



EUROPEAN AVIATION SAFETY AGENCY  
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE  
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

| 10<sup>TH</sup> ANNIVERSARY |

# OPS Workshop

**Copenhagen**

**18/02/2013**

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Rulemaking Officer, EASA

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# Agenda Day 1

<b>0910- 0955</b>	<b>Regulation 216/2008 – Cover regulation – Development of opinions</b>	<b>EASA</b>
<b>0955 - 1055</b>	<b>Regulation 965/2012 'Air Operations – OPS'</b>	<b>EASA</b>
<b>1055 - 1110</b>	<b>Coffee break</b>	
<b>1110 - 1140</b>	<b>Entry into force – Transitioning – Grandfathering – Conversion of AOC</b>	<b>EASA</b>
<b>1140 - -1210</b>	<b>Alternative means of compliance and AMC process</b>	<b>EASA</b>
<b>1210 - 1310</b>	<b>Flight Time Limitations (FTL) CAT and future FTL work</b>	<b>EASA</b>
<b>1310 - 1410</b>	<b>Lunch</b>	
<b>1410 - 1440</b>	<b>Volcanic Ash</b>	<b>EASA</b>
<b>1440 - 1510</b>	<b>On-going EASA Rulemaking tasks</b>	<b>EASA</b>
<b>1510 - 1530</b>	<b>Closing remarks</b>	<b>CAA-DK</b>



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- Regulation (EC) No 216/2008**
- Cover regulations**
- Development of opinions**

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# Territorial scope of the BR

## Validity of the BR



27 EU states



4 EFTA states



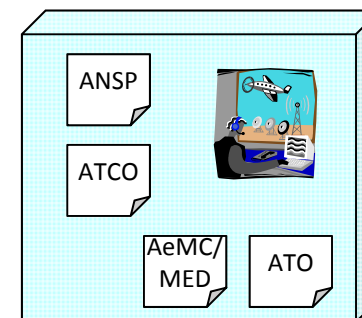
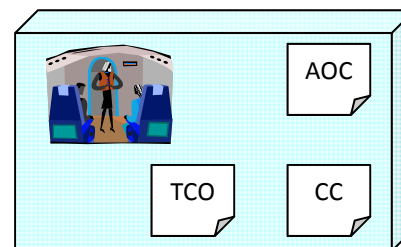
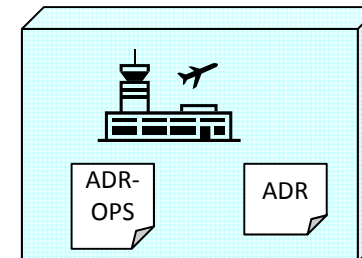
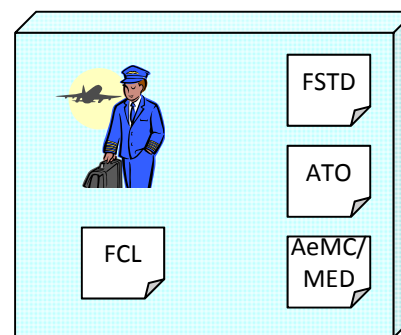
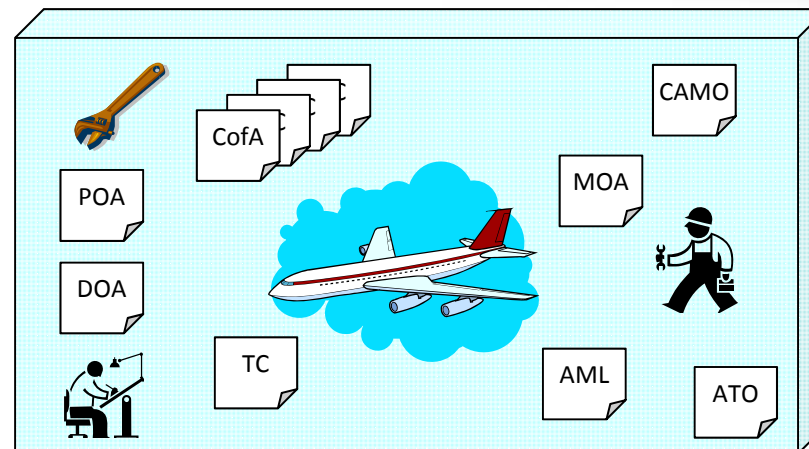


# Material scope of the BR

## BR covers:

Airworthiness and  
environmental  
protection of aircraft

- Pilots
- Air operations
- Aerodromes
- ATM/ANS and Air Traffic Controllers





# Material scope of the BR

## BR does not cover:

Airworthiness and environmental protection of aircraft	<ul style="list-style-type: none"><li>- while carrying out military, customs, police, SAR, fire fighting, coastguard or similar services</li><li>- when referred to in Annex II</li></ul>
Pilots and operations	<ul style="list-style-type: none"><li>- of aircraft referred to in Annex II, unless used for commercial operations</li></ul>
Aerodromes	<ul style="list-style-type: none"><li>- that are controlled and operated by the military</li><li>- not open to the public, not serving commercial air transport, not providing operations using instrument approach or departure (or) having paved runway of less than 800m (unless exclusively serving helicopters)</li></ul>
ATM/ANS	<ul style="list-style-type: none"><li>- that are provided or made available by the military</li></ul>

Consequence: The national rules apply.



