

**European Aviation Safety Agency** 

# **Terms of Reference**

for a rulemaking task

# Fuel procedures and planning

RMT.0573 — ISSUE 1 — 27.4.2015

Applicability		Process map	
Affected regulations and decisions:	Annexes I-VIII to Commission Regulation (EU) No 965/2012 (Part Definitions, Part-ARO, Part- ORO, Part-CAT, Part-SPA, Part-NCC, Part-NCO, Part-SPO); Decision 2013/017/R; Decision 2014/014/R; Decision 2014/017/R; Decision 2014/015/R; Decision 2013/021/R; Decision 2014/016/R; and Decision 2014/018/R.	Concept Paper: Rulemaking group: RIA type: Technical consultation during NPA drafting: Publication date of the NPA: Duration of NPA consultation: Review group: Focussed consultation: Publication date of the Opinion:	No Yes Full No 2016/Q2 3 months TBD TBD 2017/Q3
Affected stakeholders: Driver/origin:	Air Operators; National Aviation Authorities (NAAs). Legal obligation (ICAO amendment); safety.	Publication date of the Decision:	2018/Q3
Reference:	Safety Recommendation FRAN-2012-026 (BEA)		

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## 1. Issue and reasoning for regulatory change

In 2008, ICAO 'recognised the need for updating and amending the fuel and alternate aerodrome selection provisions of Annex 6'. A revision was made and subsequent amendments were introduced to Annex 6 in 2012 and 2014. Pursuant to those amendments, EASA (European Aviation Safety Agency, hereinafter referred to as 'the Agency') has published a Safety Information Bulletin (<u>SIB 2013-12</u>) on 23 July 2013.

In addition, a safety recommendation (FRAN-2012-026<sup>1</sup>) was addressed to the Agency regarding a fuel emergency related incident.

Moreover, the Agency published on 23 May 2014 another Safety Information Bulletin (<u>SIB 2014-16</u>) on 'Aeroplane Refuelling with One Engine Running' that requires developing further Acceptable Means of Compliance(AMC) and Guidance Material (GM) to address this issue.

### 1.1. ICAO actions

RMT.0573 addresses the contents of:

- Amendment 36 to ICAO Annex 6 Part I (applicable as from 15 November 2012);
- Amendment 38 to ICAO Annex 6 Part I (applicable as from 13 November 2014);
- Amendment 33 to ICAO Annex 6 Part II (applicable as from 13 November 2014);
- Amendment 19 to ICAO Annex 6 Part III (applicable as from 13 November 2014); and
- the newly developed ICAO Flight Planning and Fuel Management Manual (FPFMM).

The adopted amendments to Annex 6 are intended to improve safety and enable air operators to take advantage of the latest technologies and operating practices in the industry. In addition, they offer a performance-based approach resulting in cost savings and environmental benefits. The amendments to Annex 6 changed, among others, the standards for fuel planning, the selection of alternate aerodromes and meteorological conditions, and added requirements for the pilot-in-command to avoid a shortage of the usable fuel.

The ICAO Fuel Use Subgroup (FUSG) developed the ICAO Doc 9976 — FPFMM<sup>2</sup>, which provides Guidance Material referenced in the amended SARPs of Annex 6, Part I.

#### 1.1.1 Regulation affected by ICAO actions

ICAO amendments <u>directly</u> affect the following Annexes to Regulation (EU) No 965/2012 (hereinafter referred to as 'the Air OPS Regulation'<sup>3</sup>):

- Annex I (Part Definitions<sup>4</sup>);
- Annex IV (Part-CAT<sup>5</sup>);

<sup>&</sup>lt;sup>1</sup> <u>Safety recommendation</u> by the Bureau d'Enquêtes et d'Analyses pour la sécurité de l'aviation civile (BEA) related to the event to BAe-146 (registered EI-RJW) on 17.06.2010 at the Basel-Mulhouse-Freiburg airport.

Doc 9976 'Flight Planning and Fuel Management Manual' is an Unedited Advanced Edition published in 2012.

<sup>&</sup>lt;sup>3</sup> Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1).

Annex I to Commission Regulation (EU) No 965/2012 on Definitions for terms used in Annexes II to V.

<sup>&</sup>lt;sup>5</sup> Annex IV to Commission Regulation (EU) No 965/2012 on *Commercial air transport operations*.

- Annex V (Part-SPA<sup>6</sup>);
- Annex VI (Part-NCC<sup>7</sup>); and
- Annex VII (Part-NCO<sup>8</sup>).

Annex V, Part-SPA contains rules related to fuel planning and the selection of alternate aerodromes for two specific operations described in Subpart F — Extended range operations with two-engined aeroplanes (ETOPS) and Subpart J — Helicopter emergency medical service (HEMS) operations.

- (a) Subpart ETOPS: The Agency has planned a separate rulemaking task (RMT.0577<sup>9</sup>) on *Extended Diversion Time Operations (EDTOs)*. This Subpart is, therefore, not affected by this RMT.
- (b) Subpart HEMS: ICAO Annex 6, Part III, Sections 1 and 2, contains requirements for international operations (helicopters). For this reason and for ensuring consistency across all parts, changes to Subpart HEMS might be envisaged.

