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Federal Office of Civil Aviation FOCA

# SASOC 2022 Regulatory Changes 2022 +



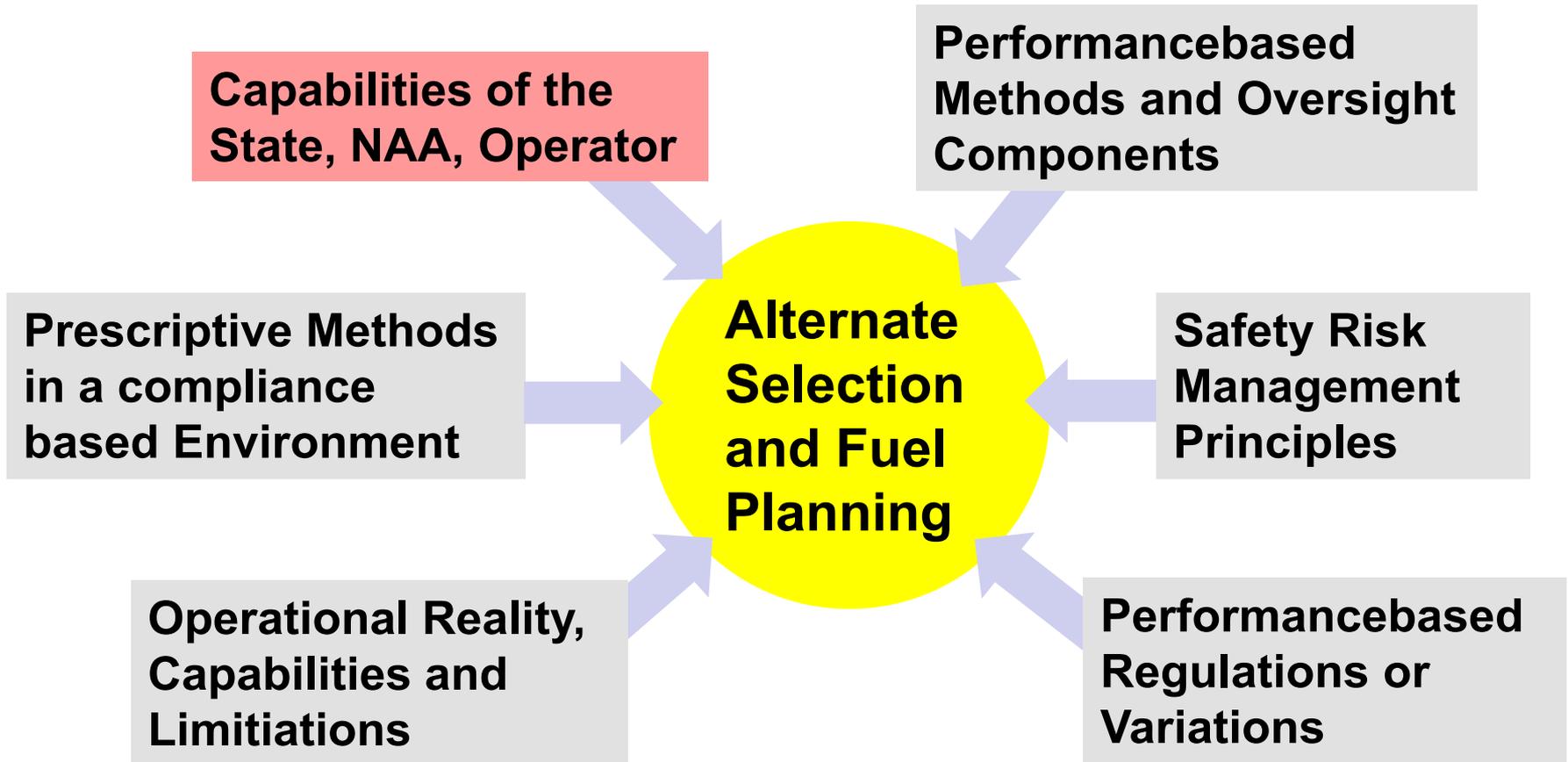


# Upcoming Changes – non conclusive

- New Fuel Schemes (former Fuel Policy)
- New All Weather Operations Requirements
- Regulations covering ground handling
- Alcohol testing of crew members
- AoB



# New Fuel Policy (Fuel Schemes)





# New Fuel Policy



Commission Implementing Regulation (EU) 2021/1296 of 4 August 2021 amending and correcting Regulation (EU) No 965/2012 as regards the requirements for fuel/energy planning and management.

**Entry into force - > application as of 30 October 2022**



# New Fuel Policy



On 25 March 2022 - The European Union Aviation Safety Agency has published a Decision which proposes that air operators be allowed to reduce the amount of fuel carried during operations, thereby reducing the CO2 emissions of the overall flight and environmental impact of the flight.

