

Checklist Fuel scheme (aeroplane)

- ☐ Basic fuel scheme (BFS)
☐ Basic fuel scheme with variations (BFSV)
☐ Individual fuel scheme with some elements from a BFS and/or BFSV (IND/BFS)
☐ Full individual fuel scheme (IND)

Operator ⁽¹⁾	Date	Inspector (Name/signature) ⁽²⁾	Ref.
Purpose:			

⁽²⁾ By signing this checklist, I hereby confirm that, at the time of performing this activity, I did not have any conflict of interest to declare regarding the above-mentioned operator ⁽¹⁾.

No	Ref Non-compliance	Non-compliances

List of remarks	
Ref remarks	Remarks

Additional notes/comments:

NA = Not Applicable; C = Compliant; NC = Not Compliant; R = Remark; N/R = Not Reviewed

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
General						
CAT.OP.MPA.180(a)(b)(c)	ALL	Fuel/energy scheme: Establishment of a fuel/energy scheme: ○ appropriate for the type(s) of operation performed; ○ corresponding to the capability of the operator to support its implementation ○ including: ▪ a fuel/energy planning and in-flight re-planning policy ▪ an aerodrome selection policy ▪ an in-flight fuel/energy management policy			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.180(a)(3)	ALL	Type of fuel scheme: The operator shall establish, implement, and maintain a fuel/energy scheme that: is either: (i) a basic fuel/energy scheme; or (ii) a basic fuel/energy scheme with variations; or (iii) an individual fuel/energy scheme.	- Check that the operator has clearly specified: ○ the variation(s) to the BFS, if it applied for a BFS with variations; ○ the elements of the BFS which applies, if any, in case it applied for an individual fuel scheme. Note: In any case, the system selected by the operator may be hybrid and include BFS elements, some variations to BFS and also an individual fuel scheme in another of the 3 policies.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Operational control (as applicable)						
Part-DEF	BFSV IND/BSF IND	Flight monitoring (if applicable): If the operator is required to implement a flight monitoring system, it should cover at least the following: - the recording in real time of departure and arrival messages to ensure that a flight is operating and has arrived at the destination aerodrome or an alternate aerodrome; - the operational monitoring of flights by suitably qualified operational-control personnel from departure throughout all phases of the flight; - the communication of all available and relevant safety	Guidance on 'Safety relevant information' may be found in GM28 to Annex I Definitions		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		information between the operational-control personnel on the ground and the flight crew; and - the critical assistance to the flight crew in the event of an in-flight emergency or security issue, or at the request of the flight crew.				
Part-DEF	BFSV IND/BSF IND	<u>Flight watch (if applicable):</u> If the operator is required to implement a flight watch system, it should cover the at least following: - all the elements required for the flight monitoring system - the active tracking of a flight by suitably qualified operational-control personnel throughout all phases of the flight to ensure that the flight is following its prescribed route without unplanned deviations, diversions or delays.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.GEN.110	BFSV IND/BSF IND	<u>Use of FOO/FD (Suitably qualified operational control personnel):</u> When a CAT operator uses flight monitoring or flight watch as functions of a system for exercising operational control, FOOs/FDs should perform those functions.				
ORO.GEN.110	BFSV IND/BSF IND	<u>FOO/FD training programme:</u> The CAT operator should develop a training programme, for FOOs/FDs that perform those functions (flight monitoring/flight watch) The training programme specified above should be detailed in the OM of the CAT operator and should be delivered by an instructor for operational control personnel.	- Check that the FOO/FD training programme is included in OM-D.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.GEN.110	BFSV IND/BSF IND	<u>FOO/FD initial training:</u> - The training should be based on the relevant parts of ICAO Annex 1, ICAO Documents 10106 and 9868. - The initial training should include, where relevant to the intended operation, the following elements that should be tailored to the specific duties assigned to each person: (1) air law; (2) aircraft general knowledge; (3) flight performance calculation, planning procedures, and loading;	- Refer to AMC1 ORO.GEN.110(c)&(e) for the detailed list of elements of the initial training programme.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		(4) human performance ; (5) meteorology ; (6) navigation ; (7) operational procedures ; (8) principles of flight: principles of flight related to the appropriate category of aircraft ; (9) radio communications: procedures for communicating with other aircraft and ground stations; and (10) special aerodromes.				
ORO.GEN.110	BFSV IND/BSF IND	<u>Operator specific training:</u> In addition to the initial training, FOOs/FDs should receive training in the specific duties, responsibilities, and tools that are associated with the operational control system of the operator.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.GEN.110	BFSV IND/BSF IND	<u>FOO/FD recurrent training:</u> - When the recurrent training is conducted within the last 12 months of a 36-month validity period, the next 36-month validity period should be calculated from the original expiry date of the previous assessment. - Notwithstanding the 36-month interval of the above point, recurrent training may also be performed at shorter intervals and adjusted to the needs identified after an assessment of the training needs conducted by the operator.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
ORO.GEN.110	BFSV IND/BSF IND	<u>FOO/FD instructors:</u> Unless otherwise required by the relevant national regulations, instructors for operational control personnel should: (1) be able to prove that they are current in the subjects covered by the training programme for FOOs/FDs, including the operator-specific elements, or otherwise successfully complete an FOO/FD training programme; (2) have adequate instructional skills or attend instructor training; if more than 24 months have passed since the delivery of the last FOO/FD course, they should attend recurrent instructor training before delivering the next course; and (3) have relevant work experience in the areas of the training that	- Check that the FOO/FD instructor training requirements are included in the OM-D.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		they provide. The CAT operator should include in the OM the required knowledge, skills, and qualifications of the instructors for operational control personnel.				