Specialised operations fall outside the scope of the ICAO SARPs. However, to ensure consistency across all Parts of the Air Ops Regulation, the ICAO amendment will also affect Annex VIII (Part-SPO).

Although these amendments to ICAO Annex 6 do not directly affect Annex III (Part-ORO) to the Air OPS Regulation, changes to the above-mentioned Parts might have an impact on Part-ORO.

Finally, subsequent changes to Annex II (Part-ARO) to the Air OPS Regulation for oversight purposes might also be necessary.

#### 1.2. Related safety recommendation

On 17 June 2010, due to bad weather at the destination aerodrome, a BAe-146 (EI-RJW) performed a go-around and diverted to the alternate aerodrome, Basel-Mulhouse-Freiburg (LFSB). During their first approach to runway 33 LFSB, and about 1.8 NM from the threshold, the crew was ordered to performed a go-around, due to another aircraft still being on the runway. Subsequently, a fuel emergency was declared by the crew to the Basel-Mulhouse-Freiburg ATC-radar, followed by an uneventful landing on runway 33.

A safety recommendation regarding this event was addressed by the French BEA to the Agency (FRAN-2012-026): 'The BEA recommends that the DGAC and EASA implement the 'minimum fuel' message already defined by ICAO, with the associated procedures'.

### 1.3. Other drivers of the issue

One Member State raised the issue of some European operators applying inconsistent procedures for hot refuelling. On 23 May 2014, the Agency issued a Safety Information Bulletin (SIB 2014-06) on 'Aeroplane refuelling with one engine running in order to raise awareness of this issue. Furthermore, it was decided by the Agency to tackle the issue through this RMT.

The Terms of Reference for this task are planned to be issued in 2016 and the task to be concluded in 2019.



<sup>&</sup>lt;sup>6</sup> Annex V to Commission Regulation (EU) No 965/2012 on *Specific approvals*.

<sup>&</sup>lt;sup>7</sup> Annex VI to Commission Regulation (EU) No 965/2012 on *Non-commercial operations with complex motor-powered aircraft*. Said Annex was added to Commission Regulation (EU) No 965/2012 through Commission Regulation (EU) No 800/2013 of 14 August 2013 amending Regulation (EU) No 965/2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 227, 24.8.2013, p. 1).

<sup>&</sup>lt;sup>8</sup> Annex VII to Commission Regulation (EU) No 965/2012 on *Non-commercial operations with other-than-complex motor-powered aircraft*. Said Annex was added to Commission Regulation (EU) No 965/2012 through Commission Regulation (EU) No 800/2013, as referenced above.

 Based on feedback from stakeholders, the Agency concluded that some parts of the rules may need clarification to ensure uniform implementation.

## 2. Objectives

The objectives of the European Union in the field of civil aviation are defined in Article 2 of Regulation (EC) No 216/2008<sup>10</sup>. This RMT will contribute to these objectives by addressing the issues outlined above (see Chapter 1).

The specific objectives of this rulemaking task are, therefore, to:

- (a) to maintain the high aviation safety level by:
  - (1) addressing safety recommendation FRAN-2012-026;
  - (2) transposing to the applicable rules of the Air OPS Regulation the content of the SIB2013-12; and
  - transposing to the applicable rules of the Air OPS Regulation the content of the SIB2014-16;
- (b) to remain in compliance with ICAO SARPS by ensuring that the European regulatory material is in compliance with the latest amendments to Annex 6 Part I, Part II and Part III regarding fuel planning and in-flight management; and
- (c) to issue an efficient regulation by:
  - (1) clarifying of the current applicable rules regarding fuel planning, fuel refuelling procedures and in-flight fuel management;
  - (2) ensuring consistency of fuel related rules across applicable Parts of the regulation (EU) No 965/2012 for motor-powered aircraft, where appropriate; and
  - (3) ensuring the correct balance between Implementing Rule (IR) and Acceptable Means of Compliance (AMC)/Guidance Material (GM) on the subject issue; and
  - (4) ensuring when possible an adequate environmental protection.

## 3. Activities

- Review the amendments to the
  - ICAO SARPs of Annex 6;
  - ICAO Doc 9976 FPFMM; and
  - ICAO State Letters 10/2012, 09/2014, 10/2014 and 11/2014,

and identify the elements to be incorporated into the EU rules (objective (b)).

- Review the safety recommendation FRAN-2012-026, assess other task-related fuel occurrences and determine if rule changes are necessary (objective (a)(1)).
- Incorporate SIB 2013-12 issued on 23 July 2013 recommending to amend the procedures for inflight fuel management and the fuel related phraseology (objective b) and SIB 2014-016 issued on 23 May 2014 regarding 'Aeroplane Refuelling with One Engine Running' (objective (a)(3)).

<sup>&</sup>lt;sup>10</sup> Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1).



