

# *Extended Diversion Time Operations Workshop*



**Nairobi**  
**October 28-November 1, 2019**

**Module 1**  
*Course Introduction*



ICAO

Proudly in partnership with

**AIRBUS**





**Module 1**  
Course Introduction

**Module 2**  
EDTO Foundation

**Module 3**  
Approval Process

**Module 4**  
Type Design & Reliability  
Considerations

**Module 5**  
Flight Operations  
Considerations

**Module 6**  
Maintenance  
Considerations

**Module 7**  
Continued Surveillance

**Module 8**  
Implementing EDTO  
Regulations

**Module 9**  
Assessment

**Module 10 – Wrap Up**



*This module consists of an introduction to the course, the instructors and some essential ‘housekeeping’. A run through of course materials provided and introduction to the interactive software to be used in the later modules will also be completed.*

## Doc 10085: Extended Diversion Time Operations (EDTO) Manual

This course is based on the content of Doc 10085

**National regulations may vary** from this content



The following symbol indicates a reference to the EDTO Manual throughout the modules of this workshop:





Part I —

**Presentation of ICAO course instructors**

Part II —

**Course goals, concept and structure**

Part III —

**Administrative information**

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- **Ian Knowles -**





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Part I — **Presentation of ICAO course instructors**

Part II — **Course goals, concept and structure**

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The goals of the ICAO EDTO course are to:

- Provide participants with **knowledge and skills to implement EDTO in National regulations**
  - Based on ICAO Standards and Recommended Practices (SARPs) contained in Annex 6 Part I.
  - With reference to Doc 10085 - Extended Diversion Time Operations Manual (EDTOM) 
- Develop participants' knowledge to **implement** and **oversee** the key components of an EDTO program, in compliance with ICAO SARPs.

- EDTOM guidance has been developed based on experience of many years of ETOPS operations
  - Drafting of EDTO manual has been conducted by EDTO experts from the Special Operations Task Force under the supervision of the FLTOPS/Panel secretariat.
  - Main contributors: International Coordinating Council of Aerospace Industries Associations (ICCAIA), International Air Transport Association (IATA) and States (Australia, France, Singapore, UK, USA, ...)
  
- The EDTO Manual (Doc 10085) is an outcome of the Regional Safety Oversight Organization (RSOO) Symposium convened by ICAO during October 2011
  - This initiative is aimed at assisting the States in the implementation of the new/revised standards, through guidance material available to RSOOs or other interested parties



- Structure and content of EDTO Manual (Doc 10085):
  - Foreword
  - Definitions and abbreviations
  - **Chapter 1: Policy and General information**
    - Details approval procedures and continuity of certification and operational approval
  - **Chapter 2: Aircraft airworthiness considerations for EDTO**
    - EDTO certification, continued airworthiness, EDTO significant systems...
  - **Chapter 3: EDTO flight operations requirements**
    - Threshold, maximum diversion time and distance, En-route Alternate Aerodrome, Area of operations, EDTO fuel, in-flight Monitoring, diversion, training, ...
  - **Chapter 4: EDTO Maintenance and reliability requirements**
    - EDTO maintenance program, Parts control, EDTO Service Check, Reliability program, Propulsion system monitoring (IFSD rate), verification program, dual maintenance limitation, ECM, oil consumption monitoring, APU in-flight start, EDTO release, training, ...



The following standardized terms and definitions have been adopted in the EDTOM:

- Authorization:** An authorization entitles an operator, owner or pilot-in-command to undertake the authorized operations.
- Acceptance:** An acceptance is a written or implicit acknowledgment by the State of the Operator/State of Registry to an operator or owner of a notification submitted by, or on behalf of, that operator or owner.
- Approval:** An approval is a formal act by the State of the Operator/State of Registry to approve an application or a proposed change submitted by, or on behalf of, an operator or owner. The approval attests to compliance with the applicable provisions.
- Specific Approval:** A specific approval is an approval which is documented in the operations specifications for commercial air transport operations, or in the list of specific approvals for non commercial operations.

The term '**approval**' is often used as a generic term for the activity of a regulator granting permission to undertake a particular operation. For items relating to Annex 8, the term '**type design approval**' is used to refer to the granting of the type design by the State of Design



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**Module 10 – Wrap Up**



- **09:00 – 10:30**      **Scheduled Activities**  
– 10:30 – 11:00      Coffee/Tea break
- **11:00 – 12:00**      **Scheduled Activities**  
– 12:00 – 13:00      Lunch
- **13:00 – 14:30**      **Scheduled Activities**  
– 14:30 – 15:00      Coffee/Tea break
- **15:00 – 16:00**      **Scheduled Activities**
- **16:00**              **End of Day**





Session Times		Day				
Start	End	1	2	3	4	5
09:00	10:30	Module 1 Module 2	Module 4	Module 5 (cont.)	Module 6 (cont.)	Module 8 (cont.)
10:30	11:00	Break				
11:00	12:00	Module 2 (cont.)	Module 4	Module 5 (cont.)	Module 7	Assessment Review Close
12:00	13:00	Lunch				
13:00	14:30	Module 3	Module 5 (cont.)	Module 6	Module 7	
14:30	15:00	Break				
15:00	16:00	Module 3 (cont.)	Module 5 (cont.)	Module 6	Module 8	





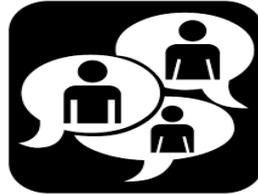
Part I — **Presentation of ICAO course instructors**

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Punctuality



Participation



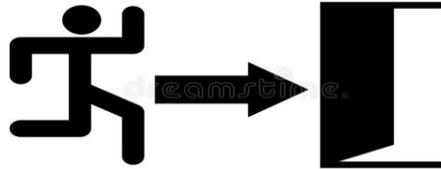
Phones



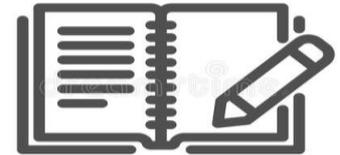
Smoking



Certificates



Emergency Exits



Feedback



- WiFi Connection - DELEGATES
- No Password

## Evaluation of participants' performance:

- A final evaluation test
- Multiple choice, open book
- Minimum pass mark: 80%



## Overall course evaluation (Feedback)

### Course evaluation :

- Content
- Practical exercises
- Instructors
- Ways and means to improve the training



- **Mentimeter ([www.menti.com](http://www.menti.com))**
  - Anonymous
  - Web based
  
- Practice questions...



# EDTO Workshop

End of Module 1 – Course Introduction

