WORKSHEET

Worksheet B (OPS.06) Extended diversion time operations – AWI assessment

Applicant name		Applicant ARN		EAP case number		File reference	

Instructions

1. Airworthiness inspectors (AWIs) 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 AWI. By selecting satisfied or not satisfied, the inspector is taken to have signed the worksheet.

4.0 EDTO maintenance and reliability requirements

4.3 EDTO maintenance procedures manual (exposition)

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
119.205(1)(h) 121.035(2) MOS 121.2.20 MOS 121.7.06 MOS 42.1.2	4.3.1.1 4.3.2.2	Has the operator included, in their exposition, EDTO requirements, including supportive maintenance program procedures, duties and responsibilities?		
119.205(1)(h) 121.035(2) MOS 121.2.20 MOS 121.7.06 MOS 42.1.2	4.3.2.3	**Does the exposition include the following:**		
		general information on applicable EDTO rules and EDTO program?		
		scope of the operator's EDTO authorisation (fleet, diversion time etc.)?		
		responsibilities (maintenance control centre, engineering, quality, training, planning and production etc.)?		
		EDTO processes (daily review, reporting, dual maintenance limitations etc.)?		
		EDTO maintenance procedures (aircraft release, EDTO service check, oil consumption monitoring etc.)?		
		EDTO maintenance training?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.610 119.205(1)(m)(i)(ii) 121.035(2)	4.3.3	Does the operator have a process to identify significant versus non-significant changes as they relate to both Part 42 and Part 119?		

4.4 EDTO configuration, maintenance and procedures (CMP) document

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
MOS 121.2.04 MOS 121.2.05 MOS 121.2.18	4.4.1.2	Are the applicable requirements stated in the CMP document addressed by the operator for each aeroplane included in the EDTO programme?		
121.035(2) MOS 42.1.2	4.4.1.3	Does the operator have procedures and responsible persons defined in its EMPM to ensure compliance with the CMP document?		

4.5 Aeroplane maintenance program for EDTO (AMP or SOM as applicable)

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 42.2 MOS 121.2.05	4.5.1.2	**Does the aircraft maintenance program for EDTO consider the following:**		
		all scheduled tasks applicable to both EDTO and non-EDTO operations, including: – maintenance review board report / maintenance planning document (MRBR/MPD) – certification maintenance requirements (CMR) documents?		
		additional EDTO specific tasks and/or intervals (e.g. CMP)?		
		unscheduled maintenance that may affect EDTO?		
121.035(2) MOS 42.2 MOS 121.2.05	4.5.3.1	Are EDTO service check tasks required for data continuity performed on non-EDTO flights (e.g. oil consumption monitoring)?		
121.035(2) MOS 42.2 MOS 121.2.05	4.5.3.1	Is there a process to downgrade an aeroplane to non-EDTO status when required EDTO maintenance tasks have not been performed?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 42.2 MOS 121.2.05	4.5.3.2	**Does the exposition include the following procedures to assess the maintenance status of an aeroplane that has not been operating EDTO for an extended period of time:**		
		assessment of tasks required to be performed prior to an EDTO flight?		
		any task required only for EDTO is performed as per the applicable interval?		
		any task with an interval specific (or different) to EDTO is performed as per the applicable EDTO interval, to ensure it is not exceeded when EDTO operations are resumed?		

4.6 EDTO significant systems

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 42.1.2 MOS 121.1.04 MOS 121.2.05	2.2.3 4.6.2.1	Has the operator identified EDTO significant systems for the AEC?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2)	4.6.2.2	Has the list of EDTO significant systems been considered against the systems safety analysis and/or design requirements, as provided by the aircraft type certificate holder?		
121.035(2)	4.6.2.3	Has the operator added other equipment or systems considered important for their EDTO operations?		
121.035(2)	4.6.2.4	**Has the EDTO maintenance program considered the following:**		
		maintenance activities for which it is necessary to adopt precautions to avoid multiple human errors (e.g. dual maintenance requirements etc.)?		
		activities related to maintaining and monitoring EDTO reliability (parts control, failure rate monitoring etc.)?		
		activities related to qualification of the EDTO maintenance staff?		

