

Fuel schemes Regulation (EU) 2021/1296 and as regards to Fuel/energy planning and management.

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EASA

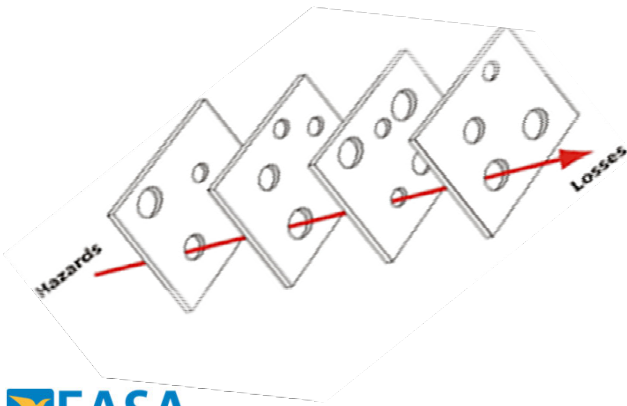


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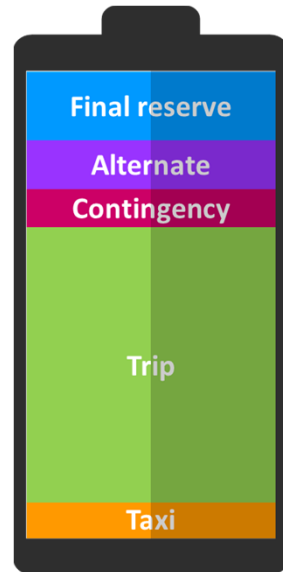
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Why this change in the Fuel Reg?

- Incorporate updates to ICAO Annex 6 and elements from ICAO Doc 9976 'Flight planning and fuel management manual (FPFM)'
- Promote new technological enhancement -> Rules are prepared for hybrid, electrical and fuel cells
- **Environment → more flexibility - more efficiency.**
- **New propulsion technology → FUEL to Fuel/energy**



- Improve operational control (e.g. aircraft connectivity with OCC)
- Address level-playing field and consistency issues.



Fuel rules for CAT

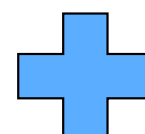
Fuel schemes

Approved by Authority

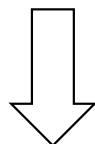
Fuel planning
policy



In-flight fuel
management policy

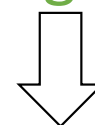


Selection of
aerodromes &
planning policy



Safety objective in the IR

Means to comply in the AMC



Performance-based regulation

Fuel rules for CAT - Performance-based rules

- The new fuel rules allow increased efficiency/flexibility in fuel planning, depending on the maturity of the operator & the Competent Authority.
- They also provide new guidance for Competent Authority inspectors to approve and oversee the fuel schemes



New concept (explained in CAT.OP. MPA 180)

➤ The IR gives the safety objective.

1. AMCs 1 gives the “basic” prescriptive way to comply with the IR.
2. AMCs 2 gives the already allowed variations which can be used by mature operators to comply with the IR.
3. AMCs 3 opens the door for “individual fuel schemes” when an experienced operator is able to prove, by a safety assessment, that he can comply with the IR safety objective by different means.



Fuel rules for CAT – example

Implementing rule: CAT.OP.MPA.180 series

No AltMoC required

Basic fuel scheme

AMC 1 CAT.OP.MPA.180

Prescriptive: 5% contingency fuel

- * No special requirements for the authority
- * No special requirements for the operator

* Current situation for most operators

Basic fuel scheme with variations

AMC 2 CAT.OP.MPA.180

Variations to basic fuel scheme:
3% contingency fuel

- * No special requirements for the authority
- * Some requirements for the operator (e.g. fuel consumption monitoring program required)
- * EASA can create new variations in the future

Individual fuel scheme

AMC 3 CAT.OP.MPA.180

Process to deviate from AMC1 & 2

* Requirements:

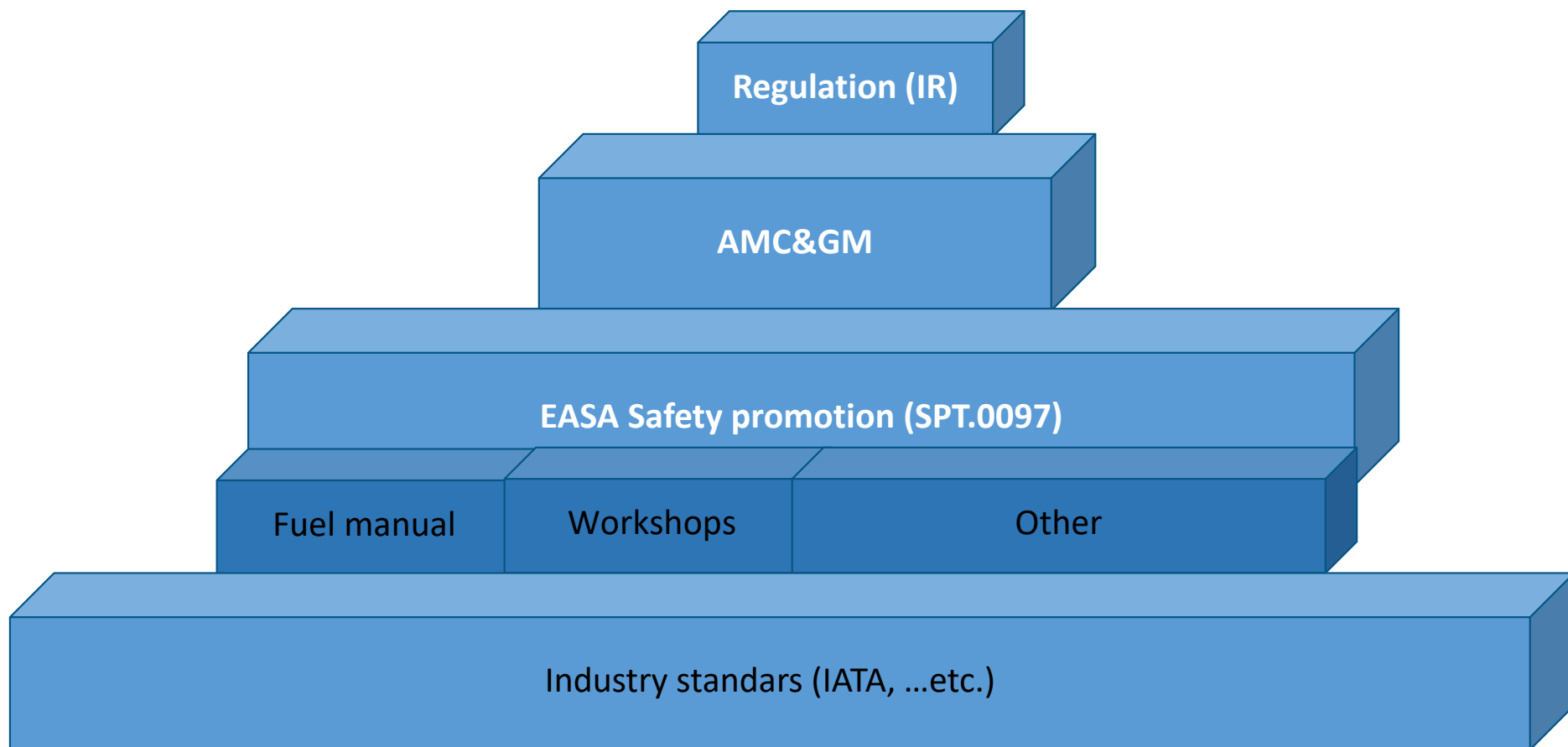
1. At least 2 years of data
2. Authority capabilities
3. Mature operator
4. Aircraft capabilities
5. Ops control centre capabilities.
6. Area of operations

Overview of the Rulemaking related work

➤ RMT.0392. Regular updates of the air operations rules

- NPA 2022-11 It amends the following fuel-related provisions: CAT.OP.MPA.175, CAT.OP.MPA.181, AMC1 CAT.OP.MPA.181(c)(5), AMC2 CAT.OP.MPA.181(c)(5), GM1 CAT.OP.MPA.181(c)(5), GM2 CAT.OP.MPA.181(c)(5), AMC8 CAT.OP.MPA.182, AMC9 CAT.OP.MPA.182.
- NPA 2023-01. It amends AMC1 CAT.OP.MPA.175(a).
- NPA 2023-03 EDTO
 - It amends the following fuel-related provisions: AMC1 CAT.OP.MPA.175(a), AMC3 CAT.OP.MPA.182.
- NPA 2024-02 Enhanced implementation of FDM programmes and miscellaneous amendments
 - It amends the following fuel-related provisions: GM2 CAT.OP.MPA.181 Statistical contingency fuel, AMC2 CAT.OP.MPA.182, AMC2 CAT.OP.MPA.185(a).
 - Comments are open until 24 June 2024.

Regulatory framework & Safety promotion



Safety promotion task SPT.0097

- Task force STP.0097 Industry experts nominated by Advisory bodies
- Webinars & presentations
 - 4 Webinars available on YouTube
 - <https://www.youtube.com/@together4safety301>



- Documentation & Questions
 - EASA FUEL implementation manual (draft V0.1).
 - New Chapter FAQ



EASA Fuel implementation Manual

- Reg. (EU) 2018/1139
- Article 4 (1)(g)
 - When taking measures under this Regulation the Commission, the Agency and the Member States shall: (...)
 - (g) take non-binding measures, including **safety promotion actions**, where possible;
- Article 76 (3)
 - The Agency shall (...) issue (...) and **guidance material** for the application of this Regulation and of the delegated and implementing acts adopted on the basis thereof.



END

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