

# Worksheet A (OPS.06) Extended diversion time operations – FOI assessment

Applicant	Appli	cant EA	AP case	File	
name	ARN	nu	ımber	reference	

## Instructions

- 1. Flight operations inspectors (FOIs) use this worksheet for the assessment of extended diversion time operations (EDTO).
- 2. Only complete the sections relevant to the operation.
- 3. Unless otherwise stated, the legislation reference refers to the Civil Aviation Safety Regulation 1998 (CASR).
- 4. The compliant column is used to record evidence that supports an assessment of *present* and *suitable* for the operation. Select a response from the drop down list. There are four available responses: **Yes / No / MI** (more information) / **N/A** (not applicable). Yes indicates that both present and suitable have been satisfied and the element is compliant with the rule.
- 5. For guidance on specific aspects of each question, refer to the respective section in the principle document / ICAO Doc 10085, as identified in the principle reference column.
- 6. The assessment summary must be completed by the FOI. By selecting satisfied or not satisfied, the inspector is taken to have signed the worksheet.
- 7. Where required, the approval data sheet must be completed by the FOI. Regservices will use this information to prepare approvals for the delegate.

# 1.0 EDTO specific approval requirements

Legislation reference	Principle reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.11	1.1	Has the operator identified the aeroplane airframe/engine combination and area of operation for the EDTO approval?		
121.035(2) MOS 121.2.03	1.2	Does the aeroplane type hold a type design approval for EDTO granted by the State of design of the aeroplane manufacturer?		
121.035(2) MOS 121.2.04	1.3	If the application is for an aeroplane with 2 turbine engines, does the operator meet the in-service experience requirements?		
121.035(2) MOS 121.2.06	1.3.1	If the application is for an aeroplane with 2 turbine-engines, does the operator's maximum diversion time meet the most limiting time limit?		
121.035(2) MOS 121.2.04 MOS 121.2.07	1.3.2	If the application is for an aeroplane with more than 2 turbine- engines, does the operator's maximum diversion time meet the most limiting time limit?		
121.035(2) MOS 121.2.13 MOS 121.2.14	1.4	If a proving flight is required, can the operator demonstrate the capability and competence to conduct EDTO?		
121.035(2) MOS 121.2.014	1.4	If a proving flight is not required, is the operator both capable and competent to support the conduct of intended EDTO?		

# 3.0 EDTO Flight operations requirements

## 3.2 Conversion of threshold and maximum diversion time to distance

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.030(1) 121.035(4) MOS 121.2.06 MOS 121.2.25	3.2	Does the exposition include instructions for the conversion of threshold time and maximum diversion time into distance, considering:		
	3.2.2	for 2 turbine-engine aeroplanes – the one engine inoperative (OEI) speed schedule?		
	3.2.3	for more than 2 turbine-engines – the all-engine cruise (AEO) speed schedule?		

# 3.4 Operations beyond the threshold time considerations

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.035 MOS 121.D4	3.4.1 3.4.1.5 3.4.2.1	Does the exposition include procedures required to support flight operations up to 180 minutes diversion time, including as required:  • for 2 turbine-engine aeroplanes – the AEC is approved for operations up to 180 minutes?  • for an aeroplane with more than 2 turbine-engines – the diversion time is within the TLS specified by the OEM?		
121.035(2) MOS 121.D4	3.4.1.7	If the application is for flight operations beyond 180 minutes diversion time in a 2 turbine-engine aeroplane, is the following met:  • the diversion time does not exceed:  - the most limiting EDTO significant system, other than fire suppression systems, minus 15 minutes at the approved OEI cruise speed  - the cargo fire suppression system, minus 15 minutes at the AEO cruise speed?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.D4	3.4.2.2	If the application is for flight operations beyond 180 minutes up to 240 minutes diversion time in an aeroplane with more than 2 turbine-engines, is the following met:  • the diversion time does not exceed:  - the most limiting EDTO significant system, other than fire suppression systems, minus 15 minutes at the approved AEO cruise speed  - the cargo fire suppression system, minus 15 minutes at the AEO cruise speed?		
119.205(1)(h) 121.035(2) MOS 121.D4		If the application is for flight operations beyond 180 minutes diversion time, does the exposition provide instructions to support operations beyond 180 minutes?		