4.7 EDTO related maintenance tasks/EDTO qualified staff

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 42.1 MOS 42.2 MOS 121.2.05	4.7.1	Has the operator identified it's EDTO qualified staff in its approved EMPM, including the tasks to be accomplished by EDTO qualified staff?		
121.035(2) MOS 121.2.05	4.7.6 4.7.7	Has the operator implemented a filtering process for identification of selected EDTO-related tasks?		

4.8 EDTO parts control program

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.420 121.035(2) MOS 42.1.2	4.8.1.1	Does the operator have a program identified in its EMPM that defines the management process of EDTO parts?		
121.035(2)	4.8.1.3	If applicable, does the operator have a process in place to ensure compliance with new (amended) CMP requirements until the illustrated parts catalogue (IPC) / illustrated parts data (IPD) has been revised?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2)	4.8.1.4	If the operator participates in a parts pooling arrangement, does the agreement include EDTO standards to ensure the correct parts are installed to support the EDTO requirements?		
121.035(2)	4.8.2.1	Has the operator developed a parts control program that ensures that proper configuration is maintained for EDTO?		
121.035(2)	4.8.2.3	If applicable, has the operator developed a parts list to identify and to manage the EDTO components?		
121.035(2)	4.8.2.4	If applicable, does the exposition detail the process to ensure the proper identification of the EDTO status of the parts?		

4.9 EDTO service check

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.145 121.035(2) MOS 42.2 MOS 121.2.05 MOS 121.2.18	4.9.1.1	Does the exposition include instructions to perform an EDTO service check prior to each EDTO flight?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.145 121.035(2) MOS 42.2 MOS 121.2.05 MOS 121.2.18	4.9.2.1	**Does the service check cover the following:**		
		verification all EDTO significant defects have been resolved or have sufficient MEL coverage?		
		a review of the technical log for EDTO significant systems?		
		performing an interior and exterior inspection?		
		check of engine oil level (including APU if required for EDTO)?		
		assessment of EDTO status and EDTO maintenance release?		
42.145 121.035(2) MOS 42.2	4.9.2.3	Will the oil consumption for each propulsion system (including APU) be verified as acceptable prior to each EDTO flight?		
121.035(2)	4.9.4.1	Does the exposition identify the qualification and training requirements for carrying out the EDTO service check?		

4.10 EDTO reliability program

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.155 121.035(2) MOS 42.3 MOS 121.2.04 MOS 121.2.24	4.10.1.1	Has the EDTO operator created an event based EDTO reliability program based on its EDTO significant systems list?		
121.035(2) MOS 121.2.26	4.10.1.2	Does the reliability program incorporate reporting and investigation procedures for EDTO significant events and trends detrimental to EDTO flights?		
121.035(2) MOS 121.2.26	4.10.2.1	Has the operator established procedures to manage EDTO diversion time capability?		
42.155 121.035(2) 121.120 MOS 121.2.24		For 2-engine aeroplanes, does the exposition include instructions to provide CASA with quarterly EDTO summary reports?		
121.035(2) MOS 121.2.26	4.10.3 4.16	If required, does the reliability program incorporate APU inflight start monitoring?		
121.035(2)	4.10.4.1	Does the exposition include instructions to inform CASA if the reliability data indicates the target inflight engine shutdown (IFSD) rate is no longer being met?		
121.035(2) MOS 121.2.26	4.10.5	Does the exposition include instructions to provide CASA with in-flight event reports within 72 hours?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.24 MOS 121.2.26	4.10.6	Does the exposition include a process for assessment of EDTO reliability indicators?		

