in accordance with the applicable airworthiness standard.	8.7.1 For flights across land areas which have been designated by the State concerned as an area in which search and rescue would be especially difficult, aircraft shall be equipped with signalling devices and life-saving equipment (including means of sustaining life) as is appropriate to the area overflown. *Note 1: Information on any areas which a State has designated as an area in which search and rescue would be especially difficult should be included in the State's AIP. Links to State AIPs can be found through the ICAO GIS Portal at http://192.206.28.84/Website/AIPS_online.html. However, it is recommended that operators apply judgement when flying over remote areas where harsh environmental conditions may be encountered.* *Note 2: Guidance on appropriate equipment for the nature of the terrain and climate is available from most survival equipment providers.*	
NCC.IDE.A.240 Headset		
(a) Aeroplanes shall be equipped with a headset with a boom microphone or equivalent for each flight crew member at their assigned station in the flight crew compartment. (b) Aeroplanes operated under IFR or at night shall be equipped with a	8.16.4.A All turbojet-engined aeroplanes and those with a maximum takeoff mass exceeding 5 700 kg shall be equipped with a boom microphone at all flight crew stations.	

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transmit button on the manual pitch and roll control for each required flight crew member.		
NCC.IDE.A.245 Radio communication equipment		
(a) Aeroplanes operated under IFR or at night, or when required by the applicable airspace requirements, shall be equipped with radio communication equipment that, under normal radio propagating conditions, shall be capable of: (1) conducting two-way communication for aerodrome control purposes; (2) receiving meteorological information at any time during flight; (3) conducting two-way communication at any time during flight with those aeronautical stations and on those frequencies prescribed by the appropriate authority; and (4) providing for communication on the aeronautical emergency frequency 121.5 MHz. (b) When more than one communication equipment unit is required, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.	8.16.1 All aircraft shall be equipped with radio communication equipment to permit the pilot to conduct two-way communications on the appropriate aeronautical frequencies. When compliance with 8.16.1 requires that more than one communication equipment unit be provided, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.	
NCC.IDE.A.250 Navigation equipment		
(a) Aeroplanes shall be equipped with navigation equipment that will enable them to proceed in accordance with: (1) the ATS flight plan, if applicable; and (2) the applicable airspace requirements.	8.16.2 All aircraft shall be equipped with sufficient radio navigation equipment to receive radio signals from the transmitting facilities to be used and to permit the aircraft to navigate in the event of the failure of one navigation unit. 8.16.3 An operator shall establish procedures for ensuring that electronic navigation data bases are compatible with the intended function of the equipment and are current.	

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(b) Aeroplanes shall have sufficient navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment shall allow safe navigation in accordance with (a), or an appropriate contingency action, to be completed safely.	See 8.16.2 above	
(c) Aeroplanes operated on flights in which it is intended to land in IMC shall be equipped with suitable equipment capable of providing guidance to a point from which a visual landing can be performed. This equipment shall be capable of providing such guidance for each aerodrome at which it is intended to land in IMC and for any designated alternate aerodromes.	8.16.6A On flights in which it is intended to land in instrument meteorological conditions, an aeroplane shall be provided with radio equipment capable of receiving signals providing guidance to a point from which a visual landing can be achieved. This equipment shall be capable of providing such guidance for each aerodrome at which it is intended to land in instrument meteorological conditions and for any designated alternate aerodromes.	
NCC.IDE.A.255 Transponder		
Aeroplanes shall be equipped with a pressure altitude reporting secondary surveillance radar (SSR) transponder and any other SSR transponder capability required for the route being flown.	8.13.1.A All turbojet engined aeroplanes with a maximum take-off mass over 5 700kg shall be equipped with a pressure altitude reporting transponder. 8.13.2.A Non-turbojet engined aeroplanes with a maximum takeoff mass of less than 5 700kg operating as VFR flights shall be equipped with a pressure-altitude reporting transponder, unless exempted by the appropriate civil aviation authorities.	
NCC.IDE.A.260 Electronic navigation data management		
(a) The operator shall only use electronic navigation data products that support a navigation application meeting standards of integrity that are adequate for the intended use of the data. (b) When the electronic navigation data products support a navigation application needed for an operation for which Annex V (Part-SPA)	8.16.3 An operator shall establish procedures for ensuring that electronic navigation data bases are compatible with the intended function of the equipment and are current.	

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to Regulation (EC) No 965/2012 requires an approval, the operator shall demonstrate to the competent authority that the process applied and the delivered products meet standards of integrity that are adequate for the intended use of the data. (c) The operator shall continuously monitor both the process and the products, either directly or by monitoring the compliance of third party providers. (d) The operator shall ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aeroplanes that require it.		
SECTION 2 - HELICOPTERS		
NCC.IDE.H.100 Instruments and equipment — general		
(a) Instruments and equipment required by this Subpart shall be approved in accordance with the applicable airworthiness requirements if they are: (1) used by the flight crew to control the flight path, to comply with NCC.IDE.H.245 and NCC.IDE.H.250; (2) used to comply with NCC.IDE.H.245; (3) used to comply with NCC.IDE.H.250; or (2) installed in the helicopter. (b) The following items, when required by this Subpart, do not need an equipment approval: (1) independent portable light, (2) an accurate time piece, (3) chart holder, (4) first-aid kit, (5) survival and signalling equipment, (6) sea anchor and equipment for mooring, and	**AIRCRAFT EQUIPMENT REQUIREMENTS** **8.1 General** 8.1.1 Aircraft shall be equipped in accordance with the requirements set out in ICAO Annex 6, Part II, or the applicable section of Annex 6 Part III, plus the requirements of this section, subject to any additional or more stringent requirements that may be imposed by the State of Registry or may be specified in State or Regional airspace rules. It is the responsibility of an operator to ensure that the aircraft is equipped and certified in accordance with these requirements. 8.1.2 All equipment required must be approved or otherwise meet the technical specifications prescribed by the State of Registry.	

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(7) child restraint device. (c) Instruments and equipment not required by this Subpart as well as any other equipment which is not required by other applicable Annexes, but is carried on a flight, shall comply with the following: (1) the information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply with Annex I to Regulation (EC) No 216/2008 or NCC.IDE.H.245 and NCC.IDE.H.250; and (2) the instruments and equipment shall not affect the airworthiness of the helicopter, even in the case of failures or malfunction. (d) Instruments and equipment shall be readily operable or accessible from the station where the flight crew member that needs to use it is seated. (e) Those instruments that are used by a flight crew member shall be so arranged as to permit the flight crew member to see the indications readily from his/her station, with the minimum practicable deviation from the position and line of vision which he/she normally assumes when looking forward along the flight path. (f) All required emergency equipment shall be easily accessible for immediate use.		
NCC.IDE.H.105 Minimum equipment for flight		
A flight shall not be commenced when any of the helicopter's instruments, items of equipment or functions required for the intended flight are inoperative or missing, unless: (a) the helicopter is operated in accordance with the operator's minimum equipment list (MEL); (b) the operator is approved by the competent authority to operate the helicopter within the constraints of the master minimum equipment	4.2.3 The pilot-in-command shall be responsible for the operation, safety and security of the aircraft and the safety of all crew members, passengers and cargo on board. Specific duties and responsibilities shall include: a. …. i. ensuring that the aircraft is airworthy, duly	