# 3.5 Flight preparation considerations

## 3.5.1 EDTO area of operations

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.035(2) MOS 121.D1 MOS 121.D2 MOS 121.5	3.5.1	Does the exposition detail the EDTO area of operations, taking into consideration:  the maximum approved diversion time (MDT)  the approved diversion speed (under ISA conditions stillair)?		
119.205(1)(h) 121.035(2) MOS 121.D1 MOS 121.D2 MOS 121.5	3.5.1.2	Does the exposition include a process to detail the EDTO entry point (EEP) and EDTO exit point (EXP) along the flight planned route on the operational flight plan?		
119.205(1)(h) 121.035(2) MOS 121.D1 MOS 121.D2 MOS 121.5	3.5.1.3	Does the exposition include a process to detail each equal time point (ETP) on the operational flight plan?		
119.205(1)(h) 121.035(2) MOS 121.D1 MOS 121.D2 MOS 121.5	3.5.1.4 3.5.3 3.5.4 3.5.6	Does the exposition provide instructions for the calculation of an ETP, considering:  • calculation of the EDTO diversion fuel?  • maximum diversion time versus TLS values?  • inflight diversion decision making?		

## 3.5.2 Alternate aerodromes for EDTO

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.035(2)	3.5.2	Does the operator have a process to assess each listed EDTO alternate aerodrome, taking into consideration:		
	3.5.2.1 3.5.2.2	the basic adequacy of the aerodrome to support a safe approach and landing (landing performance) during the validity period/time window?		
	3.5.2.1 3.5.2.3	the forecast weather conditions to support a safe approach and landing during the validity period/time window?		
	3.5.2.5	rescue and firefighting service availability at the expected aerodrome during the validity period/time window?		
		passenger recovery plan (only for flights beyond 180 minutes)?		
119.205(1)(h) 121.035(2)	3.5.2.3	Does the exposition include instructions for the calculation of the validity period/time window?		
119.205(1)(h) 121.035(2)	3.5.2.4	Does the exposition include instructions to calculate the EDTO planning dispatch weather minima?		

## 3.5.3 EDTO fuel requirements

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.D6 MOS 121.2.18	3.5.3.1	Does the exposition include the flight profiles for the calculation of the critical fuel scenario, including consideration of:  all turbine-engine depressurisation  one turbine-engine inoperative depressurisation  for 2 turbine-engine aeroplanes — an engine failure only?		
119.205(1)(h) 121.D6 MOS 121.2.18	3.5.3.1	Does the exposition include instructions for when additional EDTO fuel uplift is required to meet the critical fuel scenario?		
119.205(1)(h) 121.D6 MOS 121.2.18	3.5.3.2	Does the exposition include instructions for the calculation of the EDTO critical fuel reserve, including:  • additional fuel for icing, wind and performance degradation  • MEL/CDL items  • APU use, if applicable?		
121.D6 MOS 121.2.18 MOS 121.7	3.5.3.3	Does the operator's flight planning system have the capability to determine the critical fuel required (CFR) for each ETP versus the normal fuel required for a flight?		

## 3.5.4 Time limited system (TLS) considerations

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.05 MOS 121.2.06 MOS 121.D4	3.5.4.2	For EDTO operations up to 180 minutes, does the area of operation consider the most limiting TLS plus a 15-minute margin at the approved OEI cruise speed in still air ISA conditions?		
121.035(2) MOS 121.2.05 MOS 121.2.06 MOS 121.D4	3.5.4.3	<ul> <li>For EDTO operations beyond 180 minutes, does the area of operation consider:</li> <li>for all aeroplanes – the time specified by the OEM for the aeroplanes CFSS at the approved AEO cruise speed and altitude corrected for forecast wind and temperature; and</li> <li>for 2 turbine-engine aeroplanes – the time specified by the OEM for the aeroplane's most limiting TLS (other than CFSS) at the approved OEI cruise speed and altitude corrected for forecast wind and temperature?</li> </ul>		

## 3.5.5 EDTO technical status of the aeroplane

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.060 MOS 121.2.18 MOS 121.2.19	3.5.5.2	Does the exposition provide instructions for flight crew to confirm the EDTO status of the aeroplane prior to dispatch?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.060 MOS 121.2.18	3.5.5.2	For 2 turbine-engine aeroplanes, does the exposition include a process to provide the flight dispatcher with the EDTO status of the aeroplane?		
119.205(1)(h) 121.060 MOS 121.2.18	3.5.5.3	For aeroplanes with more than 2 turbine-engines, does the exposition include a process to provide the flight dispatcher with the EDTO status of the aeroplane?		
121.035(2)	3.5.5.4	Does the operator's MEL take into consideration the EDTO area of operations?		
119.205(1)(h) 121.060 MOS 121.2.18	3.5.5.4.4	Does the operator have a process to take into consideration weather conditions at the EDTO alternate, where deferred defects affect instrument approach capability?		