ORO.GEN.110	BFSV IND/BFS IND	<u>Briefing of FOO/FD before assuming duties:</u> In the context of an ongoing flight-following, flight-monitoring, or flight-watch activity, an FOO/FD, before assuming duties, should be briefed on the elements related to the safety of the operations the FOO/FD will be performing as part of the operational control.	- Check that the procedures of the operator foresee such briefing before taking a shift (refer to GM2 ORO.GEN.110(f) for examples of relevant safety information which may be included in the briefing).		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Individual fuel scheme						
CAT.OP.MPA.180(a)	IND/BFS IND	When determining the extent of the deviation from the current fuel scheme, the operator should take into account at least the following elements for the relevant area of operation: (1) the available aerodrome technologies, capabilities, and infrastructure; (2) the reliability of meteorological and aerodrome information; (3) the reliability of the aeroplane systems, especially the time-limited ones; and (4) the type of ATS provided and, where applicable, characteristics and procedures of the air traffic flow management and of the airspace management.	- Check that the deviations proposed are consistent with these elements. - Check that the operator has assessed the reliability of the meteorological forecast reports in the area of operations (see guidance in GM4 CAT.OP.MPA.181).		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Baseline safety performance establishment and safety risk assessment						
CAT.OP.MPA.180(d)(1)	IND/BFS IND	<u>Baseline safety performance:</u> The operator should measure the baseline safety performance of its operation with the current fuel scheme by: (i) selecting safety performance indicators (SPIs) and targets that are agreed with the competent authority; and (ii) collecting statistically relevant data for a period of at least 2 years of continuous operation (note: the number of flights should be sufficient to provide data to support the intended deviation).	- Refer to GM2 CAT.OP.MPA.180 for a non-exhaustive list of possible SPIs.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
CAT.OP.MPA.180(d)(3)	IND/BFS IND	Safety risk assessment: The operator shall identify the hazards associated with the individual fuel scheme and carry out a safety risk assessment of these hazards.	- Check that the operator's hazard identification and risk assessment process established as part of its management system is adequately defined and used by the operator for this activity.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.180(d)(3)	IND/BFS IND	Risk monitoring and risk control: The operator shall, based on this safety risk assessment, establish a mechanism for risk monitoring and risk control to ensure an equivalent level of safety to that of the current fuel scheme.	- Check that the operator is comparing the SPIs before and after the establishment of the fuel scheme and is taking relevant actions if necessary. - - Check that the operator's risk monitoring and risk control process established as part of its management system is adequately defined and used for this activity.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Reporting system						
CAT.OP.MPA.180(d)	IND/BFS IND	The operator should establish an effective continuous reporting system to the competent authority on the safety performance and regulatory compliance of the individual fuel scheme.	- Check the effective implementation of the reporting system.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Operational capability demonstration						
CAT.OP.MPA.180(a)(2)	IND/BFS IND	An operator wishing to apply for the approval of an individual fuel scheme should be able to demonstrate that it exercises sufficient organisational control over internal processes and the use of resources. The operator should adapt its management system to ensure that: (1) processes and procedures are established to support the individual fuel scheme; (2) involved flight crew and personnel are trained and competent to perform their tasks; and (3) the implementation and effectiveness of such processes, procedures, and training are monitored.	- Review the operator's operational control procedures and processes.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.180(a)(3)	IND/BFS IND	The operator should have as a minimum the following operational capabilities that support the implementation of an individual fuel scheme:	- Refer also to the section of the checklist related to the operational capabilities that support the implementation of an individual fuel scheme.		☐ N/A	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
2)		scheme: (1) use a suitable computerised flight-planning system; (2) ensure that the planning of flights is based upon current aircraft-specific data that is derived from a fuel consumption monitoring system and reliable meteorological data; (3) have airborne fuel prediction systems; (4) be able to operate in required navigation performance (RNP) 4 oceanic and remote continental airspace and in area navigation (RNAV) 1 continental en-route airspace, as applicable; (5) be able to perform APCHs that require an LVO approval and RNP APCHs down to VNAV minima; and (6) update the available landing options by establishing an operational control system with the following capabilities: (i) flight monitoring or flight watch; (ii) collection and continuous monitoring of reliable meteorological, aerodrome, and traffic information; (iii) two independent airborne communications systems to achieve rapid and reliable exchange of relevant safety information between flight operations personnel and flight crew during the entire flight; and (iv) monitoring of the status of aircraft systems that affect fuel consumption and of ground and aircraft systems that affect landing capabilities.	to flight watch and flight monitoring for their assessment. - Refer also to the section of the checklist related to the fuel consumption monitoring system. - Check that the 2 airborne communications system are adequate for the type of operations (e.g. oceanic, remote areas).		☐ C ☐ NC ☐ R ☐ N/R	
Continuous monitoring						
CAT.OP.MPA.180(d)	IND/BFS IND	After receiving the approval, the operator should: (1) continually measure and monitor the outcome of each SPI; and (2) in case of degradation of any SPI: (i) assess the root cause of the degradation; (ii) identify remedial actions to restore the baseline safety performance; and (iii) when the associated safety performance target is not met, inform the authority as soon as practicable.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Fuel/energy planning and in-flight re-planning policy						
CAT.OP.MPA.181(a)	ALL	Procedures: The operator shall develop procedures for the fuel/energy			☐ N/A	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		planning and in-flight re-planning policy that shall be contained in the operations manual.			☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.181(a)	ALL	Procedures/data: Fuel/energy planning of flights to be based upon procedures contained in the OM based on: - current aircraft-specific data derived from a fuel consumption monitoring system; or if not available - data provided by the aircraft manufacturer	- In case no fuel consumption monitoring system is established, verify the acceptability of the rationales for this (e.g. new aircraft).		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.181(a)	BFS BFSV	Fuel consumption monitoring system	- Check that when a fuel consumption monitoring system has been established, its data is used in preference to data from the aircraft manufacturer. - Check that data from the fuel consumption programme is collected and used on an individual aircraft basis. - Additional guidance may be found in para c) to GM1 CAT.OP.MPA.181.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.181(a)	IND/BFS IND	Fuel consumption monitoring system A fuel consumption monitoring system should be data driven, and should include the following: (a) a fuel performance monitoring system; (b) a database that contains statistically significant data of at least 2 years; (c) statistics and data normalisation; and (d) data transparency and verification.	- Check that when a fuel consumption monitoring system has been established, its data is used in preference to data from the aircraft manufacturer. - Check that data from the fuel consumption programme is collected and used on an individual aircraft basis.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.181(b)	ALL	Operating conditions: Fuel/energy planning of flights to be based upon procedures contained in the OM taking into account the operating conditions under which the flight is to be conducted, including at least: - aircraft fuel/energy consumption data; - anticipated masses; - anticipated meteorological conditions - the effect of deferred maintenance items and/or of configuration deviations;	- Check how the operator is managing LMC and its impact on the fuel quantity.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		- the expected departure and arrival routing and runways; and - anticipated delays.				