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list (MMEL); or (c) the helicopter is subject to a permit to fly issued in accordance with the applicable airworthiness requirements.	registered and that the documentation and operational information specified in section 8.3.1 are onboard the aircraft. **8.15 MINIMUM EQUIPMENT LIST** 8.15.1 Where a master minimum equipment list (MMEL) is established for the aircraft type, the operator shall include in the operations manual a minimum equipment list (MEL) approved by the State of Registry of the aircraft which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. 8.15.2 Where an operator has developed a MEL, maintenance personnel and flight crews shall be trained in the use of it and a copy of the MEL shall be carried on the aircraft.	
NCC.IDE.H.115 Operating lights		
Helicopters operated at night shall be equipped with: (a) an anti-collision light system; (b) navigation/position lights; (c) a landing light; (d) lighting supplied from the helicopter's electrical system to provide adequate illumination for all instruments and equipment essential to the safe operation of the helicopter; (e) lighting supplied from the helicopter's electrical system to provide illumination in all passenger compartments;	8.2.4 All helicopters when operated at night or under IFR shall, in addition the equipment specified in 8.2.2 or 8.2.3, be equipped with: a. illumination for all flight instruments and associated equipment; b. lights in all passenger compartments; c. a flashlight for each crew member station; and d. a landing light.	

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(f) an independent portable light for each crew member station; and (g) lights to conform with the International Regulations for Preventing Collisions at Sea if the helicopter is amphibious.	8.2.5 *It is recommended that the landing light be trainable at least in the vertical plane. This can be achieved either with a manoeuvrable light or with the use of switchable LEDs arrays which provide a similar facility.*	
NCC.IDE.H.120 Operations under VFR — flight and navigational instruments and associated equipment		
(a) Helicopters operated under VFR by day shall be equipped with a means of measuring and displaying the following: (1) magnetic heading, (2) time in hours, minutes and seconds, (3) pressure altitude, (4) indicated airspeed, and (5) slip. (b) Helicopters operated under VMC over water and out of sight of the land, or under VMC at night, or when the visibility is less than 1 500 m, or in conditions where the helicopter cannot be maintained in a desired flight path without reference to one or more additional instruments, shall be equipped, in addition to (a), with: (1) a means of measuring and displaying the following: (i) attitude, (ii) vertical speed, and (iii) stabilised heading, (2) a means of indicating when the supply of power to the gyroscopic instruments is not adequate; and (3) a means of preventing malfunction of the airspeed indicating	8.2.1 All helicopters when operated VFR by day shall be equipped with a means of measuring and displaying: a. magnetic heading; b. the time in hours, minutes and seconds; c. pressure altitude; d. airspeed 8.2.2 All helicopters when operated under VFR at night, or when the helicopter cannot be maintained in a desired attitude without reference to one or more flight instruments, shall, in addition to the equipment specified in 8.2.1, be equipped with a means of measuring and displaying: a. attitude (for each required pilot); b. slip; c. stabilised heading; and d. vertical climb or descent.	

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system required in (a)(4) due to condensation or icing.		
(c) Whenever two pilots are required for the operation, helicopters shall be equipped with an additional separate means of displaying the following: (1) pressure altitude, (2) indicated airspeed, (3) slip, (4) attitude, if applicable, (5) vertical speed, if applicable, and (6) stabilised heading, if applicable.	See 8.1.1 above	Operators must ensure that the specific EASA requirement is met.
NCC.IDE.H.125 Operations under IFR — flight and navigational instruments and associated equipment		
Helicopters operated under IFR shall be equipped with: (a) a means of measuring and displaying the following: (1) magnetic heading, (2) time in hours, minutes and seconds, (3) pressure altitude, (4) indicated airspeed, (5) vertical speed, (6) slip, (7) attitude, (8) stabilised heading, and (9) outside air temperature; (b) a means of indicating when the supply of power to the gyroscopic instruments is not adequate;	8.2.3 All helicopters when operated under IFR shall be equipped with a means of measuring and displaying: a. magnetic heading; b. the time in hours, minutes and seconds; c. pressure altitude; d. airspeed (which includes a means of preventing malfunctioning due to condensation or icing); e. slip; f. attitude (for each required pilot plus an additional one); g. stabilised and corrected heading; h. adequate supply of power to the stabilised instruments; i. outside temperature; and j. vertical climb or descent.	

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(c) whenever two pilots are required for the operation, an additional separate means of displaying the following: (1) pressure altitude, (2) indicated airspeed, (3) vertical speed, (4) slip, (5) attitude, and (6) stabilised heading;	See 8.1.1 above	Operators must ensure that the specific EASA requirement is met.
(d) a means of preventing malfunction of the airspeed indicating systems required in (a)(4) and (c)(2) due to condensation or icing;	See 8.2.3.d. above	Operators must ensure that the specific EASA requirement is met.
(e) an alternate source of static pressure;	See 8.1.1 above	Operators must ensure that the specific EASA requirement is met.
(f) a chart holder in an easily readable position that can be illuminated for night operations; and	See 8.1.1 above	Operators must ensure that the specific EASA requirement is met.
(g) an additional means of measuring and displaying attitude as a standby instrument.	8.2.3. All helicopters when operated under IFR shall be equipped with a means of measuring and displaying: f. attitude (for each required pilot plus an additional one);	
NCC.IDE.H.130 Additional equipment for single-pilot operations under IFR		
Helicopters operated under IFR with a single pilot shall be equipped with an autopilot with at least altitude hold and heading mode.	See 8.1.1 above	Operators must ensure that the specific EASA requirement is met.

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NCC.IDE.H.145 Airborne weather detecting equipment		
Helicopters with an MOPSC of more than nine and operated under IFR or at night shall be equipped with airborne weather detecting equipment when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather detecting equipment, may be expected to exist along the route to be flown.	8.9.2.H *It is recommended that helicopters, when carrying passengers, be equipped with operative weather-detecting equipment capable of detecting thunderstorms whenever such helicopter are being operated in areas where such conditions may be expected to exist along the route either at night or under instrument meteorological conditions.*	
NCC.IDE.H.150 Additional equipment for operations in icing conditions at night		
a) Helicopters operated in expected or actual icing conditions at night shall be equipped with a means to illuminate or detect the formation of ice. (b) The means to illuminate the formation of ice shall not cause glare or reflection that would handicap flight crew members in the performance of their duties.	8.9.1 For operations in known or forecast icing conditions, all aircraft shall be certified and equipped to cope with such conditions.	
NCC.IDE.H.155 Flight crew interphone system		
Helicopters operated by more than one flight crew member shall be equipped with a flight crew interphone system, including headsets and microphones for use by all flight crew members.	See 8.1.1 above	Operators must ensure that the specific EASA requirement is met.
NCC.IDE.H.160 Cockpit voice recorder		
(a) Helicopters with an MCTOM of more than 7 000 kg and first issued with an individual CofA on or after 1 January 2016 shall be equipped with a CVR. (b) The CVR shall be capable of retaining data recorded during at least the preceding 2 hours. (c) The CVR shall record with reference to a timescale: (1) voice communications transmitted from or received in the	8.14.4 All helicopters of a maximum certificated take-off mass of over 7 000 kg shall be equipped with a CVR. For helicopters not equipped with an FDR, at least main rotor speed shall be recorded on the CVR.	