# 3.6 In-flight considerations

## 3.6.2 In-flight monitoring

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.035(2) MOS 121.2.20 MOS 121.7.06		Does the operator have EDTO unique flight operations detailed as follows:		
	3.6.1	flight crew SOP's for EDTO flight?		
119.205(1)(h) 121.D MOS 121.2.18 MOS 121.2.20 MOS 121.4.05 MOS 121.11	3.6.2.2 3.6.2.3 3.6.3.2 3.6.3.3	diversion policies prior to EEP and after EEP, including:  – inflight system failure considerations  – alternate aerodrome status  – alternate aerodrome weather minima  – fuel progress monitoring?		
119.205(1)(h) 121.035(2) MOS 121.2.20	3.6.3	Does the exposition include diversion decision making guidance, which includes the following:  • fuel strategy  • obstacle clearance  • oxygen requirements  • recovery plan?		

Legislation reference	Doc 10085 reference	Question		Inspector comments
119.205(1)(h) 121.035(2) MOS 42	3.6.2.4	Does the operator have procedures to support the maintenance program, including:		
		APU inflight start program (if required)?		
		maintenance verification flights (as required)?		
		EDTO significant systems discrepancies?		
119.205(1)(h) 121.035(2) MOS 121.2.25		Does the exposition include a process to ensure flight crew are provided with the required navigation documents for EDTO?		
119.205(1)(h) 121.035(2) MOS 121.2.26		Does the operator provide instructions regarding when to submit an in-flight event report?		

# 3.7 Aeroplane performance data

Legislation Doc 10085 reference reference		Question	Compliant? Inspector comments	
119.205(1)(h) 121.F	3.7.2	Does the exposition provide the following performance data to support EDTO:		
	3.7.2	EDTO area of operations (diversion distance)?		
	3.7.2	detailed OEI performance data for standard and non- standard atmospheric conditions covering:  - driftdown (includes net performance)  - cruise performance (altitude coverage including 10000 ft)  - fuel requirements  - altitude capability (includes net performance)  - holding?		
	3.7.2	detailed AEO performance data, including nominal fuel flow data, for standard and non-standard atmospheric conditions covering:  - cruise performance (altitude coverage including 10000 ft)  - holding?		
	3.7.2	details of any other conditions relevant to EDTO flight preparation, including fuel used for thermal anti-ice, ice accretion on the unprotected surfaces of the aeroplane, and APU usage, as appropriate?		

# 3.8 EDTO flight operations manual (exposition)

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.035(2)	3.8.2.3	Poes the exposition include the following specific EDTO natters:		
		general information on applicable EDTO rules and the operator's EDTO program?		
		scope of the operator's EDTO authorisation (routes, fleet, diversion time(s) and speed(s) etc.)?		
		EDTO flight planning considerations?		
		EDTO enroute considerations?		
		EDTO training?		

# 3.9 EDTO training program

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.170 121.475 121.035(2) MOS 121.2.11 MOS 121.2.23 MOS 121.12	3.9.1	Has the operator implemented an EDTO training program for flight crew, flight dispatchers and other relevant flight operations personnel, that includes:		
	3.9.2	EDTO flight operations academic training?		
	3.9.3	EDTO flight operations practical training?		
	3.9.4	EDTO recurrent training?		

# **Assessment summary**

Applicant name	Applicant ARN	EAP case number	File reference					
This worksheet verifies that the flight operations asse (OPS.06) Extended diversion operations (EDTO).	essment of the above named op	perator has been conducted in acco	ordance with the current revision of Protocol					
Has Worksheet B (OPS.06) Extended diversion time operations - AWI assessment Yes No								
Inspector name		Title	Date					
Assessment								
The exposition has been assessed in accordance with	h the requirements mentioned	in regulation 121.035 of the Civil A	viation Safety Regulations 1998 (CASR).					
I am satisfied that the operator meets the require	ements mentioned in the regula	ations (as applicable).						
I am not satisfied that the operator meets the rec	quirements mentioned in the re	gulations.						
Reason for recommendation								

# **Approval data sheet**

Applicant name Applicant ARN EAP case number File reference	
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Tick the relevant boxes and insert details of the aeroplane types and associated conditions.

## ☐ Significant change recommendation

(1) The proposed significant change(s) to the exposition have been assessed in accordance with the requirements mentioned in paragraph 119.205(1)(m).

### Inspector

Ш	I recommend the significant change
	I do not recommend the significant change.

#### **Exposition revision reference**

Title	Version	Date	RMS reference	
			number	

Note: Regservices requires this information to create the EMAN in RMS.

□ Extended diversion time o	perations
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(1) For regulation 121.010 and paragraph 121.035(1)(b), the operator can be approved to operate further than the threshold distances mentioned in subparagraph 121.030(1)(b)(ii) following aeroplane engine combinations up to the maximum diversion time.

Note: RSO to add the aircraft type, threshold time and maximum diversion time to the EDTO section of the air operator's certificate.

Aeroplane type and model	Engine model	Threshold time	Maximum diversion time
(2) The approval under subsection (1) is subject to the follo	wing conditions (if required):		