CAT.OP.MPA.181(c)	ALL	Pre-flight calculation of usable fuel/energy: The operator shall ensure that the pre-flight calculation of usable fuel/energy that is required for a flight includes: (1) <u>taxi fuel/energy</u> that shall not be less than the amount expected to be used prior to take-off; (2) <u>trip fuel/energy</u> that shall be the amount of fuel/energy that is required to enable the aeroplane to fly from take-off, or from the point of in-flight re-planning, to landing at the destination aerodrome; (3) <u>contingency fuel/energy</u> that shall be the amount of fuel/energy required to compensate for unforeseen factors; (4) <u>destination alternate fuel/energy</u>: (i) when a flight is operated with at least one destination alternate aerodrome, it shall be the amount of fuel/energy required to fly from the destination aerodrome to the destination alternate aerodrome; or (ii) when a flight is operated with no destination alternate aerodrome, it shall be the amount of fuel/energy required to hold at the destination aerodrome, while enabling the aeroplane to perform a safe landing, and to allow for deviations from the planned operation; as a minimum, this amount shall be 15-minute fuel/energy at holding speed at 1 500ft (450 m) above the aerodrome elevation in standard conditions, calculated according to the estimated aeroplane mass on arrival at the destination aerodrome; (5) <u>final reserve fuel/energy</u>, that shall be the amount of fuel/energy that is calculated at holding speed at 1 500ft (450 m) above the aerodrome elevation in standard conditions according to the aeroplane estimated mass on arrival at the destination alternate aerodrome, or destination aerodrome when no destination alternate aerodrome is required, and shall not be less than: (i) for aeroplanes with reciprocating engines, the fuel/energy to fly for 45 minutes; or	- Check that these criteria are met for all types of fuel schemes. - Additional criteria per type of fuel scheme are to be checked as well (see following items of the C/L). - In the case of standard FRF values, check that it has been correctly rounded-up.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		(ii) for turbine-engined aeroplanes, the fuel/energy to fly for 30 minutes; (6) <u>additional fuel/energy</u>, if required by the type of operation; it shall be the amount of fuel/energy to enable the aeroplane to land at a fuel/energy en route alternate aerodrome (fuel/energy ERA aerodrome critical scenario) in the event of an aircraft failure that significantly increases the fuel/energy consumption at the most critical point along the route; this additional fuel/energy is required only if the minimum amount of fuel/energy that is calculated according to points (2) to (5) is not sufficient for such an event; (7) <u>extra fuel/energy</u>, to take into account anticipated delays or specific operational constraints; and (8) <u>discretionary fuel/energy</u>, if required by the commander.				
CAT.OP.MPA.181(c)	BFS IND/BFS	ELA2 aeroplanes: For operations, take-off, and landing at the same aerodrome or operating site under VFR by day, operators should specify the minimum FRF in the OM This FRF should not be less than the amount needed to fly for a period of 45 minutes. The operating conditions may be rounded up to a single figure of fuel for all flights. For the pre-flight calculation of the required usable fuel, a single rounded-up figure for the particular flight is needed, which includes trip fuel, contingency fuel, extra fuel, discretionary fuel, and alternate fuel, to reach a destination alternate aerodrome if such an aerodrome is required.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Taxi fuel						
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class A aeroplanes Taxi fuel to take into account the local conditions at the departure aerodrome and the APU consumption (if applicable).	- Check that the assessment of the local conditions include NOTAMs, meteorological conditions, ATS procedures and any anticipated delays.		☐ N/A ☐ C ☐ NC ☐ R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
					☐ N/R	
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class B and C aeroplanes Taxi fuel to be included if the amount is significant.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.181(c)	BFSV IND/BFS	BFS with variations: statistical taxi fuel To calculate taxi fuel for a basic fuel scheme with variations, the operator may use statistical taxi fuel.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Trip fuel						
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class A aeroplanes (1) fuel for take-off and climb from the aerodrome elevation to the initial cruising level/altitude, taking into account the expected departure routing; (2) fuel from the top of climb to the top of descent, including any step climb/descent; (3) fuel from the top of descent to the point where the approach procedure is initiated, taking into account the expected arrival routing; and (4) fuel for making an approach and landing at the destination aerodrome;			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class B and C aeroplanes Trip fuel (no specific additional criteria)			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Contingency fuel						
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class A aeroplanes Contingency fuel to be either:			☐ N/A	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		(1) 5 % of the planned trip fuel or, in the event of in-flight re-planning, 5 % of the trip fuel for the remainder of the flight; or (2) an amount to fly for 5 minutes at holding speed at 1 500 ft (450 m) above the destination aerodrome in standard conditions, whichever is the higher.			☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class B and C aeroplanes Contingency fuel to be not less than 5 % of the planned trip fuel, or in the event of in-flight re-planning, 5 % of the trip fuel for the remainder of the flight			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.181(c)	BFSV IND/BFS	BFS with variations: contingency fuel other than 5% If the operator establishes and maintains a fuel consumption monitoring system for individual aeroplanes, and uses valid data for fuel calculation based on such a system, contingency fuel should be the higher of either: (1) an amount of fuel that should be either: (i) not less than 3 % of the planned trip fuel, or in the event of in-flight re-planning, 3 % of the trip fuel for the remainder of the flight provided that a fuel en route alternate (fuel ERA) aerodrome is available; or (ii) an amount of fuel sufficient for 20-minute flying time based upon the planned trip fuel consumption; or (iii) an amount of fuel based on a statistical fuel method that ensures an appropriate statistical coverage of the deviation from the planned to the actual trip fuel; prior to implementing a statistical fuel method, a continuous 2-year operation is required during which statistical contingency fuel (SCF) data is recorded. <u>Note:</u> to use SCF on a particular city pair/aeroplane combination, sufficient data is required to be statistically significant; the operator should use this method to monitor the fuel consumption on each city pair/aeroplane combination, and to carry out a statistical analysis to calculate the required contingency fuel for that city pair/aeroplane combination; or (2) an amount of fuel to fly for 5 minutes at holding speed at 1 500	- Refer also to the section of the checklist related to the fuel consumption monitoring system.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		ft (450 m) above the destination aerodrome in standard conditions.				