This potential saving would represent approximately 1% of European flight emissions.

<b>Start</b> Terms of Reference RMT.0573	<b>Public consultation</b> NPA 2016-06(A)(B)(C)	<b>Proposal to the Commission</b> Opinion No 02/2020	<b>Adoption by the Commission</b> Implementing Act	<b>Decision</b> Certification Specifications, Acceptable Means of Compliance, Guidance Material
27.4.2015	15.7.2016	8.10.2020	4.8.2021	22.3.2022



# New Fuel Policy

The regulatory package consists of:

- **Regulation (EU) 2021/1296**
- **ED Decision 2022/005/R** for AMC's and GM,

The content is aligned with guidance from ICAO.

The principles will also apply for aircraft powered fully or partially by **alternative energy sources**, such as electric aircraft



# New Fuel Policy



- Introduced to improve efficiency in fuel/energy planning and management for commercial air transport (CAT) aeroplanes, while maintaining an equally high level of safety in air operations
- to incorporate into EU rules the latest International Civil Aviation Organization (ICAO), Annex 6, Parts I, II, and III amendments on fuel planning and management
- The rules on other types of operations are also amended for consistency. The requirements of Annexes VI (**Part-NCC**) and VIII (**Part-SPO**) to Regulation (EU) No 965/2012 (the 'Air OPS Regulation') are better harmonised with those of Annex IV (**Part-CAT**) for CAT operations that are based on the new fuel schemes



# New Fuel Schemes



New requirements for aeroplanes used in commercial air transport (CAT) operations will introduce a comprehensive fuel scheme covering three main policies related to fuel (Fuel Planning Policy):

- fuel/energy planning
- aerodrome selection
- in-flight fuel and energy management

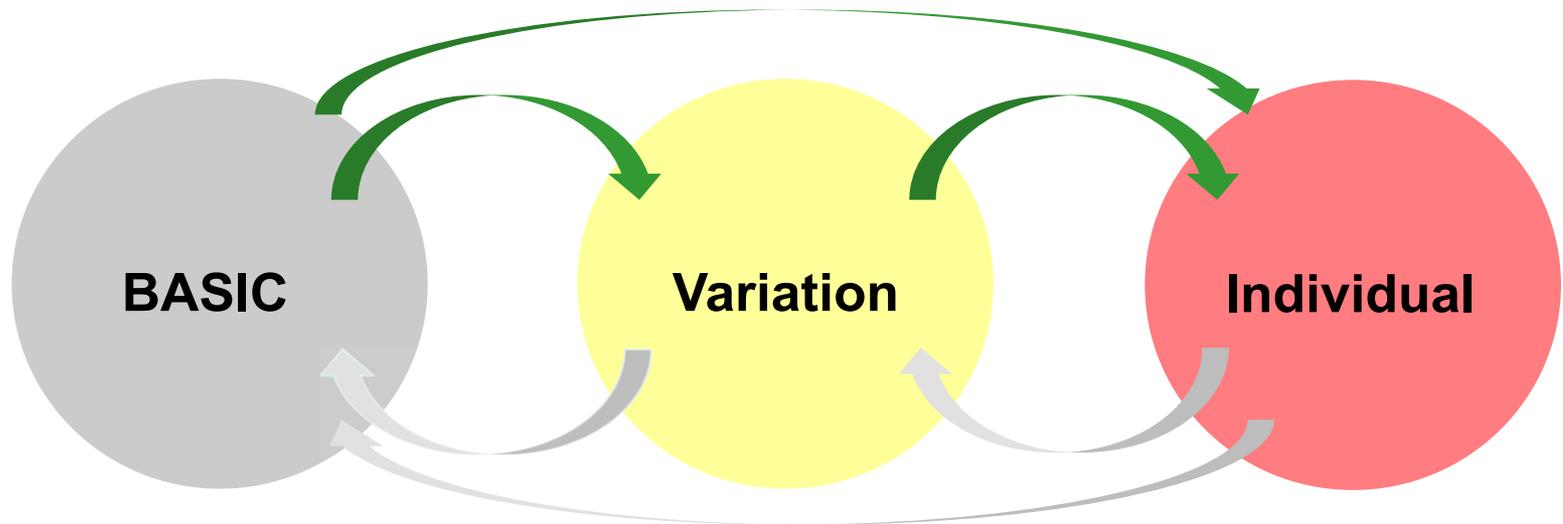
This should allow a more flexible management of risks by the operator, leading to potential efficiency gains.