# Legal Framework

## ► Legislator:

### 1) European Parliament and Council



upon proposal from the European Commission

### 2) European Commission



- European Parliament and Council may delegate to the Commission power to adopt Delegating Acts
- Commission is granted power to adopt      Implementing Acts



# Legal Framework

- EASA supports the European Commission by providing drafts for such legislation
- Drafts are provided as Agency opinions



EASA Rulemaking Directorate

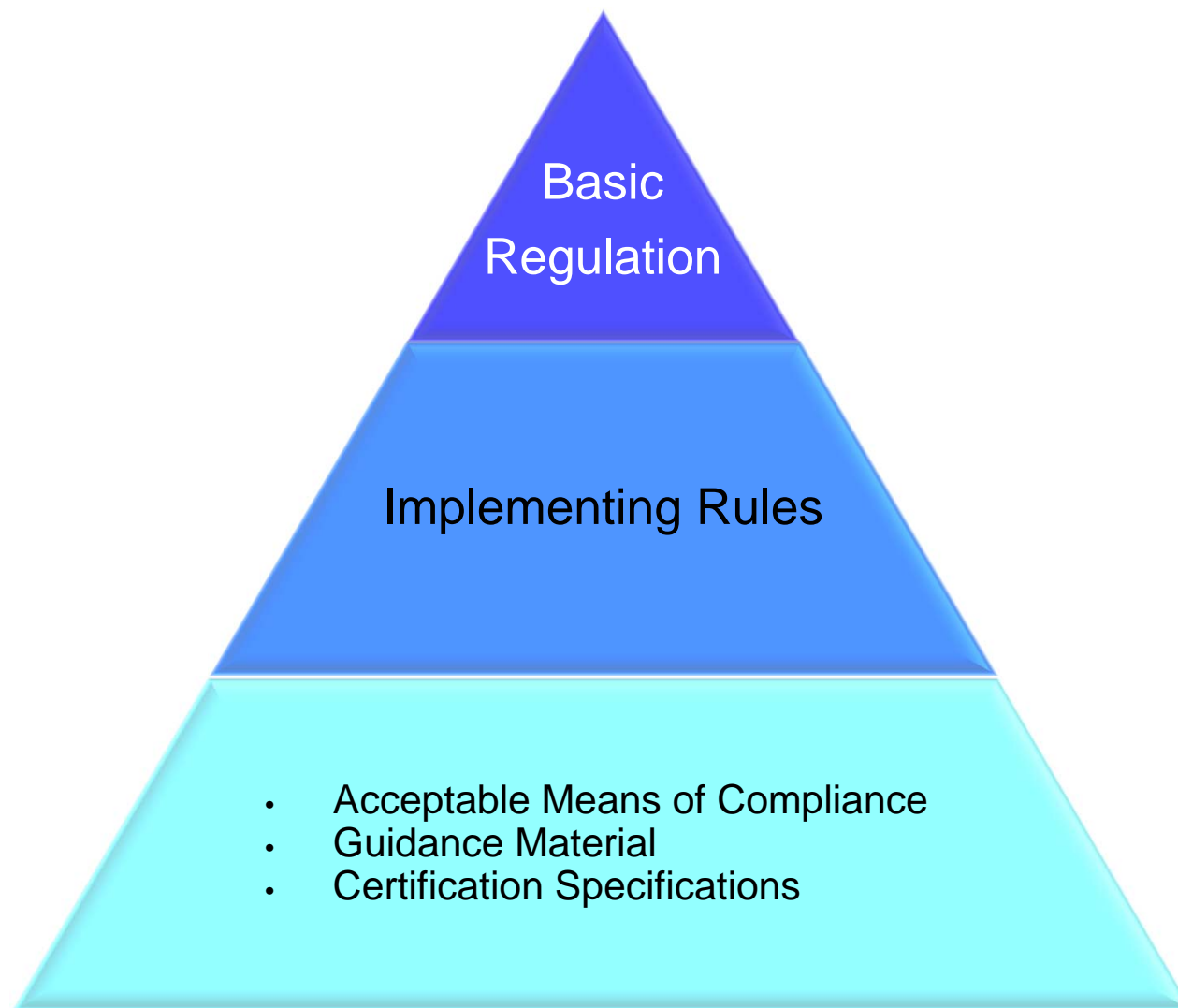


- Agency opinions are developed in accordance to its Rulemaking Procedure (Decision of the MB)