CAT.OP.MPA.181(c)	BFSV IND/BFS	BFS with variation: RCF procedure The establishment and maintenance of a fuel consumption monitoring system for individual aeroplanes, and the use of valid data for fuel calculation based on such a system is required for the use of the RCF procedure. If the operator's fuel policy includes pre-flight planning to a destination 1 aerodrome (commercial destination with an RCF procedure using a decision point along the route) and a destination 2 aerodrome (optional refuelling destination), the amount in the pre-flight calculation of the required usable fuel should be the higher of either: (1) the sum of: (i) taxi fuel; (ii) trip fuel to the destination 1 aerodrome via the decision point; (iii) contingency fuel equal to not less than 5 % of the fuel that is estimated to be consumed from the decision point to the destination 1 aerodrome; (iv) the amount of fuel specified in AMC2 CAT.OP.MPA.182: destination 1 alternate fuel or no alternate fuel if the remaining flying time from the decision point to destination 1 aerodrome is less than 6 hours; (v) FRF; (vi) additional fuel; (vii) extra fuel if there are anticipated delays or specific operational constraints; and (viii) discretionary fuel, if required by the commander; or (2) the sum of: (i) taxi fuel; (ii) trip fuel to the destination 2 aerodrome via the decision point; (iii) contingency fuel equal to not less than the amount that is calculated in accordance with point (c) of AMC6 (3% contingency fuel), from the departure aerodrome to the destination 2 aerodrome;	- Refer also to the section of the checklist related to the fuel consumption monitoring system.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		(iv) alternate fuel if a destination 2 alternate aerodrome is required; (v) FRF; (vi) additional fuel; (vii) extra fuel if there are anticipated delays or specific operational constraints; and (viii) discretionary fuel, if required by the commander.				
CAT.OP.MPA.181(c)	BFSV IND/BFS	<u>BFS with variation : ERA location for contingency fuel reduced to 3%</u> The fuel en route alternate (fuel ERA) aerodrome should be located within a circle with a radius equal to 20 % of the total flight plan distance; the centre of this circle lies on the planned route at a distance from the destination aerodrome equal to 25 % of the total flight plan distance, or at least 20 % of the total flight plan distance plus 50 NM, whichever is greater. All distances should be calculated in still-air conditions. The fuel ERA aerodrome should be nominated in the operational flight plan.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Destination alternate fuel						
CAT.OP.MPA.181(c)	BFS IND/BFS	<u>Performance class A aeroplanes</u> (1) when the aircraft is operated with one destination alternate aerodrome: (i) fuel for a missed approach from the applicable DA/H or MDA/H at the destination aerodrome to the missed-approach altitude, taking into account the complete missed-approach procedure; (ii) fuel for climb from the missed-approach altitude to the cruising level/altitude, taking into account the expected departure routing; (iii) fuel for cruising from the top of climb to the top of descent, taking into account the expected routing; (iv) fuel for descent from the top of descent to the point where the approach is initiated, taking into account the expected arrival routing; and (v) fuel for making an approach and landing at the destination			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		alternate aerodrome; and (2) when the aircraft is operated with two destination alternate aerodromes, the amount of fuel that is calculated in accordance with point (1), based on the destination alternate aerodrome that requires the greater amount of fuel.				
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class B and C aeroplanes Alternate fuel to allow to reach the destination alternate aerodrome via the destination if a destination alternate aerodrome is required;			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Final reserve fuel (FRF)						
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class A, B and C aeroplanes The final reserve fuel/energy that shall be the amount of fuel/energy that is calculated at holding speed at 1 500ft (450 m) above the aerodrome elevation in standard conditions according to the aeroplane estimated mass on arrival at the destination alternate aerodrome, or destination aerodrome when no destination alternate aerodrome is required, and shall not be less than: (i) for aeroplanes with reciprocating engines, the fuel/energy to fly for 45 minutes; or (ii) for turbine-engined aeroplanes, the fuel/energy to fly for 30 minutes.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Additional fuel						
CAT.OP.MPA.181(c)	BFS IND/BFS	Performance class A aeroplanes Additional fuel includes an amount of fuel that allows the aeroplane to proceed, in the event of an engine failure or loss of pressurisation, from the most critical point along the route to a fuel en route alternate (fuel ERA) aerodrome in the relevant aircraft configuration, hold there for 15 minutes at 1 500 ft (450 m) above the aerodrome elevation in standard conditions, make an approach, and land. This additional fuel should be calculated according to the engine			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		failure or loss of pressurisation, whichever requires a greater amount of fuel.				