# New Fuel Schemes

The new rules bring in **three different fuel schemes**:

- basic fuel scheme
- **fuel scheme with variations**
- **individual fuel scheme**





# Regaining the formal Approval



## CAT.OP.MPA.150 Fuel policy

*Regulation (EU) No 965/2012*

- (a) The operator shall establish a fuel policy for the purpose of flight planning and in-flight replanning to ensure that every flight carries sufficient fuel for the planned operation and reserves to cover deviations from the planned operation. The fuel policy and any change to it require prior approval by the competent authority.

Expired after  
October 2022

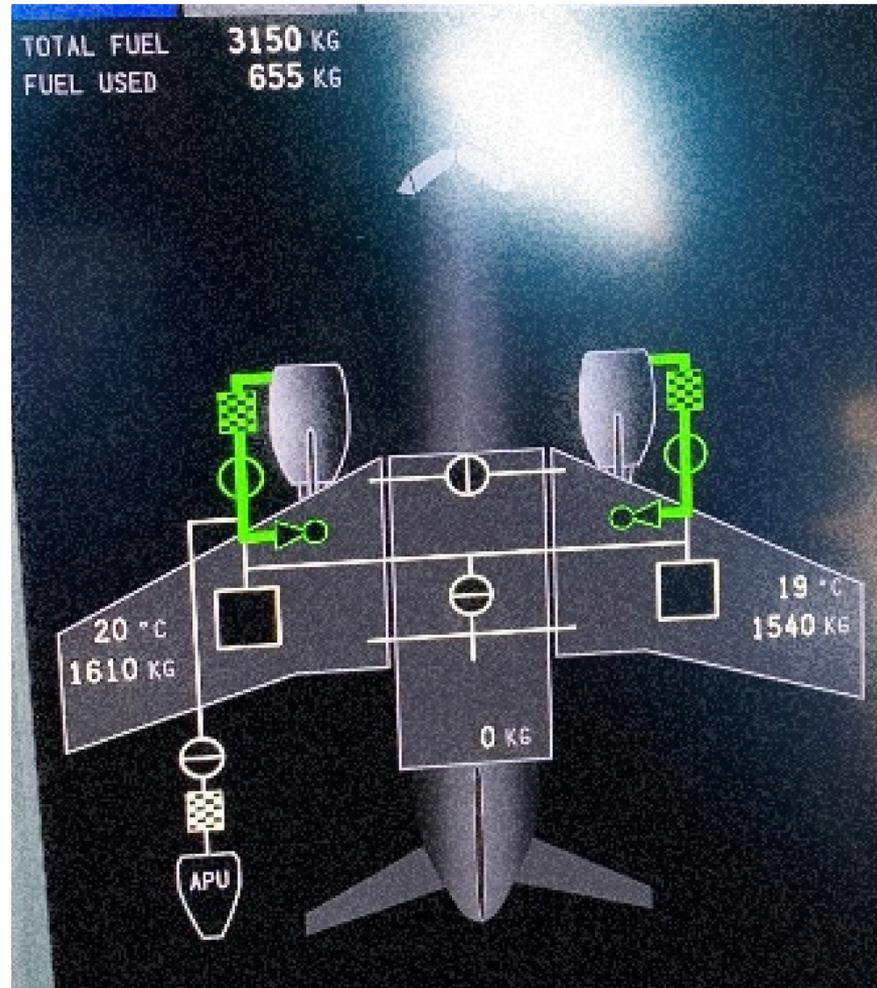
## CAT.OP.MPA.180 Fuel/energy scheme – aeroplanes

*Regulation (EU) 2021/1296*

- (b) All fuel/energy schemes shall comprise:
- (1) a fuel/energy planning and in-flight re-planning policy;
  - (2) an aerodrome selection policy; and
  - (3) an in-flight fuel/energy management policy.
- (c) The fuel/energy scheme and any change to it shall require prior approval by the competent authority.