4.11 Propulsion system monitoring

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.04 MOS 121.2.24 MOS 121.2.26	4.11.1	Does the operator have access to EDTO performance reports (or similar) for the worldwide fleet based on the ongoing assessment from the type certificate holder (and the State of Design)?		
121.035(2) MOS 121.2.04 MOS 121.2.24 MOS 121.2.26	4.11.1	Is propulsion system monitoring performed as an input to the operator's reliability program?		
121.035(2) MOS 121.2.04 MOS 121.2.24 MOS 121.2.26	4.11.2.3	Is the worldwide fleet IFSD rate calculated and monitored by the type certificate holder and provided to the operator?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.04 MOS 121.2.24 MOS 121.2.26	4.11.2.4	Is the operator's specific IFSD rate calculated and monitored?		
121.035(2) MOS 121.2.04 MOS 121.2.24 MOS 121.2.26	4.11.2.5	Has the operator established an appropriate IFSD alert level based on an acceptable standard (e.g. FAA 121.374(i) or EASA AMC 20-6)?		
121.035(2) MOS 121.1 MOS 121.2.04 MOS 121.2.24 MOS 121.2.26	4.11.3	Has the operator defined what constitutes an IFSD event? (i.e. what should be classed as an IFSD and what should not)		
121.035(2) MOS 121.2.04 MOS 121.2.24 MOS 121.2.26	4.11.4	Does the operator monitor the IFSD rate and have procedures for corrective actions should adverse trends be identified?		

4.12 Verification program

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.130 121.035(2) MOS 42.2	4.12.1	**Has the operator developed an EDTO verification program that ensures the effectiveness of maintenance actions taken on EDTO significant systems as follows:**		
		program and verification tasks defined in the exposition?		
		positive corrective action on all engine inflight shut down occurrences?		
		positive corrective action on all EDTO significant system failures?		
		MEL relief applied prior to EDTO flight?		
		verification actions after complex maintenance tasks?		
		clarification when inflight verification is required?		
42.130 121.035(2) MOS 42.2	4.12.2	Does the operator verification program contain actions beyond standard tasks and troubleshooting issued by the type certificate holder, which are based on its own in-service experience?		
42.130 121.035(2) MOS 42.2	4.12.4	Has the operator assessed the need for verification tasks related to the completion of multiple or complex maintenance tasks?		

4.13 Dual maintenance limitations

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.130 121.035(2) MOS 42.2	4.13.1.1	Does the EDTO operator have an approved program that ensures maintenance performed on the same element of identical but separate EDTO significant systems prevents duplication of a human error?		
42.130 121.035(2) MOS 42.2	4.13.2 4.13.3.1	Has the operator defined, in the exposition, an acceptable program of dual maintenance limitations to prevent loss of EDTO significant system redundancy?		
42.130 121.035(2) MOS 42.2	4.13.3.3	Does the operator identify and consider (i.e. publish) directions on the servicing of fluids and gases to assure EDTO reliability standards are maintained?		

4.14 Engine condition monitoring program

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.130 121.035(2) MOS 42.2 MOS 121.2.24	4.14.1	Has the operator implemented an engine condition monitoring program?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.130 121.035(2) MOS 42.2 MOS 121.2.24	4.14.2 4.14.3	Does the program describe the parameters to be monitored, the method of data collection, the frequency of collection and the corrective action process?		
42.130 121.035(2) MOS 42.2 MOS 121.2.24	4.14.5	Does the operator utilise the engine type certificate holder to support the engine condition monitoring program?		

4.15 Oil consumption monitoring program

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.130 121.035(2) MOS 42.2 MOS 121.2.24	4.15.1	Has the operator implemented an oil consumption monitoring program?		
42.130 121.035(2) MOS 42.2 MOS 121.2.24	4.15.2	Has a consumption rate for normal usage been established?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
42.130 121.035(2) MOS 42.2 MOS 121.2.24	4.15.2.2	If the APU is required for EDTO operations, has the APU been included in the monitoring program?		