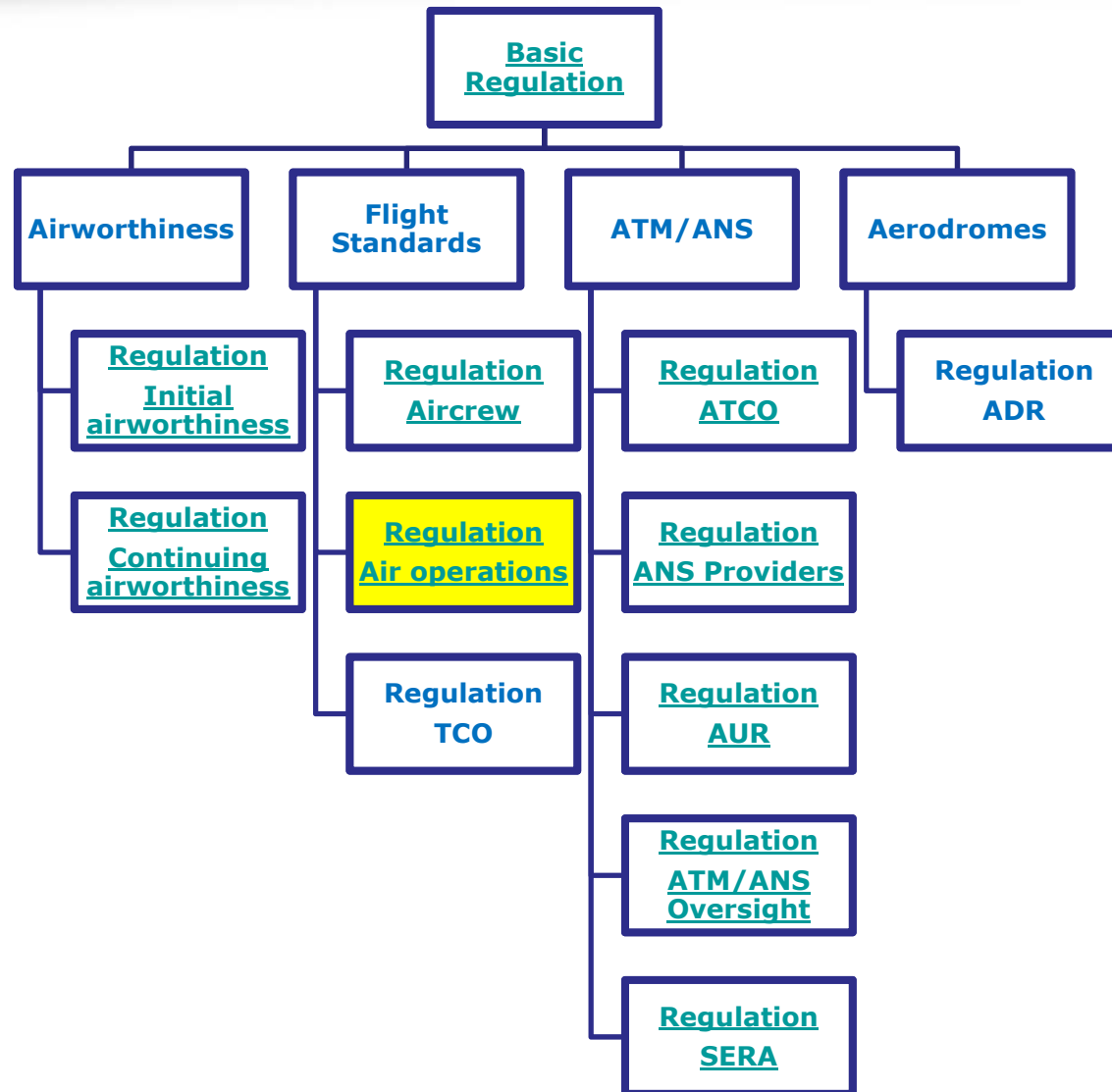


# Legal Framework





# European aviation rule structure



- **ATM/ANS:** air traffic management, air navigation services
- **TCO:** third country operators
- **ATCO:** air traffic controllers
- **AUR:** airspace usage requirements
- **SERA:** single European rules of the air
- **ADR:** aerodromes



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# **Regulation No 965/2012**

## **‘Air operations’**

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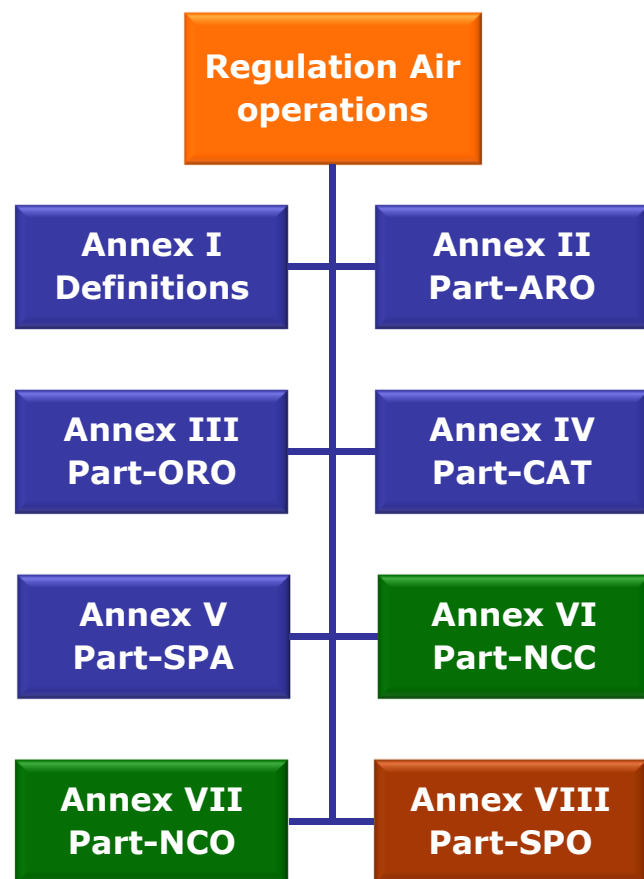


# Outline

- OPS rule structure and rule development
- Drafting principles for OPS rules
- Overview “Cover Regulation”
- Overview of Annexes



# OPS rule structure and rule development



## Regulation 965/2012 + Decisions 2012/15-16-17-18-19/R

- **Part-ARO:** Authority requirements - OPS
- **Part-ORO:** Organisation requirements - OPS
- **Part-CAT:** Commercial air transport operations
- **Part-SPA:** Operations requiring specific approvals

## Opinion 01/2012

- **Part-NCC:** Non-commercial operations with complex motor-powered aircraft (CMPA)
- **Part-NCO:** Non-commercial operations with other than CMPA

## Opinion 02/2012

- **Part-SPO:** special operations (e.g. aerial work)



# OPS rule structure and rule development

## Basic Regulation Article 3 item (j) 'complex motor powered aircraft' shall mean:

### An aeroplane with

- MTOM > 5700 kg, or
- MPSC > 19, or
- Minimum crew of 2 pilots, or
- One or more turbojet engine or more than one turboprop engine.



### An helicopter with

- MTOM > 3175 kg, or
- MPSC > 9, or
- Minimum crew of 2 pilots.





# OPS rule structure and rule development

Rule development	Phase OPS I	Phase OPS II	Phase OPS III	Phase OPS IV
Cover Reg.				
Definitions				
Part-ARO				
Part-ORO				
Part-CAT	A, H			S, B, A-to-A
Part-SPA				
Part-NCC				
Part-NCO				
Part-SPO				

initial version

amendment



# OPS rule structure and rule development

Document Status	Published: Reg. 965/2012	Adopted in EASA Committee	Discussed in EASA Committee	Discussed in EASA Committee
	Phase OPS I	Phase OPS II	Phase OPS III	Phase OPS IV
Cover Reg.				
Definitions				
Part-ARO				
Part-ORO				
Part-CAT	A, H			S, B, A-to-A
Part-SPA				
Part-NCC				
Part-NCO				
Part-SPO				