# New Fuel Policy





# New Fuel Policy

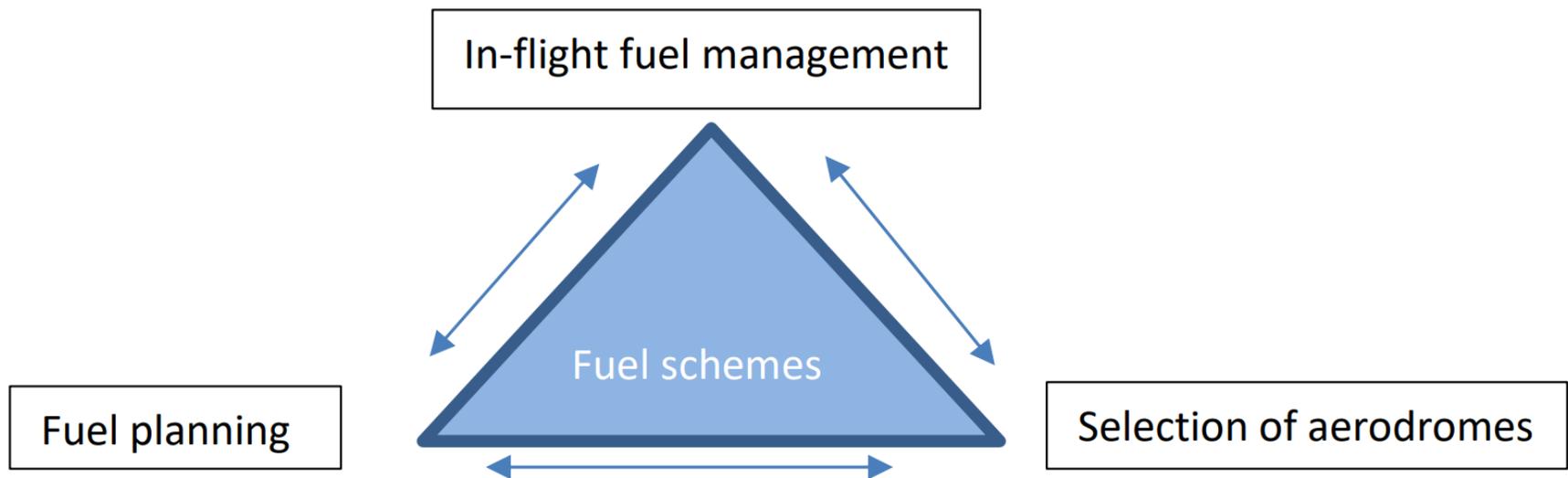


EASA summarised a study on in-flight fuel management:

- a good flight planning alone does not guarantee a safe outcome without proper in-flight fuel management; the same principle applies to the selection of aerodromes;
- the combination of a good fuel planning policy and a poor in-flight fuel management policy may lead to an unsafe fuel situation (e.g. fuel emergency, minimum fuel or similar); and
- conversely, poor flight planning will probably have a safe outcome with proper in-flight fuel management (e.g. early diversion to an alternate aerodrome to refuel).



# New Fuel Policy





# Sample of Changes



## Planning minima destination alternate aerodrome

Type of approach	Planning minima
CAT II and III	CAT I RVR
CAT I	CAT I + 200 ft/400 m visibility
NPA	NPA RVR/VIS + 400 m Ceiling shall be at or above MDH + 200 ft

Expired after October 2022

**Table 2 — Basic fuel scheme — planning minima — aeroplanes**

**Destination alternate aerodrome, fuel ERA aerodrome, isolated destination aerodrome**

Type of approach operation	Aerodrome ceiling (cloud base or vertical visibility)	RVR/VIS
Type B instrument approach operations	DA/H + 200 ft	RVR/VIS + 800 m
Type A instrument approach operations	DA/H or MDA/m + 400 ft	RVR/VIS + 1 500 m
Circling approach operations	MP <sub>1</sub> /H + 400 ft	VIS + 1 500 m
<b>Crosswind planning minima: see Table 1 of AMC3 CAT.OP.MPA.182</b>		
Wind limitations should be applied taking into account the runway condition (dry, wet, contaminated).		

Valid 30 October 2022



# New Fuel Policy



The FOCA may, based on the results of a specific safety risk assessment conducted by the operator, which demonstrates how an equivalent level of safety will be maintained, approve **operational variations to alternate aerodrome selection criteria**. The specific safety risk assessment shall include at least the:

- capabilities of the **operator**
- overall capability of the aeroplane and its **systems**
- available aerodrome technologies, capabilities and **infrastructure**
- quality and reliability of **meteorological information**
- identified hazards and **safety risks** associated with each alternate aerodrome variation
- specific **mitigation measures**



# Sample of Changes



- **Basic Fuel Scheme**

**Table 2 — Basic fuel scheme — planning minima — aeroplanes**

**Destination alternate aerodrome, fuel ERA aerodrome, isolated destination aerodrome**



<b>Type of approach operation</b>	<b>Aerodrome ceiling (cloud base or vertical visibility)</b>	<b>RVR/VIS</b>
Type B instrument approach operations	DA/H + 200 ft	RVR/VIS + 800 m
Type A instrument approach operations	DA/H or MDA/H + 400 ft	RVR/VIS + 1 500 m
Circling approach operations	MDA/H + 400 ft	VIS + 1 500 m
<b>Crosswind planning minima: see Table 1 of AMC3 CAT.OP.MPA.182</b>		
<b>Wind limitations should be applied taking into account the runway condition (dry, wet, contaminated).</b>		



# Sample of Changes

- Basic Fuel Scheme with **variations**

**Table 3 — Basic fuel scheme with variations — planning minima — aeroplanes**  
**Destination alternate aerodrome, fuel ERA aerodrome**