CAT.OP.MPA.181(c)	BFS IND/BFS	<u>Performance class B and C aeroplanes</u> No specific criteria (left to the operator).			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Extra fuel						
CAT.OP.MPA.181(c)	BFS IND/BFS	<u>Performance class A, B and C aeroplanes</u> include anticipated delays or specific operational constraints that can be predicted.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Discretionary fuel						
CAT.OP.MPA.181(c)	BFS IND/BFS	<u>Performance class A, B and C aeroplanes</u> Discretionary fuel includes a quantity at the sole discretion of the commander.	- Check that the procedure to clearly state the possibility offered to the commander to decide to plan extra fuel at his/her discretion. - Check the practical use of this possibility by commanders in relation to the operator's safety culture assessment.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
In-flight re-planning						
CAT.OP.MPA.181(d)	ALL	The operator shall ensure that in-flight re-planning procedures for calculating the usable fuel/energy that is required when a flight proceeds along a route or to a destination aerodrome other than the ones originally planned include: - trip fuel/energy that shall be the amount of fuel/energy that is required to enable the aeroplane to fly from take-off, or from the point of in-flight re-planning, to landing at the destination aerodrome; - contingency fuel/energy that shall be the amount of fuel/energy required to compensate for unforeseen			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		factors; - destination alternate fuel/energy - final reserve fuel/energy - additional fuel/energy, if required by the type of operation; - extra fuel/energy, to take into account anticipated delays or specific operational constraints.				
Aerodrome selection policy						
Take-off alternate						
CAT.OP.MPA.182(a)(b)	ALL	<u>Take-off alternate selection:</u> At the planning stage, to allow for a safe landing in case of an abnormal or emergency situation after take-off, the operator shall select and specify in the operational flight plan a take-off alternate aerodrome if either: (1) the meteorological conditions at the aerodrome of departure are below the operator's established aerodrome landing minima for that operation; or (2) it would be impossible to return to the aerodrome of departure for other reasons.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.182(a)(c)	All	<u>Take-off alternate: criteria to consider</u> The take-off alternate aerodrome shall be located within a distance from the departure aerodrome that minimises the risk of exposure to potential abnormal or emergency situations. In selecting the take-off alternate aerodrome, the operator shall consider at least the following: (1) actual and forecast meteorological conditions; (2) availability and quality of the aerodrome infrastructure; (3) navigation and landing capabilities of the aircraft in abnormal or emergency conditions, taking into account the redundancy of critical systems; and (4) approvals held (e.g. extended range operations with two-engined aeroplanes (ETOPS), low visibility operation (LVO), etc.).			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.182(a)(c)	BFS	<u>Location of the take-off alternate:</u>			☐ N/A	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
)	IND/BFS	The take-off alternate aerodrome should not be farther from the departure aerodrome than: (a) for two-engined aeroplanes: (1) 1-hour flight time at an one-engine-inoperative (OEI) cruising speed according to the AFM in ISA and still-air conditions using the actual take-off mass; or (2) the extended-range twin operations (ETOPS) diversion time that is approved in accordance with SPA.ETOPS, subject to any minimum equipment list (MEL) restriction, up to a maximum of 2-hour flight time at OEI cruising speed according to the AFM in ISA and still-air conditions using the actual take-off mass; and (b) for three- or four-engined aeroplanes, 2-hour flight time at an all-engines-operating cruising speed according to the AFM in ISA and still-air conditions using the actual take-off mass; (c) for operations approved in accordance with SPA.SET-IMC, 30 minutes flying time at normal cruising speed in still-air conditions, based on the actual take-off mass; (d) in the case of multi-engined aeroplanes, if the AFM does not contain an OEI cruising speed, the speed to be used for calculation shall be that which is achieved with the remaining engine(s) set at maximum continuous power.			☐ C ☐ NC ☐ R ☐ N/R	
En-route/destination alternates						
CAT.OP.MPA.182(a)(d)	ALL	En-route/destination alternate: general policy Except in the case of the isolated aerodrome procedure, at the planning stage, for each instrument flight rules (IFR) flight, the operator shall select and specify in the operational and air traffic services (ATS) flight plans one or more aerodromes so that two safe-landing options are available during normal operation when reaching the destination aerodrome.	<u>Note:</u> For the isolated aerodrome procedure refer to the specific section of the C/L.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.182(a)(d)	BFS IND/BFS	Destination alternate selection (except for isolated aerodrome): (a) For each IFR flight, the operator should select and specify in the operational and ATS flight plans at least one destination alternate aerodrome. (b) For each IFR flight, the operator should select and specify in the operational and ATS flight plans two destination alternate	<u>Note:</u> For the isolated aerodrome procedure refer to the specific section of the C/L.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		aerodromes when for the selected destination aerodrome, the safety margins for meteorological conditions of AMC5 CAT.OP.MPA.182, and the planning minima of AMC6 CAT.OP.MPA.182 cannot be met, or when no meteorological information is available.				