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flight crew compartment by radio; (2) flight crew members' voice communications using the interphone system and the public address system, if installed; (3) the aural environment of the cockpit, including, without interruption, the audio signals received from each crew microphone; and (4) voice or audio signals identifying navigation or approach aids introduced into a headset or speaker. (d) The CVR shall start automatically to record prior to the helicopter moving under its own power and shall continue to record until the termination of the flight when the helicopter is no longer capable of moving under its own power. (e) In addition to (d), depending on the availability of electrical power, the CVR shall start to record as early as possible during the cockpit checks prior to engine start at the beginning of the flight until the cockpit checks immediately following engine shutdown at the end of the flight. (f) The CVR shall have a device to assist in locating it in water.		
NCC.IDE.H.165 Flight data recorder		
(a) Helicopters with an MCTOM of more than 3 175 kg and first issued with an individual CofA on or after 1 January 2016 shall be equipped with an FDR that uses a digital method of recording and storing data and for which a method of readily retrieving that data from the storage medium is available. (b) The FDR shall record the parameters required to determine accurately the helicopter flight path, speed, attitude, engine power, configuration and operation and be capable of retaining data recorded during at least the preceding 10 hours. (c) Data shall be obtained from helicopter sources that enable accurate	8.14.1 All helicopters of a maximum certificated take-off mass of over 7 000 kg, or having a passenger seating configuration of more than nineteen, for which the individual certificate of airworthiness is first issued on or after 1 January 1989 shall be equipped with a Type IV FDR. 8.14.2 All helicopters of a maximum certificated take-off mass of over 3 180 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2016 shall be equipped with a Type IVA FDR.	

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
correlation with information displayed to the flight crew. (d) The FDR shall start automatically to record the data prior to the helicopter being capable of moving under its own power and shall stop automatically after the helicopter is incapable of moving under its own power. (e) The FDR shall have a device to assist in locating it in water.	8.14.3 *It is recommended that helicopters of a maximum certificated take-off mass of over 3 180 kg, up to and including 7 000 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 1989 should be equipped with a Type V FDR..*	
NCC.IDE.H.170 Data link recording		
(a) Helicopters first issued with an individual CofA on or after 1 January 2016 that have the capability to operate data link communications and are required to be equipped with a CVR shall record on a recorder, where applicable: (1) data link communication messages related to ATS communications to and from the helicopter, including messages applying to the following applications: (i) data link initiation; (ii) controller–pilot communication; (iii) addressed surveillance; (iv) flight information; (v) as far as is practicable, given the architecture of the system, aircraft broadcast surveillance; (vi) as far as is practicable, given the architecture of the system, aircraft operational control data; and (vii) as far as is practicable, given the architecture of the system, graphics; (2) information that enables correlation to any associated records related to data link communications and stored separately		Will be introduced into the IS-BAO before 2016. Operators must ensure that the specific EASA requirement is met.

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
from the helicopter; and (3) information on the time and priority of data link communications messages, taking into account the system's architecture. (b) The recorder shall use a digital method of recording and storing data and information and a method for readily retrieving that data. The recording method shall allow the data to match the data recorded on the ground. (c) The recorder shall be capable of retaining data recorded for at least the same duration as set out for CVRs in NCC.IDE.H.160. (d) The recorder shall have a device to assist in locating it in water. (e) The requirements applicable to the start and stop logic of the recorder are the same as the requirements applicable to the start and stop logic of the CVR contained in NCC.IDE.H.160 (d) and (e).		
NCC.IDE.H.175 Flight data and cockpit voice combination recorder		
Compliance with CVR and FDR requirements may be achieved by one flight data and cockpit voice combination recorder.		Information
NCC.IDE.H.180 Seats, seat safety belts, restraint systems and child restraint devices		
(a) Helicopters shall be equipped with: (1) a seat or berth for each person on board who is aged 24 months or more; (2) a seat belt on each passenger seat and restraining belts for each berth; (3) for helicopters first issued with an individual CofA after 31 December 2012, a seat belt with an upper torso restraint system for each passenger who is aged 24 months or more; (4) a child restraint device (CRD) for each person on board younger than 24 months;	**8.4 Seats, Safety Belts and Safety/Shoulder Harnesses** 8.4.1 Except as provided in 8.4.2.H below, aircraft shall be equipped with: a. a seat for each occupant of the aircraft, except for infants under an age specified by the State of Registry; b. a safety belt, having a metal-to-metal latching device, for each passenger (other than infants); c. a safety/shoulder harness for each flight crew	

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(5) a seat belt with upper torso restraint system incorporating a device that will automatically restrain the occupant's torso in the event of rapid deceleration on each flight crew seat; and (6) a seat belt with upper torso restraint system on the seats for the minimum required cabin crew, in the case of helicopters first issued with an individual CofA after 31 December 1980. (b) A seat belt with upper torso restraint system shall: (1) have a single point release; and (2) on flight crew seats, on any seat alongside a pilot's seat and on the seats for the minimum required cabin crew, include two shoulder straps and a seat belt that may be used independently.	member and any other person occupying a flight deck seat or a sideways facing seat; and d. a safety/shoulder harness for each cabin crew member seat that is not a regular passenger seat. 8.4.2.H For helicopter operations where in-flight transfer of personnel or door-open operations is required, unless otherwise prohibited, a crew member may operate without the provision of a seat provided a secure safety harness is fitted and used.	
NCC.IDE.H.185 Fasten seat belt and no smoking signs		
Helicopters in which not all passenger seats are visible from the flight crew seat(s) shall be equipped with a means of indicating to all passengers and cabin crew when seat belts shall be fastened and when smoking is not allowed.		Not specified for helicopters. Operators must ensure that the specific EASA requirement is met.
NCC.IDE.H.190 First-aid kit		
(a) Helicopters shall be equipped with at least one first-aid kit. (b) The first-aid kit(s) shall be: (1) readily accessible for use; and (2) kept up-to-date.	8.5.1 All aircraft shall be equipped with: a. first aid kit; b. fire extinguishers for use in the crew, passenger and cargo compartments; and c. for aircraft with a seating configuration of more than 19 passengers, a crash axe.	
NCC.IDE.H.200 Supplemental oxygen — non-pressurised helicopters		
(a) Non-pressurised helicopters operated at flight altitudes when the oxygen supply is required in accordance with (b) shall be equipped with oxygen storage and dispensing apparatus capable of storing and	8.8.2.H All helicopters intended to be operated at altitudes where the use of oxygen has been prescribed, shall carry equipment for storing and dispensing the oxygen supplies required in 6.2.6	

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dispensing the required oxygen supplies. (b) Non-pressurised helicopters operated above flight altitudes at which the pressure altitude in the passenger compartments is above 10 000 ft shall carry enough breathing oxygen to supply: (1) all crew members and at least 10 % of the passengers for any period in excess of 30 minutes when the pressure altitude in the passenger compartment will be between 10 000 ft and 13 000 ft; and (2) all crew members and passengers for any period that the pressure altitude in the passenger compartment will be above 13 000 ft.		
NCC.IDE.H.205 Hand fire extinguishers		
(a) Helicopters shall be equipped with at least one hand fire extinguisher: (1) in the flight crew compartment; and (2) in each passenger compartment that is separate from the flight crew compartment, except if the compartment is readily accessible to the flight crew. (b) The type and quantity of extinguishing agent for the required fire extinguishers shall be suitable for the type of fire likely to occur in the compartment where the extinguisher is intended to be used and to minimise the hazard of toxic gas concentration in compartments occupied by persons.	See 8.5.1.b above	
NCC.IDE.H.210 Marking of break-in points		
If areas of the helicopter's fuselage suitable for break-in by rescue crews in an emergency are marked, such areas shall be marked as shown in Figure 1. **Figure 1: Marking of break-in points**		Operators must ensure that the specific EASA requirement is met.