Row	Type of approach operation	Aerodrome ceiling (cloud base or vertical visibility)	RVR/VIS
1	Type B instrument approach operations	DA/H + 200 ft	RVR/VIS + 550 m
2	3D Type A instrument approach operations, based on a facility with a system minimum of 200 ft or less	DA/H or MDA/H* + 200 ft	RVR/VIS** + 800 m
3	Two or more usable type A instrument approach operations***, each based on a separate navigation aid	DA/H or MDA/H* + 200 ft	RVR/VIS** + 1 000 m
4	Other type A instrument approach operations	DA/H or MDA/H + 400 ft	RVR/VIS + 1 500 m



# Sample of Changes

- Basic Fuel Scheme with **variations and SPA CAT III/III**

**Table 4 — Basic fuel scheme with variations — planning minima**



**Destination alternate aerodrome, fuel ERA aerodrome, isolated destination aerodrome**

Row	Type of approach	Aerodrome ceiling (cloud base or vertical VIS)	RVR/VIS
1	Two or more usable type B instrument approach operations to two separate runways***	DA/H* + 100 ft	RVR** + 300 m
2	One usable type B instrument approach operation	DA/H + 150 ft	RVR + 450 m
3	3D Type A instrument approach operations, based on a facility with a system minimum of 200 ft or less	DA/H or MDA/H* + 200 ft	RVR/VIS** + 800 m
4	Two or more usable type A instrument approach operations***, each based on a separate navigation aid	DA/H or MDA/H* + 200 ft	RVR/VIS** + 1 000 m



# New Fuel Policy



The FOCA may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve variations to the pre-flight fuel calculation of taxi fuel, trip fuel, contingency fuel, destination alternate fuel, and additional fuel. The specific safety risk assessment shall include at least:

- flight fuel calculations
- capabilities of the operator to include
  - a data-driven method that includes a fuel consumption monitoring programme and/or
  - the advanced use of alternate aerodromes
- specific mitigation measures



# Individual Fuel Scheme



It should be noted that the related AMC reinforces **flight monitoring** and **flight watch** as important tasks for the implementation of **individual fuel schemes**.

This includes:

- training programme for OCP for flight monitoring or flight watch
- initial training
- operator-specific training
- recurrent training
- retaining of knowledge, skills, and qualifications for instructors of OCP



# Individual Fuel Scheme



Required elements as part of an operational control system with the following capabilities:

- **flight monitoring** or flight watch
- collection and **continuous monitoring** of reliable meteorological, **aerodrome, and traffic information**
- **two independent airborne communications systems** to achieve rapid and reliable exchange of relevant safety information between flight operations personnel and flight crew during the entire flight
- monitoring of the **status of aircraft systems** that affect fuel consumption and of ground and aircraft systems that affect landing capabilities



# New Fuel Schemes



## Impact on the AOC Operator

- Analysis of the changes, the risks and the opportunities
- Management of Change and seeking Formal Approval
- Collecting and processing fuel and planning data
- Adopting OM-A (major revision)
- Adopting training syllabus if necessary (Crew, FOO)
- Adopting Training and Checking programmes
- Implementing the new requirements as of 30 Oct 2022