CAT.OP.MPA.182(a)(d)	BFS IND/BFS	Take-off alternate/isolated aerodrome: limitations For the take-off alternate aerodrome and isolated destination aerodrome, any limitations related to OEI operations should be taken into account.	<u>Note:</u> this provision applies also to the isolated aerodrome procedure but is not specific to it. Refer to the specific section of the C/L for the specific items related to the isolated aerodrome procedure.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Planning minima						
CAT.OP.MPA.182(e)	BFS IND/BFS	Aerodrome forecast meteorological conditions: Application of aerodrome forecasts (TAF and TREND) to pre-flight planning	- Check that the operator has transposed the table of AMC3 CAT.OP.MPA.182 in its fuel scheme.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.182(e)	BFS IND/BFS	Planning minima for take-off alternate and destination aerodrome The operator should only select an aerodrome as: (1) take-off alternate aerodrome; or (2) destination aerodrome when the appropriate weather reports and/or forecasts indicate that during a period commencing 1 hour before and ending 1 hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the applicable landing minima as follows: (i) RVR or VIS specified in accordance with point CAT.OP.MPA.110; and (ii) for a type A or a circling operation, ceiling at or above MDH.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description																		
CAT.OP.MPA.182(e)	BFS IND/BFS	Planning minima for destination alternate, fuel ERA aerodrome and isolated destination aerodrome: The operator should only select an aerodrome as: (1) destination alternate aerodrome; (2) fuel ERA aerodrome; or (3) isolated destination aerodrome when the appropriate weather reports and/or forecasts indicate that during a period commencing 1 hour before and ending 1 hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the following planning minima: <table><tr><th>APCH type</th><th>Ceiling</th><th>RVR/VIS</th></tr><tr><td>Type B</td><td>DA/H +200ft</td><td>RVR/VIS +800m</td></tr><tr><td>Type A</td><td>DA/H or MDA/H +400ft</td><td>RVR/VIS+1500m</td></tr><tr><td>Circling</td><td>MDA/H +400ft</td><td>VIS +1500m</td></tr><tr><td colspan="3">X-wind planning minima: see AMC3 CAT.OP.MPA.182</td></tr><tr><td colspan="3">Wind limitations to be applied taking into account the runway condition (dry, wet contaminated)</td></tr></table>	APCH type	Ceiling	RVR/VIS	Type B	DA/H +200ft	RVR/VIS +800m	Type A	DA/H or MDA/H +400ft	RVR/VIS+1500m	Circling	MDA/H +400ft	VIS +1500m	X-wind planning minima: see AMC3 CAT.OP.MPA.182			Wind limitations to be applied taking into account the runway condition (dry, wet contaminated)			<u>Note:</u> this provision applies also to the isolated aerodrome procedure but is not specific to it. Refer to the specific section of the C/L for the specific items related to the isolated aerodrome procedure.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
APCH type	Ceiling	RVR/VIS																						
Type B	DA/H +200ft	RVR/VIS +800m																						
Type A	DA/H or MDA/H +400ft	RVR/VIS+1500m																						
Circling	MDA/H +400ft	VIS +1500m																						
X-wind planning minima: see AMC3 CAT.OP.MPA.182																								
Wind limitations to be applied taking into account the runway condition (dry, wet contaminated)																								
CAT.OP.MPA.182(e)	BFSV IND/BFS	Planning minima: BFS with variation (case 1) As a minimum, the operator should: (1) use a suitable computerised flight-planning system; and (2) have established an operational control system that includes flight monitoring. The operator should select an aerodrome as: (1) a destination alternate aerodrome, or (2) a fuel ERA aerodrome, only when the appropriate weather reports and/or forecasts indicate that the weather conditions will be at or above the following planning minima: <table><tr><th>Row</th><th>APCH type</th><th>Ceiling</th><th>RVR/VIS</th></tr><tr><td>1</td><td>Type B</td><td>DA/H +200ft</td><td>RVR/VIS +550 m</td></tr><tr><td>2</td><td>3D type A based on a facility with a system minimum of 200ft or less</td><td>DA/H* +200ft</td><td>RVR/VIS** +800 m</td></tr><tr><td>3</td><td>2 or more usable type</td><td>DA/H or</td><td>RVR/VIS**</td></tr></table>	Row	APCH type	Ceiling	RVR/VIS	1	Type B	DA/H +200ft	RVR/VIS +550 m	2	3D type A based on a facility with a system minimum of 200ft or less	DA/H* +200ft	RVR/VIS** +800 m	3	2 or more usable type	DA/H or	RVR/VIS**	- Refer to the section of the checklist related to flight monitoring for its assessment.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R			
Row	APCH type	Ceiling	RVR/VIS																					
1	Type B	DA/H +200ft	RVR/VIS +550 m																					
2	3D type A based on a facility with a system minimum of 200ft or less	DA/H* +200ft	RVR/VIS** +800 m																					
3	2 or more usable type	DA/H or	RVR/VIS**																					

Reference	Appl.	Requirement				Specific requirements/expectations	Eval. operator	Eval. CA	Description
			A*** based on a separate nav aid	MDA/H* +200ft	+1000 m				
		4	Other type A	DA/H or MDA/H +400ft	RVR/VIS +1500 m				
		5	Circling	MDA/H +400ft	VIS +1500 m				
		X-wind planning minima: see AMC3 CAT.OP.MPA.182							
		Wind limitations to be applied taking into account the runway condition (dry, wet contaminated)							
		* The higher of the usable DA/H or MDA/H.							
		** The higher of the usable DA/H or MDA/H.							
		*** Compliance with point CAT.OP.MPA.182(f) should be ensured							
CAT.OP.MPA.182(e)	BFSV IND/BFS	Planning minima: BFS with variation (case 2) As a minimum, the operator should: (1) use a suitable computerised flight-planning system; (2) hold an approval for limited-visibility approach operations for that fleet; and (3) have established an operational control system that includes flight monitoring . The operator should select an aerodrome as: (1) destination alternate aerodrome; (2) fuel ERA aerodrome; or (3) isolated destination aerodrome only when the appropriate weather reports and/or forecasts indicate that the weather conditions will be at or above the following planning minima:				- Refer also to the section of the checklist related to flight monitoring for its assessment. <u>Note:</u> this provision applies also to the isolated aerodrome procedure but is not specific to it. Refer to the specific section of the C/L for the specific items related to the isolated aerodrome procedure.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
		Row	APCH type	Ceiling	RVR/VIS				
		1	2 or more type B to 2 separate runways***	DA/H* +100ft	RVR** + 300 m				
		2	1 type B	DA/H +150ft	RVR + 450 m				
		3	3D type A based on a facility with a system minimum of 200ft or less	DA/H + 200 ft	RVR/VIS** + 800 m				

Reference	Appl.	Requirement				Specific requirements/expectations	Eval. operator	Eval. CA	Description
		4	2 or more usable type A*** based on a separate nav aid	DA/H or MDA/H* + 200 ft	RVR/VIS** + 1 000 m				
		5	1 type A	DA/H or MDA/H + 400 ft	RVR/VIS + 1 500 m				
		6	Circling	MDA/H + 400 ft	VIS + 1 500 m				
		X-wind planning minima: see AMC3 CAT.OP.MPA.182							
		Wind limitations to be applied taking into account the runway condition (dry, wet contaminated)							
		* The higher of the usable DA/H or MDA/H.							