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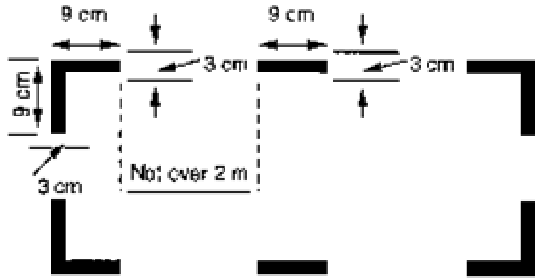		
NCC.IDE.H.215 Emergency locator transmitter (ELT)		
(a) Helicopters shall be equipped with at least one automatic ELT. (b) Helicopters operating on a flight over water in support of offshore operations in a hostile environment and at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed, where in the case of the critical engine failure, the helicopter is able to sustain level flight, shall be equipped with an automatically deployable ELT (ELT(AD)). (c) An ELT of any type shall be capable of transmitting simultaneously on 121.5 MHz and 406 MHz.	8.10.A ELT - Aeroplanes 8.10.1 Except as provided in 8.10.2, all aeroplanes shall be equipped with at least one ELT of any type. 8.10.2 All aeroplanes for which the individual Certificate of Airworthiness was first issued after 1 July 2008 shall be equipped with at least one automatic ELT. 8.10.3 *It is recommended that all aircraft carry an automatic ELT.* 8.10.4 ELTs carried to satisfy the requirements of 8.10.1 and 8.10.2 shall be capable of operation on both 406 MHz and 121.5 MHz simultaneously in accordance with the relevant provisions of Annex 10, Volume III.	
NCC.IDE.H.225 Life-jackets--		
(a) Helicopters shall be equipped with a life-jacket for each person on board or equivalent individual floatation device for each person on board younger than 24 months, which shall be worn or stowed in a	**8.6.H Flights over Water - Helicopters** 8.6.1 All helicopters shall be fitted with a permanent, or	ICAO Annex 6, Part II defines "offshore operations as: Operations which routinely have a

EASA IR Requirements – PART - NCC	IS-BAO Requirements	Comments
position that is readily accessible from the seat or berth of the person for whose use it is provided, when: (1) operated on a flight over water at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed, where in the case of the critical engine failure, the helicopter is able to sustain level flight; (2) operated on a flight over water beyond autorotational distance from the land, where in the case of critical engine failure, the helicopter is not able to sustain level flight; or (3) taking off or landing at an aerodrome or operating site where the take-off or approach path is over water. (b) Each life-jacket or equivalent individual flotation device shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons.	rapidly deployable, means of flotation so as to ensure a safe ditching of the helicopter when engaged in any overwater operations where the helicopter flight crew is likely to be forced to execute a ditching manoeuvre in the case of a power-plant failure. 8.6.2 All helicopters operating in accordance with the provisions of 8.6.1 shall be equipped with: a. A life jacket; equipped with a means of electrical illumination for the purpose of facilitating the location of persons; for each person on board; and stowed in a position easily accessible from the seat of the person whose use it is provided; b. Life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in an emergency; c. With each life-saving raft, equipment providing means of sustaining life as appropriate to the to the operations being undertaken; d. Equipment for making the pyrotechnical distress signals described in Annex 2. 8.6.3 For 'offshore operations' the life jacket shall be worn unless the occupant is wearing an integrated survival suit that includes the functionality of the life jacket. 8.6.5 All helicopters taking off or landing at a heliport where the departure or approach path is so disposed over water that in the event of a foreseeable event there would be a likelihood of ditching, shall be equipped as in 8.6.2 a.	substantial proportion of the flight conducted over sea areas to or from offshore locations. Such operations include, but are not limited to, support of offshore oil, gas and mineral exploitation and sea-pilot transfer.

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EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.IDE.H.226 Crew survival suits		
Each crew member shall wear a survival suit when: (a) operating on a flight over water in support of offshore operations, at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed, where in the case of the critical engine failure, the helicopter is able to sustain level flight and when: (1) the weather report or forecasts available to the pilot-in-command indicate that the sea temperature will be less than plus 10 °C during the flight, or (2) the estimated rescue time exceeds the estimated survival time; or (b) so determined by the pilot-in-command based on a risk assessment taking into account the following conditions: (1) flights over water beyond autorotational distance or safe forced landing distance from land, where in the case of the critical engine failure, the helicopter is not able to sustain level flight, and (2) the weather report or forecasts available to the pilot-in-command indicate that the sea temperature will be less than plus 10 °C during the flight.	8.6.4 *For 'offshore operations' it is recommended that survival suits be worn by all occupants when the sea temperature is less than 10°C or when the estimated rescue time exceeds the calculated survival time. When the elevation and strength of the sun results in a high temperature hazard on the flight deck, consideration should be given to alleviating the flight crew from this recommendation.* *Note: When establishing rescue time, the sea state and the ambient light conditions should be taken into consideration.*	Survival suits are not required by Annex 6 Part III Sec 3. Operators must ensure that the specific EASA requirement is met.
NCC.IDE.H.227 Life-rafts, survival ELTs and survival equipment on extended overwater flights		
Helicopters operated: (a) on a flight over water at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed, where in the case of the critical engine failure, the helicopter is able to sustain level flight; or (b) on a flight over water at a distance corresponding to more than 3 minutes flying time at normal cruising speed, where in the case of	8.6.2 All helicopters operating in accordance with the provisions of 8.6.1 shall be equipped with: a. A life jacket; equipped with a means of electrical illumination for the purpose of facilitating the location of persons; for each person on board; and stowed in a position easily accessible from the seat of the person whose use it is provided;	