## IR:

- Rule development finalised
- IR to be published in the Official Journal

## AMC/GM:

- Rule development at final stage
- To be published together with IR





# OPS rule applicability

Rule applicability	CAT operator	NCC operator	NCO operator	SPO operator	NAA
Cover Reg.					
Definitions					
Part-ARO					
Part-ORO				Com/non-com CMPA	
Part-CAT					
Part-SPA					
Part-NCC					
Part-NCO					
Part-SPO					



# Drafting principles for OPS rules

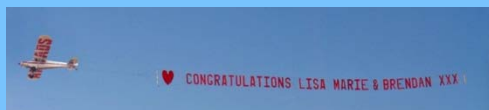
## Air operations

### Commercial

CAT



SPO



### Non commercial

NCC



NCO



SPO



**Commercial operation:** any operation of an aircraft, in return for remuneration or other valuable consideration, which is available to the public or, when not made available to the public, which is performed under a contract between an operator and a customer, where the latter has no control over the operator;



# Drafting principles for OPS rules

## ➤ **Safety focus**

- Risk-based approach.
- Emphasis on SMS and oversight capabilities.
- Strengthening operator and authority responsibilities.

## ➤ **Harmonisation**

- ICAO compatibility.
- Harmonised rules with other regional regulators, e.g. FAA, TCAA.

## ➤ **Flexibility and efficiency**

- Safety objective – Implementing Rule level.
- Method to comply with safety objective – AMC level.
- Operator can develop its own alternative AMC.
- Specific operational or geographical needs can be addressed.
- Proportionality.



# Drafting principles for OPS rules

- **Proportionality: CAT rules differentiate between; (1/2)**
  - Organisation;
    - non-complex versus complex organisations.
  - Nature of operation;
    - local/A-to-A versus A-to-B operations.
  - Flight rules;
    - IFR and night versus VFR operations.
  - Crew;
    - single-pilot versus multi-pilot operations,
    - operations with cabin crew versus operations without cabin crew.



# Drafting principles for OPS rules

- **Proportionality: CAT rules differentiate between; (2/2)**
  - Aircraft;
    - non-complex aircraft versus complex aircraft,
    - single-engined aircraft versus multi-engined aircraft,
    - performance classes A, B and C for aeroplanes,
    - performance classes 1, 2, 3 and categories A and B for helicopters.



# Drafting principles for OPS rules

## ➤ **For transposing EU-OPS and JAR-OPS 3**

- Rules with a safety objective are transposed as IR.
- Rules with a means to comply with a safety objective are transposed as AMC,
  - following this principle, most Appendices have been transposed as AMC.
- Rules which could not obviously be classified as safety objective or means to comply are transposed as IR.
- Notes and rules with explanatory character are transposed as GM.
- Appendices with alleviations: 1.005(a), 3.005(f), 3.005(g) have been transposed into the applicable rules, where relevant.



# Drafting principles for OPS rules

## ➤ **For transposing EU-OPS and JAR-OPS 3 (cont.)**

- Rules allowing an alternative if approved/accepted by the authority have been removed and are replaced:
  - For IRs by the Article 14 (BR 216/2008) procedure. \*
  - For AMCs by the alternative means of compliance procedure.



# Drafting principles for OPS rules

## \* Article 14

### Flexibility provisions

1. The provisions of this Regulation and of its implementing rules shall not prevent a Member State from reacting immediately to a safety problem which involves a product, person or organisation subject to the provisions of this Regulation.

The Member State shall immediately notify the Agency, the Commission and the other Member States of the measures taken and the reason therefore.





# Drafting principles for OPS rules

- **For transposing EU-OPS and JAR-OPS 3 (cont.)**
- Rules requiring an approval are either
  - transposed as IR, or
  - if transposed as AMC have been removed (alternative MOC procedure).
- Rules which are already covered in the essential requirements (ER) of the BR have been retained with link to the ER.



# Drafting principles for OPS rules

## ➤ For transposing EU-OPS and JAR-OPS 3 (cont.)

- Rules containing  
*“acceptable to the authority”*  
have been transposed as  
*“the operator shall specify in the OM”*
- Rules containing  
*“if approved by the authority”*  
have been transposed as an item requiring prior approval,  
or being included in the AOC.
  - GM3 ORO.GEN.130(b) Changes



# Transposition of EU-OPS

<b>EU-OPS</b>	<b>Part-CAT</b>	<b>Part-SPA</b>	<b>Part-ORO</b>	<b>Part-ARO</b>	<b>Annex 1</b>	<b>Others</b>
SUBPART A — Applicability and definitions					DEF	CR OPS
SUBPART B — General	GEN		GEN/AOC/MLR		DEF	
SUBPART C — Operator certification and supervision			GEN/AOC	GEN/OPS		
SUBPART D — Operational procedures	OP	MNPS/PBN /ETOPS/ RVSM	GEN/MLR	OPS	DEF	SERA AMC-20
SUBPART E — All weather operations	OP	LVO		OPS	DEF	SERA
SUBPART F — Performance general	POL.A				DEF	
SUBPART G — Performance Class A	POL.A					
SUBPART H — Performance Class B	POL.A					
SUBPART I — Performance Class C	POL.A					
SUBPART J — Mass and balance	POL.MAB				DEF	Part-M



# Transposition of EU-OPS

<b>EU-OPS</b>	<b>Part-CAT</b>	<b>Part-SPA</b>	<b>Part-ORO</b>	<b>Part-ARO</b>	<b>Annex 1</b>	<b>Others</b>
SUBPART K — Instruments and equipment	IDE.A.					Part-M AMC-20
SUBPART L — Communication and navigation equipment	IDE.A.					Part-M AMC-20
SUBPART M — Aeroplane maintenance						Part-M
SUBPART N — Flight crew			FC		DEF	Part-FCL
SUBPART O — Cabin crew			CC	AR.CC		Part-CC
SUBPART P — Manuals, logs and records	OP		GEN/MLR			
SUBPART Q — Flight and duty time limitations and rest requirements			FTL		DEF	OPS.055
SUBPART R — Transport of dangerous goods by air	GEN	DG		OPS	DEF	
SUBPART S — Security	GEN		SEC			