4.16 APU in-flight start monitoring program (if required for EDTO)

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.05	4.10.3 4.16.1	Has the operator implemented an APU in-flight start monitoring program?		
121.035(2) MOS 121.2.05	4.16.2.4 4.16.4	Have routine in-flight start tests been established for each aircraft?		
121.035(2) MOS 121.2.05	4.16.3	Has an APU in-flight start reliability objective been established?		

4.17 Control of aeroplane's EDTO status: EDTO release statement

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.05 MOS 121.2.18 MOS 121.2.19 MOS 121.11.06	3.5.5.3 3.5.5.4 4.17.1 4.17.3	Does the EDTO maintenance procedures manual define the procedures associated with the EDTO release statement?		
121.035(2) MOS 121.2.05 MOS 121.2.18 MOS 121.2.19 MOS 121.11.06	4.17.1.4	**Does the EDTO maintenance release statement confirm that:**		
		the aircraft condition has been checked and confirmed to comply with EDTO dispatch requirements and applicable MEL?		
		the EDTO items of the applicable line check have been accomplished?		
		the aircraft configuration has been checked and confirmed to comply with the standards set forth in the EDTO CMP?		
		the capability of relevant time limited systems (TLS) has been assessed?		
121.035(2) MOS 121.2.05 MOS 121.2.18 MOS 121.2.19 MOS 121.11.06	4.17.2	Is the procedure for changing EDTO status to EDTO / non-ETDO clearly documented?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.05 MOS 121.2.18 MOS 121.2.19 MOS 121.11.06	4.17.2.5	Does the maintenance control function authorise changing the EDTO status to EDTO / non-ETDO when away from a main base?		
121.035(2) MOS 121.2.05 MOS 121.2.18 MOS 121.2.19 MOS 121.11.06	4.17.3.3	Does the EDTO release statement provide a clear EDTO capability status (YES/NO) to the flight crew prior to each EDTO flight?		
121.035(2) MOS 121.2.05 MOS 121.2.18 MOS 121.2.19 MOS 121.11.06	4.17.3.3	Does the EDTO release statement clearly indicate the EDTO maximum diversion time capability?		
121.035(2) MOS 121.2.05 MOS 121.2.18 MOS 121.2.19 MOS 121.11.06	4.17.3.8	Has a dedicated process been developed for the check and tracking of the time capability of the relevant time limited systems (TLS) to ensure the information is transferred to the flight operations organisation (dispatchers and flight crews)?		

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 121.2.05 MOS 121.2.11 MOS 121.2.18 MOS 121.2.19 MOS 121.11.06	4.17.4	For aeroplanes with more than two engines, is the EDTO release statement appropriate?		

4.18 EDTO training

Legislation reference	Doc 10085 reference	Question	Compliant?	Inspector comments
121.035(2) MOS 42.1	4.18.1	Has the operator created an EDTO maintenance training program relevant to the EDTO AEC and MDT?		
121.035(2) MOS 42.1	4.18.3	**Does the EDTO maintenance training program cover:**		
		initial training?		
		recurrent training?		
121.035(2) MOS 42.1	4.18.5	Is the EDTO training program suitably comprehensive?		

Assessment summary

Applicant name		Applicant ARN		EAP case number		File reference	

This worksheet verifies that the airworthiness assessment of the above named operator has been conducted in accordance with the current revision of Protocol (OPS.06) Extended diversion operations (EDTO).

Inspector name		Title		Date	

Assessment

The exposition has been assessed in accordance with the requirements mentioned in regulation 121.035 of the *Civil Aviation Safety Regulations 1998* (CASR).

☐ I am satisfied that the operator meets the requirements mentioned in the regulations (as applicable).

☐ I am not satisfied that the operator meets the requirements mentioned in the regulations.

Reason for recommendation