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the critical engine failure, the helicopter is not able to sustain level flight, and if so determined by the pilot-in-command by means of a risk assessment, shall be equipped with: (1) in the case of a helicopter carrying less than 12 persons, at least one life-raft with a rated capacity of not less than the maximum number of persons on board, stowed so as to facilitate their ready use in emergency; (2) in the case of a helicopter carrying more than 11 persons, at least two life-rafts, stowed so as to facilitate their ready use in an emergency, sufficient together to accommodate all persons capable of being carried on board and, if one is lost the remaining life-raft(s) having the overload capacity sufficient to accommodate all persons on the helicopter; (3) at least one survival ELT (ELT(S)) for each required life-raft; and (4) life-saving equipment, including means of sustaining life, as appropriate to the flight to be undertaken.	b. Life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in an emergency; c. With each life-saving raft, equipment providing means of sustaining life as appropriate to the to the operations being undertaken; d. Equipment for making the pyrotechnical distress signals described in Annex 2.	
NCC.IDE.H.230 Survival equipment		
Helicopters operated over areas in which search and rescue would be especially difficult shall be equipped with: (a) signalling equipment to make distress signals; (b) at least one survival ELT (ELT(S)); and (c) additional survival equipment for the route to be flown taking account of the number of persons on board.	**8.7 Flights Over Remote Land Areas** 8.7.1 For flights across land areas which have been designated by the State concerned as an area in which search and rescue would be especially difficult, aircraft shall be equipped with signalling devices and life-saving equipment (including means of sustaining life) as is appropriate to the area overflown. *Note 1: Information on any areas which a State has designated as an area in which search and rescue would be especially difficult should be included in the State's AIP. Links to State*	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
	AIPs can be found through the ICAO GIS Portal at http://192.206.28.84/Website/AIPS_online.html. However, it is recommended that operators apply judgement when flying over remote areas where harsh environmental conditions may be encountered. *Note 2: Guidance on appropriate equipment for the nature of the terrain and climate is available from most survival equipment providers.*	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
NCC.IDE.H.231 Additional requirements for helicopters conducting offshore operations in a hostile sea area		
Helicopters operated in offshore operations in a hostile sea area, at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed, shall comply with the following: (a) When the weather report or forecasts available to the pilot-in-command indicate that the sea temperature will be less than plus 10 °C during the flight, or when the estimated rescue time exceeds the calculated survival time, or the flight is planned to be conducted at night, all persons on board are wearing a survival suit. (b) All life-rafts carried in accordance with NCC.IDE.H.227 shall be installed so as to be usable in the sea conditions in which the helicopter's ditching, flotation and trim characteristics were evaluated in order to comply with the ditching requirements for certification. (c) The helicopter shall be equipped with an emergency lighting system with an independent power supply to provide a source of general cabin illumination to facilitate the evacuation of the helicopter. (d) All emergency exits, including crew emergency exits, and the means of opening them shall be conspicuously marked for the guidance of occupants using the exits in daylight or in the dark. Such markings shall be designed to remain visible if the helicopter is capsized and the cabin is submerged. (e) All non-jettisonable doors that are designated as ditching emergency exits shall have a means of securing them in the open position so that they do not interfere with occupants' egress in all sea conditions up to the maximum required to be evaluated for ditching and flotation. (f) All doors, windows or other openings in the passenger compartment intended to be used for the purpose of underwater escape shall be equipped so as to be operable in an emergency.	See 8.1.1 above	Not required by Annex 6 Part III Section 3. Operators must ensure that the specific EASA requirement is met.

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - NCC	**IS-BAO Requirements**	**Comments**
(g) Life-jackets shall be worn at all times, unless the passenger or crew member is wearing an integrated survival suit that meets the combined requirement of the survival suit and life-jacket.		
NCC.IDE.H.232 Helicopters certified for operating on water — miscellaneous equipment		
Helicopters certified for operating on water shall be equipped with: (a) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the helicopter on water, appropriate to its size, weight and handling characteristics; and (b) equipment for making the sound signals prescribed in the International Regulations for Preventing Collisions at Sea, where applicable.	See 8.1.1 above	Not addressed in IS-BAO. Operators must ensure that the specific EASA requirement is met.
NCC.IDE.H.235 All helicopters on flights over water — ditching		
Helicopters shall be designed for landing on water or certified for ditching in accordance with the relevant airworthiness code or fitted with emergency flotation equipment when operated on a flight over water in a hostile environment at a distance from land corresponding to more than 10 minutes flying time at normal cruising speed.	**8.6.H FLIGHTS OVER WATER - HELICOPTERS** 8.6.1 All helicopters shall be fitted with a permanent, or rapidly deployable, means of flotation so as to ensure a safe ditching of the helicopter when: a. engaged in 'offshore operations'; or b. when flying at a distance from land further than 25nm	
NCC.IDE.H.240 Headset		
Whenever a radio communication and/or radio navigation system is required, helicopters shall be equipped with a headset with boom microphone or equivalent and a transmit button on the flight controls for each required pilot and/or crew member at his/her assigned station.	8.16.5.H All helicopters shall be equipped with headset with boom microphone and a transmit button on the flight controls for each required pilot and crew member at his working station.	
NCC.IDE.H.245 Radio communication equipment		
(a) Helicopters operated under IFR or at night, or when required by the applicable airspace requirements, shall be equipped with radio	**8.16 Communications and Navigational Equipment**	

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communication equipment that, under normal radio propagating conditions, shall be capable of: (1) conducting two-way communication for aerodrome control purposes; (2) receiving meteorological information; (3) conducting two-way communication at any time during flight with those aeronautical stations and on those frequencies prescribed by the appropriate authority; and (4) providing for communication on the aeronautical emergency frequency 121.5 MHz.	8.16.1 All aircraft shall be equipped with radio communication equipment to permit the pilot to conduct two-way communications on the appropriate aeronautical frequencies.	
(b) When more than one communications equipment unit is required, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.	When compliance with 8.16.1 requires that more than one communication equipment unit be provided, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.	
(c) When a radio communication system is required, and in addition to the flight crew interphone system required in NCC.IDE.H.155, helicopters shall be equipped with a transmit button on the flight controls for each required pilot and crew member at his/her assigned station	8.16.5.H All helicopters shall be equipped with headset with boom microphone and a transmit button on the flight controls for each required pilot and crew member at his working station.	
NCC.IDE.H.250 Navigation equipment		
(a) Helicopters shall be equipped with navigation equipment that will enable them to proceed in accordance with: (1) the ATS flight plan, if applicable; and (2) the applicable airspace requirements.	8.16.2 All aircraft shall be equipped with sufficient radio navigation equipment to receive radio signals from the transmitting facilities to be used and to permit the aircraft to navigate in the event of the failure of one navigation unit.	
(b) Helicopters shall have sufficient navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment shall allow safe navigation in	See above	