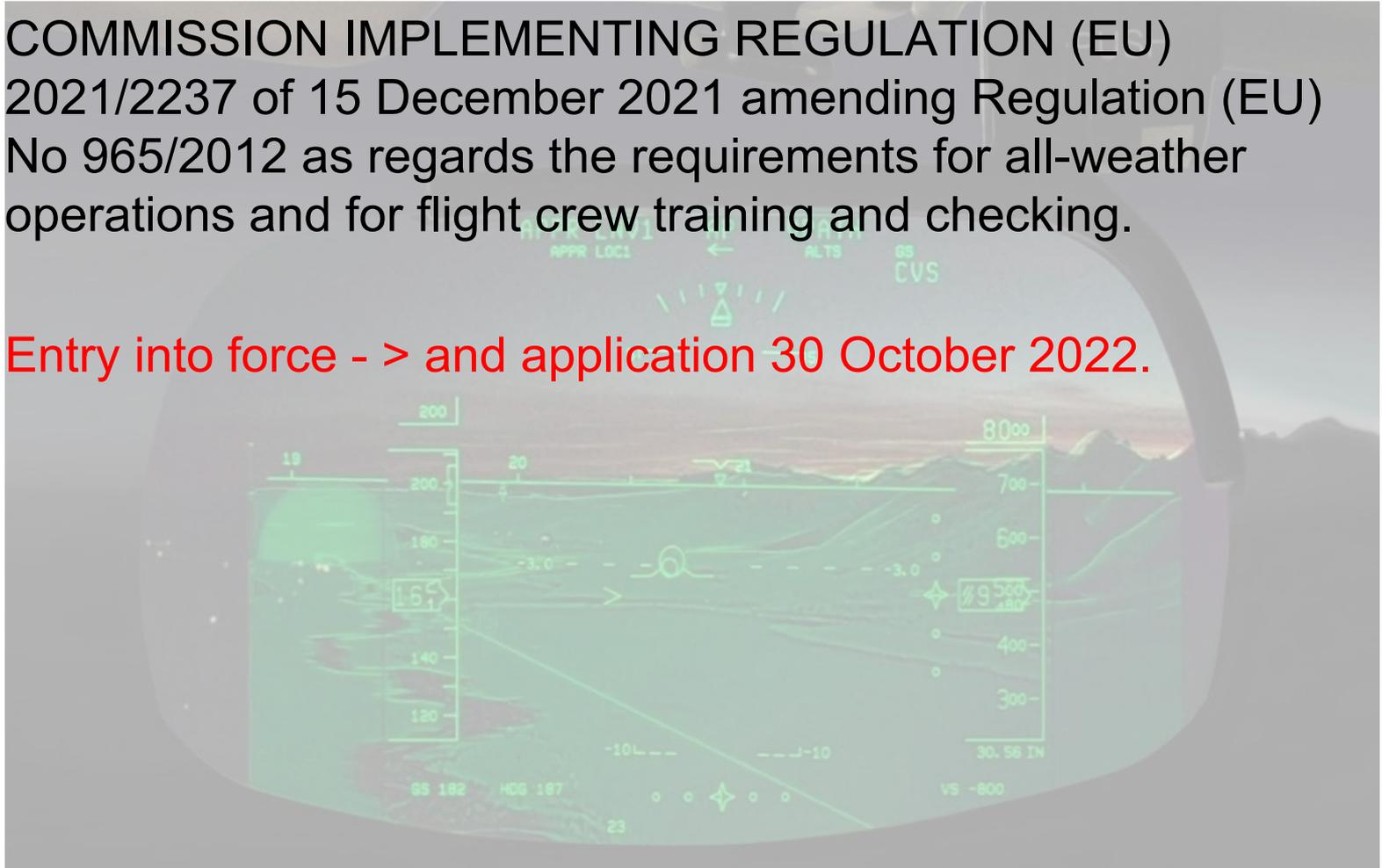


# New AWO Regulation



COMMISSION IMPLEMENTING REGULATION (EU) 2021/2237 of 15 December 2021 amending Regulation (EU) No 965/2012 as regards the requirements for all-weather operations and for flight crew training and checking.

Entry into force - > and application 30 October 2022.





# New AWO Regulation



As regards AWOs, the new regulation follows a performance- and risk-based approach. It sets the appropriate balance between performance-based and prescriptive principles depending on the type of air operations. The rules are not technology-dependent and may accommodate for future changes.