		** The higher of the usable DA/H or MDA/H.							
*** Compliance with point CAT.OP.MPA.182(f) should be ensured									
CAT.OP.MPA.182(f)	ALL	Sufficient means to navigate: For each IFR flight, the operator shall ensure that sufficient means are available to navigate to and land at the destination aerodrome or at any destination alternate aerodrome in the event of loss of capability for the intended approach and landing operation.						☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.182(f)	BFS IND/BFS	PBN operations When the operator intends to use PBN, the operator should select an aerodrome as destination alternate aerodrome only if an instrument approach procedure that does not rely on a GNSS is available either at that aerodrome or at the destination aerodrome.						☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.182(f)	BFS IND/BFS	Operational credits When the operator intends to use ‘operational credits’ (e.g. EFVS, SA CAT I, etc.), the operator should select an aerodrome as destination alternate aerodrome only if an approach procedure that does not rely on the same ‘operational credit’ is available either at that aerodrome or at the destination aerodrome.						☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
In-flight fuel/energy management policy						
CAT.OP.MPA.185(a)	ALL	In-flight fuel checks: procedure The operator shall establish procedures for in-flight fuel/energy management that ensure: (1) continual validation of the assumptions made during the planning stage (pre-flight or in-flight re-planning, or both); (2) re-analysis and adjustment, if necessary; (3) that the amount of usable fuel/energy remaining on board is protected and not less than the fuel/energy that is required to proceed to an aerodrome where a safe landing can be made; and (4) that the relevant fuel/energy data for the purpose of points (1), (2), and (3) is recorded.	- Check that the recorded data includes (unless ACARS is available): - Off-block fuel - Take-off fuel (if recorded automatically) - MINIMUM fuel declarations - MAYDAY FUEL declarations - Fuel after touchdown is recorded automatically - On-block fuel		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.185(a)	BFS IND/BFS	In-flight fuel checks: procedure (1) The operator should establish a procedure to ensure that in-flight fuel checks are carried out at regular intervals or at specified points indicated in the operational flight plan (one check at least every 60 minutes). (2) The remaining usable fuel should be evaluated to: (i) compare the actual consumption with the planned consumption; (ii) check that the remaining usable fuel is sufficient to complete the flight; and (iii) determine the usable fuel that is expected to remain upon landing at the destination aerodrome.	- Check that the in-flight fuel checks are recorded on the OFP in accordance with the operator's policy.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.185(a)	BFS IND/BFS	In-flight fuel checks: data management In relation to the recording of relevant data, the operator should: (i) agree with the competent authority on what constitutes relevant data for the purpose of recording; (ii) use the relevant data as safety performance indicators (SPIs) of the current fuel scheme; and (iii) ensure that the recorded data is stored for at least 2 years. The operator should establish a procedure for the data to be de-identified to a level that ensures the implementation of a 'just culture'.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
CAT.OP.MPA.185(a)	BFS IND/BFS	In-flight fuel management: fuel monitoring (1) The flight should be conducted to ensure that the usable fuel expected to remain upon landing at the destination aerodrome is not less than: (i) the required alternate fuel plus the FRF; or (ii) the FRF if no alternate aerodrome is required. (2) If an in-flight fuel check shows that the usable fuel expected to remain upon landing at the destination aerodrome is less than: (i) the required alternate fuel plus the FRF, the commander should request delay information from the ATC, and take into account the prevailing traffic and operational conditions at the destination aerodrome, at the destination alternate aerodrome, and at any other adequate aerodrome, to decide whether to proceed to the destination aerodrome or to divert in order to perform a safe landing with not less than the FRF; or (ii) the FRF, if no destination alternate aerodrome is required, the commander should take appropriate action and proceed to an aerodrome where a safe landing can be made with not less than the FRF.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.185(a)	BFS IND/BFS	Use of fuel for other objectives: The use of fuel after flight commencement for objectives other than the ones originally intended during pre-flight planning should require reanalysis and, if applicable, adjustment of the planned operation.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.185(b)	ALL	Delay information The operator shall have procedures in place to require the commander to obtain delay information from a reliable source when unforeseen circumstances may result in landing at the destination aerodrome with less than the final reserve fuel/energy plus any: (1) fuel/energy to proceed to an alternate aerodrome, if required; or (2) fuel/energy required to proceed to an isolated aerodrome.	- Check that the operator has assessed (by order of priority) the integrity, availability, accuracy and continuity of the source of delay information. <u>Note:</u> Coordination with ATC is the simplest solution, but more advanced means may be used based on ACARS/EFB for example. <u>Note:</u> this provision applies also to the isolated aerodrome procedure but is not specific to it.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
			Refer to the specific section of the C/L for the specific items related to the isolated aerodrome procedure.			