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accordance with (a), or an appropriate contingency action, to be completed safely.		
(c) Helicopters operated on flights in which it is intended to land in IMC shall be equipped with navigation equipment capable of providing guidance to a point from which a visual landing can be performed. This equipment shall be capable of providing such guidance for each aerodrome at which it is intended to land in IMC and for any designated alternate aerodromes.	See 8.1.1 above	Addressed in IS-BAO for aeroplanes but not helicopters. Operators must ensure that the specific EASA requirement is met.
NCC.IDE.H.255 Transponder		
Helicopters shall be equipped with a pressure altitude reporting secondary surveillance radar (SSR) transponder and any other SSR transponder capability required for the route being flown.	8.13.1.H All helicopters shall be equipped with a pressure altitude reporting transponder, unless exempted by the appropriate civil aviation authorities.	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - SPA	**IS-BAO Requirements**	**Related Issues**
ANNEX V PART-SPA		
SUBPART A - GENERAL REQUIREMENTS		
SPA.GEN.100 Competent authority		
(a) The competent authority for issuing a specific approval shall be: (1) for the commercial operator the authority of the Member State in which the operator has its principal place of business; and (2) for the non-commercial operator the authority of the State in which the operator is established or residing. (b) Notwithstanding (a)(2), for the non-commercial operator using aircraft registered in a third country, the applicable requirements under this Annex for the approval of the following operations shall not apply if these approvals are issued by a third country State of Registry: (1) Performance-based navigation (PBN); (2) Minimum operational performance specifications (MNPS); (3) Reduced vertical separation minima (RVSM) airspace.	Not applicable. EASA IR applicability material.	It must be noted that operators must meet the specific requirements of Part SPA and obtain the associated approvals for their National Authority.
SPA.GEN.105 Application for a specific approval		
(a) The operator applying for the initial issue of a specific approval shall provide to the competent authority the documentation required in the applicable Subpart, together with the following information: (1) the name, address and mailing address of the applicant; and	Not applicable. EASA IR administrative material for operator's action.	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - SPA	**IS-BAO Requirements**	**Related Issues**
(2) a description of the intended operation. (b) The operator shall provide the following evidence to the competent authority: (1) compliance with the requirements of the applicable Subpart; and (2) that the relevant elements defined in the data established in accordance with Regulation (EC) No 1702/2003 are taken into account. (c) The operator shall retain records relating to (a) and (b) at least for the duration of the operation requiring a specific approval, or, if applicable, in accordance with Annex III (Part-ORO).		
SPA.GEN.110 Privileges of an operator holding a specific approval		
The scope of the activity that an operator is approved to conduct shall be documented and specified: (a) for operators holding an air operator certificate (AOC) in the operations specifications to the AOC; and (b) for all other operators in the list of specific approvals.	Not applicable. EASA IR administrative material.	
SPA.GEN.115 Changes to a specific approval		
When the conditions of a specific approval are affected by changes, the operator shall provide the relevant documentation to the competent authority and obtain prior approval for the operation.	Not applicable. EASA IR administrative material.	
SPA.GEN.120 Continued validity of a specific approval		
Specific approvals shall be issued for an unlimited duration and shall remain valid subject to the operator remaining in compliance with the requirements associated with the specific approval and taking into	Not applicable. EASA IR administrative material.	

EASA IR Requirements – PART - SPA	IS-BAO Requirements	Related Issues
account the relevant elements defined in the data established in accordance with Regulation (EC) No 1702/2003.		
SUBPART B - PERFORMANCE-BASED NAVIGATION (PBN) OPERATIONS		
SPA.PBN.100 PBN operations		
Aircraft shall only be operated in designated airspace, on routes or in accordance with procedures where performance-based navigation (PBN) specifications are established if the operator has been granted an approval by the competent authority to conduct such operations. No specific approval is required for operations in area navigation 5 (RNAV5 (basic area navigation, B-RNAV)) designated airspace.	**6.6 Special Communications, Navigation, and Surveillance (CNS) Requirements and Approvals** 6.6.1 Prior to operations in airspace where special CNS requirements exist such as Performance Based Navigation (PBN) Specifications, Minimum Navigation Performance Specification (MNPS), Reduced Vertical Separation Minimums (RVSM), Controller Pilot Data Link Communication (CPDLC), or Automatic Dependent Surveillance (ADS) B/C, an operator shall have a process to ensure that: a. the aircraft and operator has been authorized by the State of Registry and, if required, the State of Operations; b. the aircraft meets the aircraft system, airworthiness, continuing airworthiness (including maintenance personnel training) and operational requirements for the operations concerned; and c. continuing RVSM height monitoring requirements have been met. 6.6.2 Flight Crew Authorization a. Flight crews engaged in operations in airspace where special CNS requirements apply (i.e. PBN, RVSM, MNPS, CPDLC, ADS) shall be so authorized by an appropriately authorized manager. b. To be considered qualified to be so authorized,	

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EASA IR Requirements – PART - SPA	**IS-BAO Requirements**	**Related Issues**
	each flight crew member shall complete training in the subject areas as required by the specific State authorizations and as necessary to ensure competency in operations in such airspace. c. Such authorizations shall be included in the pilot training records.	
SPA.PBN.105 PBN operational approval		
To obtain a PBN operational approval from the competent authority, the operator shall provide evidence that: (a) the relevant airworthiness approval of the RNAV system has been obtained; (b) a training programme for the flight crew members involved in these operations has been established; and (c) operating procedures have been established specifying: (1) the equipment to be carried, including its operating limitations and appropriate entries in the minimum equipment list (MEL); (2) flight crew composition and experience requirements; (3) normal procedures; (4) contingency procedures; (5) monitoring and incident reporting; and (6) electronic navigation data management.	Not applicable. EASA IR administrative material. Also see 6.6 above..	
SUBPART C - OPERATIONS WITH SPECIFIED MINIMUM NAVIGATION PERFORMANCE (MNPS)		
SPA.MNPS.100 MNPS operations		
Aircraft shall only be operated in designated minimum navigation	**IS-BAO Implementation Guide**	Use of the Regional

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - SPA	**IS-BAO Requirements**	**Related Issues**
performance specifications (MNPS) airspace in accordance with Regional Supplementary Procedures, where minimum navigation performance specifications are established, if the operator has been granted an approval by the competent authority to conduct such operations.	**7.5.3 MNPS, RNAV and RNP Procedures** The flight crew will conduct operations in MNPS, RNAV and RNP airspace, in accordance with the approved regional supplement. The pertinent operating and contingency procedure information must be available to the crew for in flight reference.	Supplemental procedures is not included in the IS-BAO standards but is included in the IS-BAO Implementation Guide and section 8.16.2 of the GCOM.
SPA.MNPS.105 MNPS operational approval		
To obtain an MNPS operational approval from the competent authority, the operator shall provide evidence that: (a) the navigation equipment meets the required performance; (b) navigation displays, indicators and controls are visible and operable by either pilot seated at his/her duty station; (c) a training programme for the flight crew members involved in these operations has been established; and (d) operating procedures have been established specifying: (1) the equipment to be carried, including its operating limitations and appropriate entries in the MEL; (2) flight crew composition and experience requirements; (3) normal procedures; (4) contingency procedures including those specified by the authority responsible for the airspace concerned; and (5) monitoring and incident reporting.	Not applicable. EASA IR administrative material.	

Comparison IS-BAO to EASA IR Requirements for Non-commercial Ops		
EASA IR Requirements – PART - SPA	**IS-BAO Requirements**	**Related Issues**
SUBPART D - OPERATIONS IN AIRSPACE WITH REDUCED VERTICAL SEPARATION MINIMA (RVSM)		
SPA.RVSM.100 RVSM operations		
Aircraft shall only be operated in designated airspace where a reduced vertical separation minimum of 300 m (1 000 ft) applies between flight level (FL) 290 and FL 410, inclusive, if the operator has been granted an approval by the competent authority to conduct such operations.	**6.6 RNP, MNPS, RNAV & RVSM** 6.6.1 Prior to operation in Required Navigation Performance (RNP), Minimum Navigation Performance Specification (MNPS), Area Navigation (RNAV) or Reduced Vertical Separation Minimum (RVSM) (including D-RVSM) airspace, an operator shall ensure that: a. the aircraft has been authorized by the State of Registry, b. the aircraft meets the aircraft system, airworthiness, continuing airworthiness (including maintenance personnel training) and operational requirements for the operations concerned, c. the appropriate current operational approval has been obtained from the State of Registry/Operator, and d. continuing height monitoring requirements have been met.	
SPA.RVSM.105 RVSM operational approval		
To obtain an RVSM operational approval from the competent authority, the operator shall provide evidence that: (a) the RVSM airworthiness approval has been obtained; (b) procedures for monitoring and reporting height-keeping errors	Not applicable. EASA IR administrative material.	