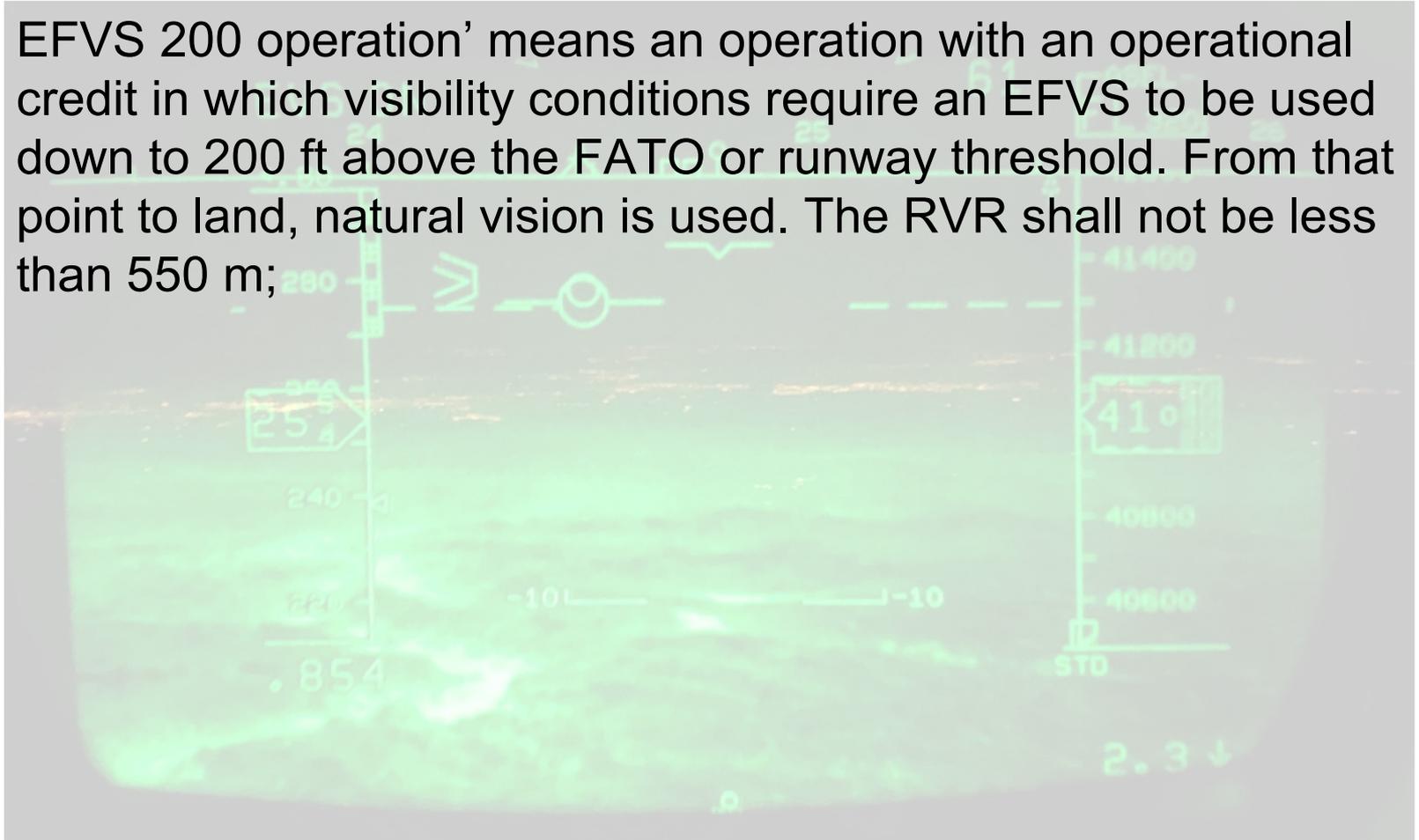




# New AWO Regulation



EFVS 200 operation' means an operation with an operational credit in which visibility conditions require an EFVS to be used down to 200 ft above the FATO or runway threshold. From that point to land, natural vision is used. The RVR shall not be less than 550 m;





# New AWO Regulation



## Impact on the regulatory landscape

- Differences between domains
  - Airworthiness (CS-AWO)
  - Operation (965/2012)
  - Aircrew (1178/2011)
  - Aerodromes (139/2014)
- Harmonisation with FAR's
- Alignment with ICAO SARP's



# New AWO Regulation



## Changes in definitions

- Definition of visibility
- EVS
- CVS (Combined Visual System)
- EFVS (Enhanced Flight Vision System)
- EFVS-A (Approach)
- EFVS-L (landing)
- SVS (Synthetic Vision System)
- ...



# New AWO Regulation



- Definition of visibility
- New definition of LVO if RVR >550m
- **EFVS operation** (T/O and Ldg)
- EFVS 200 operation (down to 200ft)
- **SA CAT I** (DH 150ft, RVR 400m)
- **SA CAT II** (DH 100ft, RVR 350m)
- Type A instrument approach
- Type B instrument approach (**CAT I, CAT II, CAT III**)
- LVTO RVR 75m removed
- LTS CAT I removed
- OTS CAT II removed/ renamed **SA CAT II**
- NPA term removed



# New AWO Regulation

**Table 5**

**CAT III operation minima: RVR (m) versus DH (ft)**

DH (ft)	Roll-out control/guidance system	RVR (m)*
50-99	Not required	175
0-49 or no DH	Fail-passive	125
	Fail-operational	75

\* Note: For a fail-passive or HUD roll-out control system, a lower RVR value (no lower than 75 m) can be used as stated in the AFM provided that the equipment was demonstrated as part of the certification process. This is provided that the operator has implemented the appropriate operating procedures and training.



# New AWO Regulation



Expected challenges:

**Entry into force - > and application 30 October 2022.**

As of today no related AMC's and GM's available.

EASA is aiming to publish the missing documents before July 2022.

-  Opinion No 02/2021
-  Annex I — **DRAFT** COM DEL REGULATION (EU) ...-... amending Regulation (EU) No 139-2014 as regards the requirements for AWOs
-  Annex II — **DRAFT** COM IMPL REG (EU) ...-... amending Reg (EU) No 1178-2011 as regards requirements for AWOs and for IR & TR train
-  Annex III — **DRAFT** COM IMPL REGULATION (EU) ...-... amending Reg (EU) No 965-2012 as regards the requirements for AWOs
-  **Draft** Annex to **DRAFT** COM DEL REGULATION (EU) ...-... amending Regulation (EU) No 139-2014
-  **Draft** Annex to **DRAFT** COM IMPL REGULATION (EU) ...-... amending Reg (EU) No 1178-2011
-  **Draft** Annex to **DRAFT** COM IMPLG REGULATION (EU) ...-... amending Regulation (EU) No 965-2012
-  **Draft** AMC & GM (OPS and FCL) Amendment 1
-  **Draft** AMC & GM (ADR)