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- Review the consistency of fuel-related rules across all regulatory parts for motor-powered aircraft (objectives (c)(1), (2) and (3)).
- Address any editorial mistakes or implementation issues on the fuel-related rules brought to the attention of the Agency (objectives (c)(1) and (2)).
- Develop a Regulatory Impact Assessment (RIA) (all objectives).
- Develop a Notice of Proposed Amendment (NPA) including amendments, as appropriate, to the Air OPS Regulation and related AMC/GM (all objectives).

## 4. Deliverables

- Notice of Proposed Amendment (NPA) (2016/Q2);
- CRD to NPA (2017/Q3);
- Opinion with draft Implementing Rule (2017/Q3); and
- ED Decision (2018/Q3).

## 5. Interface issues

General Aviation Road Map: The task will take into account proportionality, in particular for Part-NCO.

## 6. Profile and contribution of the rulemaking group

Profile of rulemaking group and its members:

- knowledge of and/or experience in Air Traffic Control (ATC) standard phraseology and related procedures;
- extensive knowledge of and experience in fuel planning, aeroplanes and/or helicopters;
- knowledge and experience with regard to the contingency fuel statistical method;
- experience with regard to Reduced Contingency Fuel (RCF) procedure;
- extensive knowledge of and experience in in-flight fuel management (aeroplanes and/or helicopters);
- knowledge of and/or experience in flight planning;
- knowledge of and experience in operational control;
- knowledge of fuelling and defuelling procedures;
- knowledge of ICAO Annex 6 and Doc 9976 with regard to fuel and planning-related material, as well as knowledge of the EU regulatory framework;
- experience in the performance-based regulatory framework;
- experience in risk assessment and knowledge of the related methodology; and
- experience in and/or knowledge of the oversight of air operators.
- **Note**: The group should have a balanced representation of NAAs, air operators and pilot associations representing different types of operations.

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# 7. Annex I: Reference documents

#### 7.1. Affected regulations

- Commission Regulation (EU) No 965/2012 of 28 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Commission Regulation (EU) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1).
  - Annex I (Part Definitions);
  - Annex II (Part-ARO);
  - Annex III (Part-ORO);
  - Annex IV (Part-CAT);
  - Annex V (Part-SPA);
  - Annex VI (Part-NCC);
  - Annex VII (Part-NCO); and
  - Annex VIII (Part-SPO).

### 7.2. Affected decisions

- Decision 2013/017/R of the Executive Director of the Agency of 23 August 2013 amending Decision 2012/015/R of the Executive Director of the Agency of 24 October 20121 on Acceptable Means of Compliance and Guidance Material to Annex I Definitions (Amendment 1)';
- Decision 2014/014/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-ARO of Regulation (EU) No 965/2012 and repealing Decision 2012/016/R of the Executive Director of the Agency of 24 October 2012;
- Decision 2014/017/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-ORO of Regulation (EU) No 965/2012 and repealing Decision 2012/017/R of the Executive Director of the Agency of 24 October 2012;
- Decision 2014/015/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-CAT of Regulation (EU) No 965/2012 and repealing Decision 2012/018/R of the Executive Director of the Agency of 24 October 2012 'AMC and GM to Part-CAT Issue 2';
- Decision 2013/021/R of the Executive Director of the Agency of 23th August 2013 on adopting Acceptable Means of Compliance and Guidance Material for Non-commercial operations with complex motor-powered aircraft (Part-NCC);
- Decision 2014/016/R of the Executive Director of the Agency of 24th April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-NCO of Regulation (EU) No 965/2012 and repealing Decision 2013/022/R of the Executive Director of the Agency of 23 August 2013 'AMC and GM to Part-NCO Issue 2'; and



 Decision 2014/018/R of the Executive Director of the Agency of 24th April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-SPO of Regulation (EU) No 965/2012 'AMC and GM to Part-SPO'.

## 7.3. Reference documents

- ICAO Annex 6 (Operation of Aircraft) to the Chicago Convention on International Civil Aviation, signed at Chicago on 7 December 1944;
- ICAO Document 9976 Flight Planning and Fuel Management Manual, Advanced, 2012 Edition (unedited);
- ICAO State letter 10/2012, Amendment 36 to Annex 6 Part I;
- ICAO State letter 09/2014, Amendment 38 to Annex 6 Part I;
- ICAO State letter 10/2014, Amendment 33 to Annex 6 Part II;
- ICAO State letter 11/2014, Amendment 19 to Annex 6 Part III;
- ICAO Document 4444, PANS-ATM;
- EASA Safety Information Bulletin (SIB 2013-12), In-Flight Fuel Management Phraseology for Fuel Related Messages to Air Traffic Control (ATC), 23 July 2013;
- EASA Safety Information Bulletin (SIB 2014-16), Aeroplane Refuelling with One Engine Running, 23 May 2014, 1 July 2014 (correction);
- FAA Economic Values for FAA Investment and Regulatory Decisions, 2007; and
- ICAO Circular 303-AN/176 Operational Opportunities to Minimize Fuel Use and Reduce Emissions, February 2003.