# Transposition of JAR-OPS 3

JAR-OPS 3	Part-CAT	Part-SPA	Part-ORO	Part-ARO	Annex 1	Others
SUBPART A — Applicability and definitions					DEF	CR OPS
SUBPART B — General	GEN	NVIS/HHO/HEMS	GEN/AOC/MLR		DEF	
SUBPART C — Operator certification and supervision			GEN/AOC	GEN/OPS		
SUBPART D — Operational procedures	OP	PBN	GEN/MLR	OPS	DEF	SERA AMC-20
SUBPART E — All weather operations	OP	LVO		OPS	DEF	SERA
SUBPART F — Performance general	POL.H				DEF	
SUBPART G — Performance Class 1	POL.H					
SUBPART H — Performance Class 2	POL.H					
SUBPART I — Performance Class 3	POL.H					
SUBPART J — Mass and balance	POL.MAB				DEF	



# Transposition of JAR-OPS 3

JAR-OPS 3	Part-CAT	Part-SPA	Part-ORO	Part-ARO	Annex 1	Others
SUBPART K — Instruments and equipment	IDE.H.					
SUBPART L — Communication and navigation equipment	IDE.H.					
SUBPART M — Helicopter maintenance						Part-M
SUBPART N — Flight crew			FC		DEF	Part-FCL
SUBPART O — Crew members other than flight crew			TC			
SUBPART P — Manuals, logs and records	OP		GEN/MLR			
SUBPART Q — Flight and duty time limitations and rest requirements			FTL		DEF	
SUBPART R — Transport of dangerous goods by air	GEN	DG		OPS	DEF	
SUBPART S — Security	GEN		SEC			



# Cross reference table

## Cross reference tables:

- Comparison EASA OPS with JAR-OPS 3 and EU-OPS
- Difference statements
- Status: version 02 was published before end of 2012
- [http://easa.europa.eu/flightstandards/doc/Cross%20reference%20table\\_version02.xlsx](http://easa.europa.eu/flightstandards/doc/Cross%20reference%20table_version02.xlsx)

Sec #	European rule IR/AMC/GM	European rule reference	European rule title	EU-OPS/JAR-OPS3 IR/ACJ/AMC/IEM	EU-OPS rule reference	JAR-OPS3 rule reference	EU-OPS/JAR-OPS3 rule title	Difference to EU-OPS Classification	Difference to EU-OPS Description	Difference to JAR-OPS3 Classification	Difference to JAR-OPS3 Description
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	-	3.005(f) - Appendix 1, (a)(1)	Operations for small helicopters (VFR day only)	-	-	Amended	The definition in EASA OPS is more specific. Small helicopters (as defined in JAR-OPS 1) are treated as non-complex helicopters (in the sense of the Basic Regulation).
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.037(a)4.	-	Accident prevention and flight safety programme	No change	Definition for 'flight data monitoring' extracted from EU-OPS rule	-	-
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.1150(a)1, 4 - 6, 15	3.1150(a)(1), (3), (4), (15)	Terminology	No change	-	No change	-
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.165(a)	3.165(a)	Leasing	Amended	The terms are aligned with Art. 2 of Reg. (EC) No 1008/2008	Amended	The terms are aligned with Art. 2 of Reg. (EC) No 1008/2008
1	IR	Annex I	Definitions for terms used in Annexes II to VII	ACJ	1.345 2.a, 2.g, 2.k	-	Ice and other contaminants	Amended	Anti-icing and 'de-icing' refer to aircraft, not only aeroplanes. 'Hold-over time' aligns with ICAO Doc 9640, 2nd ed..	New	Definitions from EU-OPS refer to aircraft, not aeroplanes and therefore apply to helicopters too.
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.430 - Appendix 1 (f)1.(i), (ii)	3.430 - Appendix 1, (d)(1)	Precision approach — Category II and other than Standard Category II operations	No change	-	Amended	The scope of OTS CAT II has been extended to helicopter operations.
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.430 - Appendix 1 (New), (b)(3)	-	Aerodrome operating minima	Amended	Approach procedure with vertical guidance: does not provide for the authority to approve lower minima [Placed in main Annex I with Opinion 1/2012]	-	-
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.430 - Appendix 1 (New), (b)(1)	-	Aerodrome operating minima	Amended	CAT I approach operation: GNSS using SBAS is included	-	-



# “Cover Regulation” Air operations

- Article 1 Subject matter and scope
- Article 2 Definitions
- Article 3 Oversight capabilities
- Article 4 Ramp inspections
- Article 5 Air operations
- Article 6 Derogations
- Article 7 Air operator certificates
- Article 8 Flight time limitations
- Article 9 Minimum equipment lists
- Article 10 Entry into force





# “Cover Regulation” Air operations

## ➤ **Scope (Art. 1) (OPS Phase I)**

- CAT operations with
  - aeroplanes, helicopters



## ➤ Excluded for the time being are:

- operations with airships, tilt-rotor aircraft, tethered balloons and remotely piloted aircraft
- operations by design or production organisations related to the introduction or modification of aircraft types
- A-to-A operations with performance class B aeroplanes and non-complex helicopters



# “Cover Regulation” Air operations

## ➤ **Definitions (Art. 2) : CAT & commercial operation**

- Commercial air transport (CAT) operation (Reg. 965/2008)
  - Aircraft operation to transport passengers, cargo or mail for remuneration or other valuable consideration.
- Commercial operation (Basic Regulation 216/2008)
  - Any operation of an aircraft, in return for remuneration or other valuable consideration, which is available to the public or, when not made available to the public, which is performed under a contract between an operator and a **customer**, where the **latter** has **no control over the operator**.