EASA IR Requirements – PART - SPA	IS-BAO Requirements	Related Issues
have been established; (c) a training programme for the flight crew members involved in these operations has been established; and (d) operating procedures have been established specifying: (1) the equipment to be carried, including its operating limitations and appropriate entries in the MEL; (2) flight crew composition and experience requirements; (3) flight planning; (4) pre-flight procedures; (5) procedures prior to RVSM airspace entry; (6) in-flight procedures; (7) post-flight procedures; (8) incident reporting; and (9) specific regional operating procedures.		
SPA.RVSM.110 RVSM equipment requirements		
Aircraft used for operations in RVSM airspace shall be equipped with: (a) two independent altitude measurement systems; (b) an altitude alerting system; (c) an automatic altitude control system; and (d) a secondary surveillance radar (SSR) transponder with altitude reporting system that can be connected to the altitude measurement system in use for altitude control.	**IG 7.0** **7.5.2 RVSM** The following equipment must be installed and fully operational for flight in radar controlled RVSM airspace: a. two independent height measuring systems; b. an automatic altitude control system; c. an altitude alerter; and d. one SSR altitude reporting transponder. If only one installed it must be selectable to either air data computer.	

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SPA.RVSM.115 RVSM height-keeping errors		
(a) The operator shall report recorded or communicated occurrences of height-keeping errors caused by malfunction of aircraft equipment or of operational nature, equal to or greater than: (1) a total vertical error (TVE) of ±90 m (±300 ft); (2) an altimetry system error (ASE) of ±75 m (±245 ft); and (3) an assigned altitude deviation (AAD) of ±90 m (±300 ft). (b) Reports of such occurrences shall be sent to the competent authority within 72 hours. Reports shall include an initial analysis of causal factors and measures taken to prevent repeat occurrences. (c) When height-keeping errors are recorded or received, the operator shall take immediate action to rectify the conditions that caused the errors and provide follow-up reports, if requested by the competent authority.		Operators must ensure that the specific EASA requirement is met.
SUBPART E - LOW VISIBILITY OPERATIONS (LVO)		
SPA.LVO.100 Low visibility operations		
The operator shall only conduct the following low visibility operations (LVO) when approved by the competent authority: (a) low visibility take-off (LVTO) operation; (b) lower than Standard Category I (LTS CAT I) operation; (c) Standard Category II (CAT II) operation; (d) other than Standard Category II (OTS CAT II) operation;	**6.5 ALL WEATHER OPERATIONS** 6.5.1 An operator shall not permit an aircraft to conduct instrument approach or departures below standard Category I weather minima unless all equipment, training and operating requirements and regulatory requirements have been met. 6.5.2 An operator shall not permit an aircraft to conduct an instrument approach to Category II or III approach	

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(e) Standard Category III (CAT III) operation; and (f) approach operation utilising enhanced vision systems (EVS) for which an operational credit is applied to reduce the runway visual range (RVR) minima by no more than one third of the published RVR.	minima unless the operator has authorization from the civil aviation authority in the State of Registry and the authority of the State in which the CAT II or CAT III operations are being conducted. The minimum requirements to conduct Category II or III operations are: a. approved Category II or III operating procedures in the company operations manual, b. flight crew that are trained and certified to conduct Category II or III instrument approaches, c. aircraft that are equipped, approved and maintained for Category II or III operations.	
SPA.LVO.105 LVO approval		
To obtain an LVO approval from the competent authority, the operator shall demonstrate compliance with the requirements of this Subpart.	Not applicable. EASA IR administrative material.	
SPA.LVO.110 General operating requirements		
(a) The operator shall only conduct LTS CAT I operations if: (1) each aircraft concerned is certified for operations to conduct CAT II operations; and (2) the approach is flown: (i) auto-coupled to an auto-land that needs to be approved for CAT IIIA operations; or (ii) using an approved head-up display landing system (HUDLS) to at least 150 ft above the threshold. (b) The operator shall only conduct CAT II, OTS CAT II or CAT III	**6.5 ALL WEATHER OPERATIONS** 6.5.1 An operator shall not permit an aircraft to conduct instrument approach or departures below standard Category I weather minima unless all equipment, training and operating requirements and regulatory requirements have been met.	

EASA IR Requirements – PART - SPA	IS-BAO Requirements	Related Issues
operations if: (1) each aircraft concerned is certified for operations with a decision height (DH) below 200 ft, or no DH, and equipped in accordance with the applicable airworthiness requirements; (2) a system for recording approach and/or automatic landing success and failure is established and maintained to monitor the overall safety of the operation; (3) the DH is determined by means of a radio altimeter; (4) the flight crew consists of at least two pilots; and (5) all height call-outs below 200 ft above the aerodrome threshold elevation are determined by a radio altimeter (c) The operator shall only conduct approach operations utilising an EVS if: (1) the EVS is certified for the purpose of this subpart and combines infra-red sensor image and flight information on the HUD; (2) for operations with an RVR below 550 m, the flight crew consists of at least two pilots; (3) for CAT I operations, natural visual reference to runway cues is attained at least at 100 ft above the aerodrome threshold elevation; (4) for approach procedure with vertical guidance (APV) and non-precision approach (NPA) operations flown with CDFA technique, natural visual reference to runway cues is attained at least at 200 ft above the aerodrome threshold elevation and the following requirements are complied		

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with: (i) the approach is flown using an approved vertical flight path guidance mode; (ii) the approach segment from final approach fix (FAF) to runway threshold is straight and the difference between the final approach course and the runway centreline is not greater than 2°; (iii) the final approach path is published and not greater than 3.7°; and (iv) the maximum cross-wind components established during certification of the EVS are not exceeded.		
SPA.LVO.115 Aerodrome related requirements		
(a) The operator shall not use an aerodrome for LVOs below a visibility of 800 m unless: (1) the aerodrome has been approved for such operations by the State of the aerodrome; and (2) low visibility procedures (LVP) have been established. (b) If the operator selects an aerodrome where the term LVP is not used, the operator shall ensure that there are equivalent procedures that adhere to the requirements of LVP at the aerodrome. This situation shall be clearly noted in the operations manual or procedures manual including guidance to the flight crew on how to determine that the equivalent LVP are in effect.	6.4.3 An operator shall not operate to or from an aerodrome or heliport, using operating minima lower than those which may be established for that aerodrome or heliport, by the State in which it is located, except with the specific approval of that State. 6.5.2 An operator shall not permit an aircraft to conduct instrument approach or departures below standard Category I weather minima unless all equipment, training and operating requirements and regulatory requirements have been met.	
SPA.LVO.120 Flight crew training and qualifications		
The operator shall ensure that, prior to conducting an LVO:	6.5.1 An operator shall not permit an aircraft to conduct an instrument approach to Category II or III approach	