# New AWO Regulation



## Impact on AOC operator

- Analysis of changes and risks
- Management of Change and seeking formal approvals
- Adopting OM-A and OM-D content (mayor revision)
- Adopting training syllaby
- Adopting Training for pilots and FOO
- Adopting Training and Checking programs for 2022
- Implementing the new programs as of 30.Oct 2022



# New AWO Regulations



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## Webinar on All Weather Operations

*Online*

**Organised by:** EASA

**Date:**

**19 May 2022**

13:00 - 16:30 CET (UTC +2)

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### Description

Following publication of the latest EASA Rules to support All Weather Operations, EASA will host a webinar to support organisations with the implementation of the different aspects of these new rules. Further details on the agenda and topics to be covered will be provided shortly.

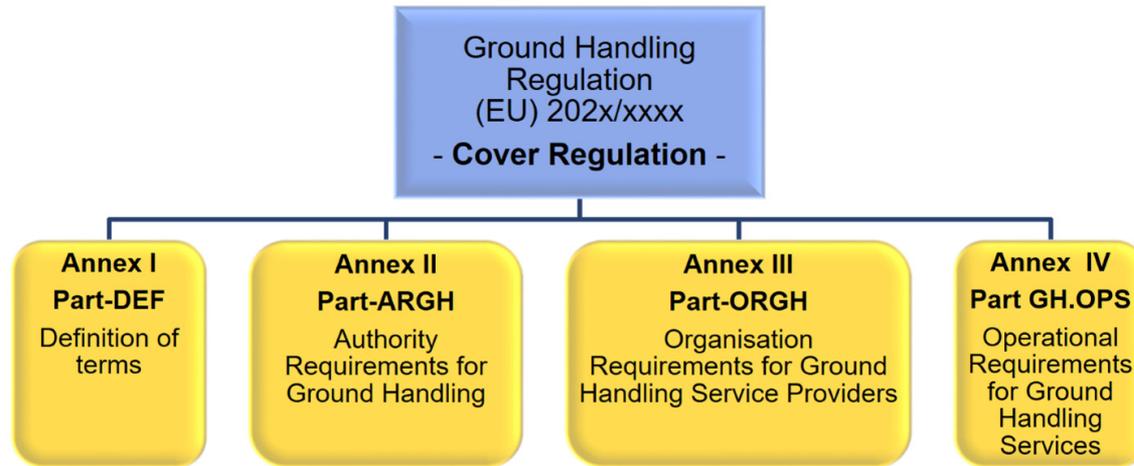
### Submit your questions before the event

Go to [Sli.do](https://sli.do) and use the following passcode: 6e2izl

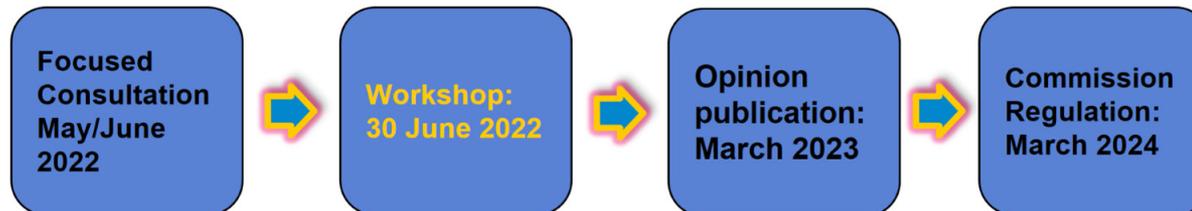


# New Requirements Ground Handling

## Proposed Structure



## Timeline





# New Requirements Ground Handling

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## Webinar on the EU Ground Handling Regulation

*Online*

**Organised by:** EASA

**Date:**

**30 Jun 2022**

14:00 - 18:10 CET (UTC +1)

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### Description

This webinar will discuss the draft rules of the future EU Ground Handling Regulation.



# Alcohol testing of crewmembers

- As of 1<sup>st</sup> of May 2022, the necessary amendment to the national law was implemented. Random alcohol checks are now possible and are also carried out sporadically
- Exchange with the public prosecutor's office on June 14
- FOCA will lead the checks conducted by the police
- In case of a second positive test result, the FOCA will have to deal with the case in coordination with public prosecutor's office
- There was already an exchange with the ZH Airport Police
- 30 to 50 test events per year - whole crew
- Screening of drugs will not occur
- More information can be found on the FOCA homepage



# Q & A

Thank you for your attention