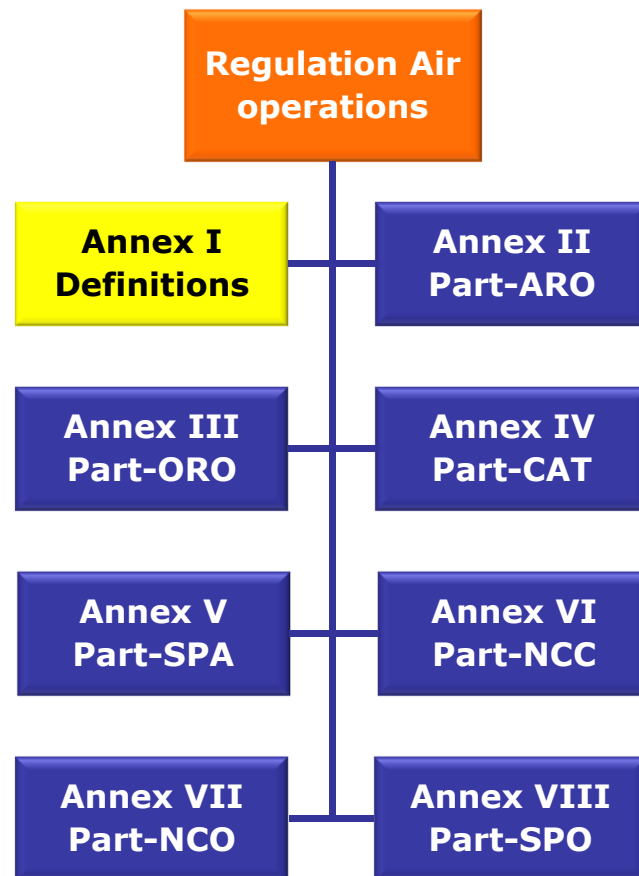
# “Cover Regulation” Air operations

## ➤ **Derogations (Art. 6)**

- Specific Annex II aircraft when used in CAT operations.
- Member States may continue to require a specific approval and additional requirements for helicopter offshore operations.
- Single engine IMC operations with aeroplanes may continue to be operated in accordance with the conditions contained in exemptions accepted under EU-OPS.
- Helicopter operations to public interest sites may continue outside performance class 1 and under conditions defined by the MS.