CAT.OP.MPA.185(a)	BFSV IND/BFS	<u>BFS with variations: In-flight fuel management (RCF procedure)</u> In addition to the criteria applicable for BFS and in the context of an RCF procedure, if the RCF procedure is used on a flight to proceed to destination 1 aerodrome, the commander should ensure that the remaining usable fuel at the decision point is at least the total of the following: (1) trip fuel from the decision point to destination 1 aerodrome; (2) contingency fuel that is equal to 5 % of the trip fuel from the decision point to destination 1 aerodrome; (3) destination 1 aerodrome alternate fuel if a destination 1 alternate aerodrome is required; (4) additional fuel, if required; and (5) FRF.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.185(a)	IND/BFS IND	<u>Committing to land at a specific aerodrome:</u> The operator should provide relevant safety information to the commander before the commander decides to commit to land at a specific aerodrome.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.185(c)	ALL	<u>'Minimum fuel' state</u> The commander shall advise air traffic control (ATC) of a 'minimum fuel/energy' state by declaring 'MINIMUM FUEL' when the commander has: (1) committed to land at a specific aerodrome; and (2) calculated that any change to the existing clearance to that aerodrome may result in landing with less than the planned final reserve fuel/energy.	- See GM1 CAT.OP.MPA.185 for guidance on the situation where the minimum fuel declaration should be used.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.185(d)	ALL	<u>'Fuel/energy emergency situation</u> The commander shall declare a situation of 'fuel/energy emergency' by broadcasting 'MAYDAY MAYDAY MAYDAY FUEL' when the usable fuel/energy that is calculated to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel/energy.			☐ N/A ☐ C ☐ NC ☐ R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
					☐ N/R	
Isolated aerodrome procedure						
CAT.OP.MPA.182(a)(d)	ALL	En-route/destination alternate: general policy At the planning stage, for each instrument flight rules (IFR) flight, the operator shall select and specify in the operational and air traffic services (ATS) flight plans one or more aerodromes so that two safe-landing options are available during normal operation when reaching the point of no return , to any available fuel/energy ERA aerodrome during isolated aerodrome operations.			☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.182(a)(d)	BFS IND/BFS	Isolated aerodrome procedure: criteria The operator may operate with no destination alternate aerodrome when the destination aerodrome is an isolated aerodrome or when the following two conditions are met: (1) the duration of the planned flight from take-off to landing does not exceed 6 hours or, in the event of in-flight re-planning, in accordance with point CAT.OP.MPA.181(d), the remaining flying time to destination does not exceed 4 hours; and (2) two separate runways are usable at the destination aerodrome and the appropriate weather reports and/or weather forecasts indicate that for the period from 1 hour before to 1 hour after the expected time of arrival, the ceiling is at least 2 000 ft (600 m) or the circling height 500 ft (150 m), whichever is greater, and ground visibility is at least 5 km.	<u>Note:</u> this provision is <u>not</u> a variation to the basic fuel scheme.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
CAT.OP.MPA.182(a)(d)	BFSV IND/BSF	Isolated aerodrome procedure: fuel requirement Unless destination alternate fuel is carried, the operator should use a destination aerodrome as an isolated aerodrome if the alternate fuel plus the FRF that is required to reach the nearest adequate destination alternate aerodrome is more than: (1) for aeroplanes with reciprocating engines, the amount of fuel required to fly either for 45 minutes plus 15 % of the flying time planned for cruising, including FRF or for 2 hours,	<u>Note:</u> this provision is a variation to the basic fuel scheme.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		whichever is less; or (2) for turbine-engined aeroplanes, the amount of fuel required to fly for 2 hours with normal cruise consumption above the destination aerodrome, including the FRF.				
CAT.OP.MPA.182(a)(d)	BFSV IND/BSF	Isolated aerodrome procedure: PNR and fuel If the operator's fuel planning policy includes an isolated aerodrome, a PNR should be determined by a computerised flight-planning system and specified in the OFP. The required usable fuel for pre-flight calculation should be as indicated in points (1) or (2) below, whichever is greater: (1) the sum of: (i) taxi fuel; (ii) trip fuel from the departure aerodrome to the isolated aerodrome via the PNR; (iii) contingency fuel that is calculated in accordance with the operator's current fuel scheme; (iv) additional fuel, if required, but not less than: (A) for aeroplanes with reciprocating engines, the fuel to fly either for 45 minutes plus 15 % of the flight time planned for cruising or for 2 hours, whichever is less; or (B) for turbine-engined aeroplanes, the fuel to fly for 2 hours with normal cruise consumption above the destination aerodrome, including the FRF; (v) extra fuel if there are anticipated delays or specific operational constraints; and (vi) discretionary fuel, if required by the commander; or (2) the sum of: (i) taxi fuel; (ii) trip fuel from the departure aerodrome to the fuel ERA PNR aerodrome via the PNR; (iii) contingency fuel that is calculated in accordance with the operator's current fuel scheme; (iv) additional fuel, if required, but not less than: (A) for aeroplanes with reciprocating engines, fuel to fly for 45 minutes; or (B) for turbine-engined aeroplanes, fuel to fly for 30 minutes at holding speed at 1 500 ft (450 m) above	<u>Note 1:</u> this provision is a variation to the basic fuel scheme. <u>Note 2:</u> PNR may only be used in the context of operations to isolated aerodromes.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

Reference	Appl.	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
		the fuel ERA aerodrome elevation in standard conditions, which should not be less than the FRF; (v) extra fuel if there are anticipated delays or specific operational constraints; and (vi) discretionary fuel, if required by the commander.				
CAT.OP.MPA.185(a)	BFSV IND/BFS	Isolated aerodrome procedure: In-flight fuel management In addition to the criteria applicable for BFS, on a flight to an isolated aerodrome, the commander should ensure that the remaining usable fuel at the actual PNR is at least the total of the following: (1) trip fuel from the PNR to the destination isolated aerodrome; (2) contingency fuel from the PNR to the destination isolated aerodrome; and (3) the additional fuel required for isolated aerodromes, as described in AMC7 CAT.OP.MPA.182.	<u>Note:</u> this provision is a variation to the basic fuel scheme.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	