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(a) each flight crew member: (1) complies with the training and checking requirements prescribed in the operations manual, including flight simulation training device (FSTD) training, in operating to the limiting values of RVR/VIS (visibility) and DH specific to the operation and the aircraft type; and (2) is qualified in accordance with the standards prescribed in the operations manual; (b) the training and checking is conducted in accordance with a detailed syllabus.	minima unless the operator has authorization from the civil aviation authority in the State of Registry and the authority of the State in which the CAT II or CAT III operations are being conducted. The minimum requirements to conduct Category II or III operations are: a. approved Category II or III operating procedures in the company operations manual, b. flight crew that are trained and certified to conduct Category II or III instrument approaches, c. aircraft that are equipped, approved and maintained for Category II or III operations. 6.5.2 An operator shall not permit an aircraft to conduct instrument approach or departures below standard Category I weather minima unless all equipment, training and operating requirements and regulatory requirements have been met.	
SPA.LVO.125 Operating procedures		
(a) The operator shall establish procedures and instructions to be used for LVOs. These procedures and instructions shall be included in the operations manual or procedures manual and contain the duties of flight crew members during taxiing, take-off, approach, flare, landing, rollout and missed approach operations, as appropriate. (b) Prior to commencing an LVO, the pilot-in-command/commander shall be satisfied that: (1) the status of the visual and non-visual facilities is sufficient; (2) appropriate LVPs are in force according to information	See above	

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received from air traffic services (ATS); and (3) flight crew members are properly qualified.		
SPA.LVO.130 Minimum equipment		
(a) The operator shall include the minimum equipment that has to be serviceable at the commencement of an LVO in accordance with the aircraft flight manual (AFM) or other approved document in the operations manual or procedures manual, as applicable. (b) The pilot-in-command/commander shall be satisfied that the status of the aircraft and of the relevant airborne systems is appropriate for the specific operation to be conducted.	Addressed in Section A of the GCOM as guidance material as follows: **8.9 ALL WEATHER OPERATIONS** Category II approaches will only be conducted in the following aircraft: All Category II operations will be conducted in accordance with the ***(Company Name)*** Category II Manual and the following requirements must be met: a. The required aircraft equipment as specified in the Category II Manual is serviceable; b. The flight crew members have received training in accordance with part D and the company Category II or III Manual, as applicable;	Operators must ensure that the specific EASA requirement is met.
SUBPART G - TRANSPORT OF DANGEROUS GOODS		
SPA.DG.100 Transport of dangerous goods		
Except as provided for in Annex IV (Part-CAT), Annex VI (Part-NCC) and Annex VII (Part-NCO) the operator shall only transport dangerous goods by air if the operator has been approved by the competent authority.	**14.1 CONSIDERATIONS FOR ALL OPERATORS** 14.1.1 Dangerous goods are defined as those articles or substances that are capable of posing significant risks to health, safety or property when transported by air. Operators shall not transport dangerous goods except where authorized under and in accordance with the provisions of the ICAO *Technical Instruction for the Safe Transport of Dangerous Goods* (hereafter called ICAO *Technical Instructions*) or the *IATA Dangerous*	

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	Goods Regulations. 14.2.1 Prior to transporting dangerous goods an operator shall ensure that all State regulatory requirements have been met.	
SPA.DG.105 Approval to transport dangerous goods		
To obtain the approval to transport dangerous goods, the operator shall in accordance with the Technical Instructions: (a) establish and maintain a training programme for all personnel involved and demonstrate to the competent authority that adequate training has been given to all personnel; (b) establish operating procedures to ensure the safe handling of dangerous goods at all stages of air transport, containing information and instructions on: (1) the operator's policy to transport dangerous goods; (2) the requirements for acceptance, handling, loading, stowage and segregation of dangerous goods; (3) actions to take in the event of an aircraft accident or incident when dangerous goods are being carried; (4) the response to emergency situations involving dangerous goods; (5) the removal of any possible contamination; (6) the duties of all personnel involved, especially with relevance to ground handling and aircraft handling; (7) inspection for damage, leakage or contamination; and (8) dangerous goods accident and incident reporting.	14.1.4 An operator shall have a system to advise passengers of what constitutes dangerous goods, and whether and how those goods can be carried on aircraft. 14.1.5 Aircraft crew members shall receive training on these procedures at least every two years. **14.2 DANGEROUS GOODS TRANSPORTATION REQUIREMENTS** 14.2.2 In particular, operators that transport dangerous goods, whether it is organization's property, the property of organization personnel, or the property of a third party, shall ensure that the goods are: a. classified, b. packed, c. labelled and marked, d. loaded, e. stowed, f. accompanied by documentation, and g. transported in accordance with the provisions of the ICAO *Technical Instructions,* or the *IATA Dangerous Goods Regulations and the rules specified by the State of the operator.* 14.2.3 An operator shall ensure that all personnel involved in the transportation of dangerous goods are trained and certified in accordance with the ICAO *Technical Instructions* or the *IATA Dangerous Goods Regulations and the rules specified by the State of the operator*.	

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SPA.DG.110 Dangerous goods information and documentation		
The operator shall, in accordance with the Technical Instructions: (a) provide written information to the pilot-in-command/commander: (1) about dangerous goods to be carried on the aircraft; (2) for use in responding to in-flight emergencies; (b) use an acceptance checklist; (c) ensure that dangerous goods are accompanied by the required dangerous goods transport document(s), as completed by the person offering dangerous goods for air transport, except when the information applicable to the dangerous goods is provided in electronic form; (d) ensure that where a dangerous goods transport document is provided in written form, a copy of the document is retained on the ground where it will be possible to obtain access to it within a reasonable period until the goods have reached their final destination; (e) ensure that a copy of the information to the pilot-in-command/commander is retained on the ground and that this copy, or the information contained in it, is readily accessible to the aerodromes of last departure and next scheduled arrival, until after the flight to which the information refers; (f) retain the acceptance checklist, transport document and information to the pilot-in-command/commander for at least 3 months after completion of the flight; and (g) retain the training records of all personnel for at least 3 years.	14.2.4 An operator shall also have a system to advise their shipping departments of what constitutes dangerous goods and whether and how those goods can be carried on aircraft. 14.2.5 An operator shall not accept dangerous goods for transport from third parties unless those parties have complied with all relevant provisions of the ICAO *Technical Instructions* or the *IATA Dangerous Goods Regulations and the rules specified by the State of the operator*. 14.2.6 An operator shall ensure that the pilots-in-command of their aircraft are informed of what dangerous goods are being carried on board the aircraft, as early as practicable before the departure of the aircraft. 14.2.7 In the event an aircraft carrying dangerous goods is involved in an accident or serious incident, the operator of an aircraft carrying dangerous goods shall provide information, without delay, to emergency personnel responding to the accident or serious incident about the dangerous goods on board, as shown in the written information to the pilot in command. As soon as possible the operator shall also provide this information to the appropriate authorities of the State of the Operator and the State in which the accident or serious incident occurred. 14.2.8 In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods shall, if requested to do so, provide information without delay to the	

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	emergency services personnel responding to the incident and to the appropriate authority of the State in which the incident occurred, about the dangerous goods on board, as shown on the written information to the pilot-in-command.	