# Annex I: Definitions

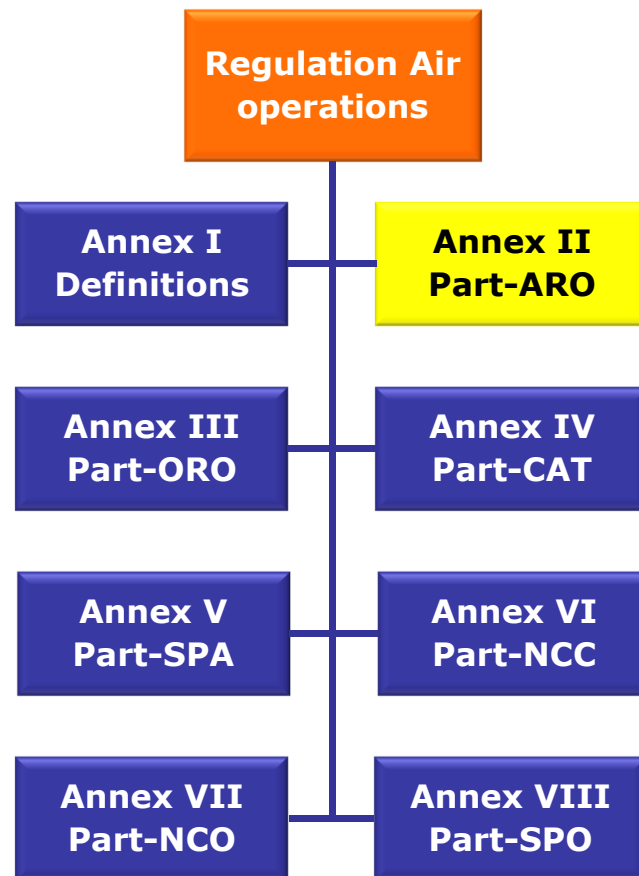


## Applicability:

- » operators and
- » competent authorities



## Annex II: Part-ARO

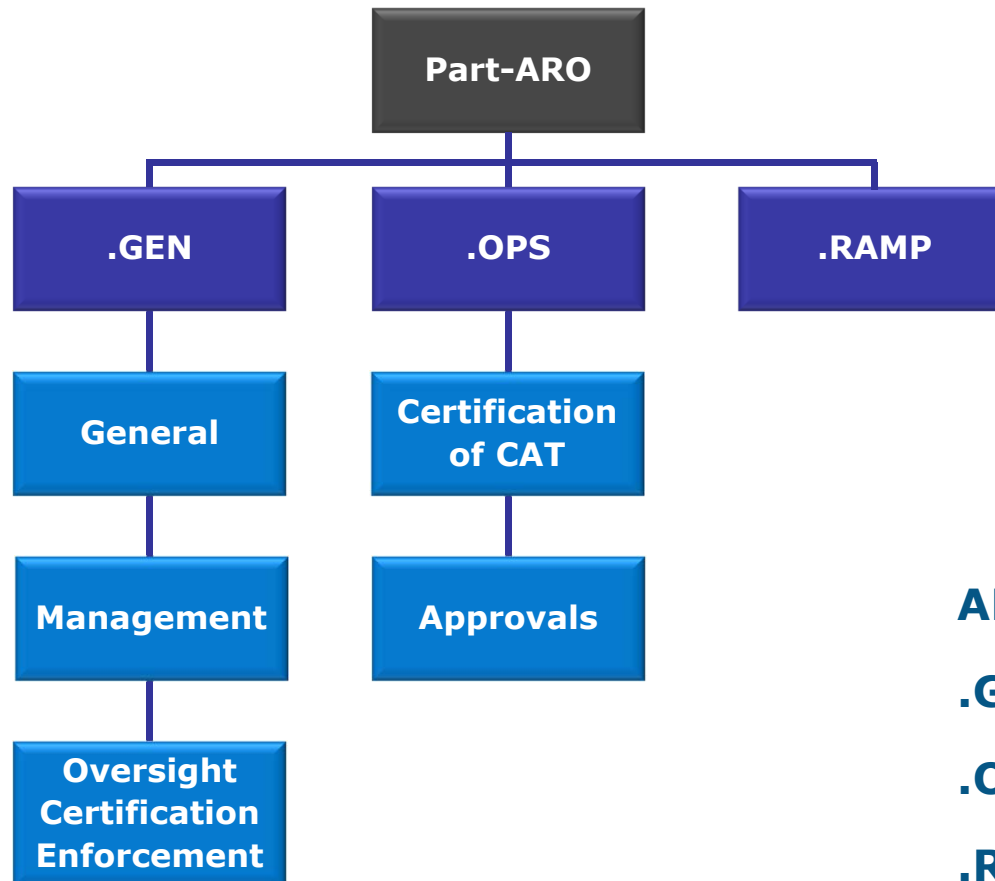


### Applicability:

- Authority requirements for air operations for National aviation authorities



## Annex II: Part-ARO



**ARO** – Authority requirements

**.GEN** General requirements

**.OPS** Air operations

**.RAMP** Ramp inspections



# ARO requirements

## ▪ **ARO.GEN**

### General

- AltMOC process (ORO.GEN.120)

### Management

- Management system / Changes to MS
- Qualified entities

### Oversight

- Oversight process / Programme
- Operator notified changes
- Findings / Corrective actions

## ▪ **ARO.OPS**

### CAT

- Lease agreement

### Approvals

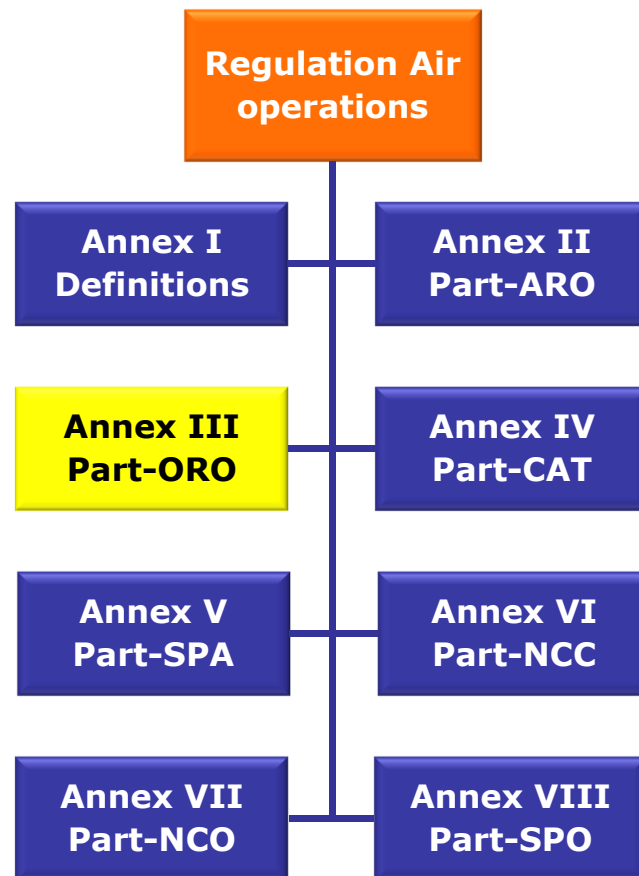
- Specific approvals

## ▪ **ARO.RAMP**

- Prioritisation criteria
- Training
- Procedure



# Annex III: Part-ORO



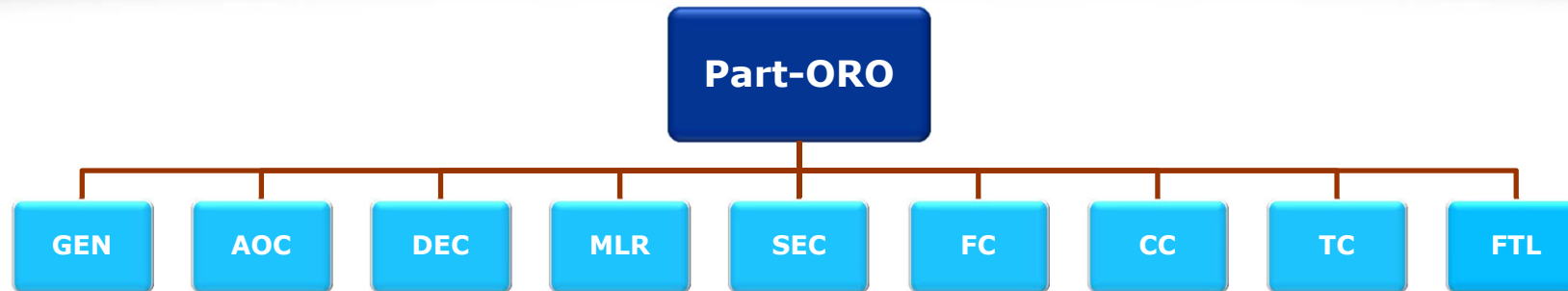
## Applicability:

- » Organisation requirements for;
  - » CAT operators
  - » NCC operators
  - » SPO operators
    - » Commercial operations
    - » Non-commercial operations with complex aircraft





## Annex III: Part-ORO



**.GEN** – general requirements

**.AOC** – air operator certification

**.DEC** – declaration (added soon)

**.MLR** – manual, logs, records

**.SEC** – security

**.FC** – flight crew

**.CC** – cabin crew

**.TC** – technical crew

**.FTL** – flight time limitations  
(added soon)



# ORO requirements

## Main elements of Part-ORO:

### ▪ **ORO.GEN**

- AltMOC process (ORO.GEN.120)
- Management system (ORO.GEN.200)

### ▪ **ORO.AOC**

- Leasing provisions (ORO.AOC.110)
- Non-revenue flight of AOC holders (ORO.AOC.125)

### ▪ **ORO.MLR**

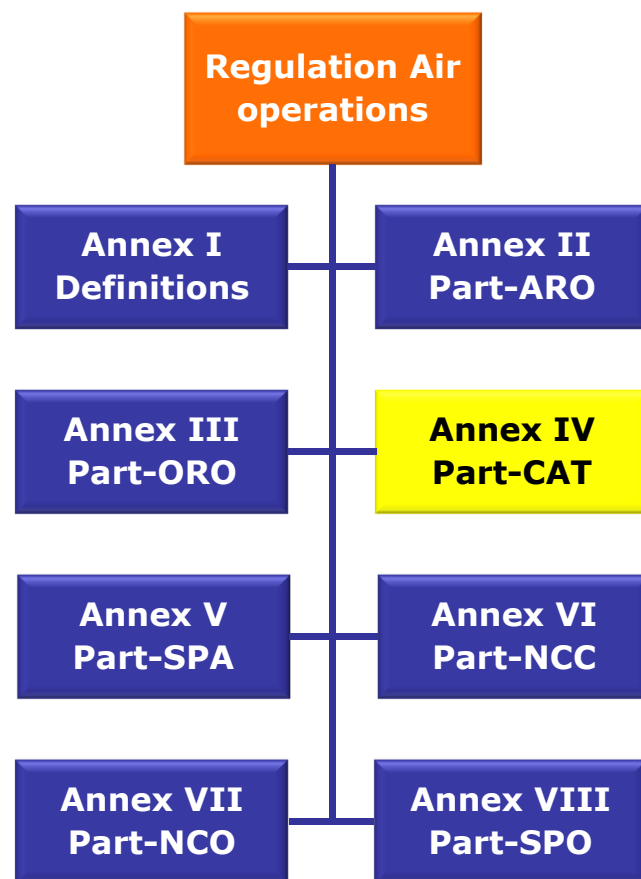
- Operations manual
- MEL (approved by the CA)

### ▪ **ORO.FC / ORO.CC**

- Flight crew training requirements (based on ICAO Annex 6 Part II)
- Single pilot operations (ORO.FC.202)
- Cabin crew training requirements (including CC attestation)



# Annex IV: Part-CAT

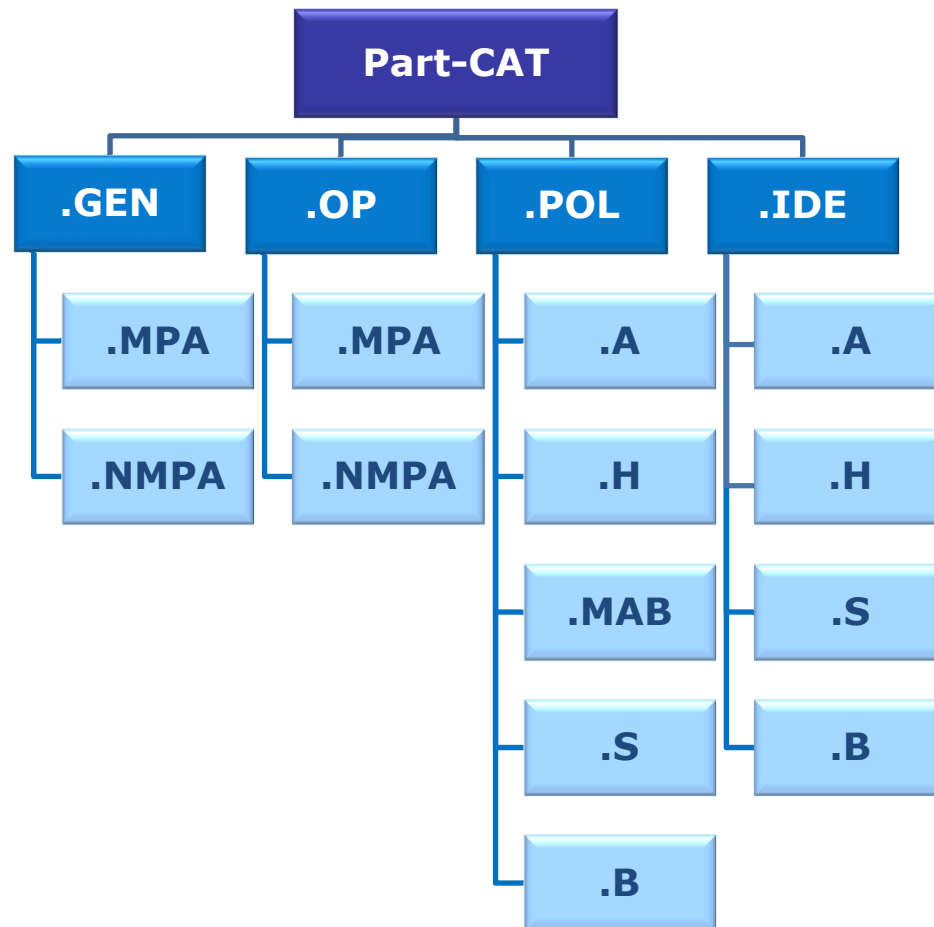


## Applicability:

- Technical rules for CAT operations with;
  - Complex aircraft:  
A, H
  - Non-complex aircraft:  
A, H (S, B added soon)
  - A-to-A operations with A, H  
(added soon)



## Annex IV: Part-CAT



**CAT** – commercial air transport

**.GEN** – general requirements

**.OP** – operational procedures

**.POL** – performance and operating limitations

**.IDE** – instruments, data, equipment

**.MPA** – motor-powered aircraft

**.NMPA** – non-motor-powered aircraft

**.A, .H, .S, .B** - aeroplanes, helicopters, sailplanes, balloons

**.MAB** – mass and balance



# Annex IV: Part-CAT

## ➤ **Key issues**

- Part contains technical rules for all CAT operations.
- Part structured into aircraft-specific sections/chapters.
- Part could be easily amended for other aircraft categories, e.g. tilt rotor aircraft, airships, remotely piloted aircraft systems.
- Rule text aligned with the content of;
  - EU-OPS and Section 1 of JAR-OPS 3,
  - section 2 material of JAR-OPS 1 and JAR-OPS 3.
- Improved balance between Implementing Rules and AMC/GM.
- EU-OPS/JAR-OPS 3 text has been given precedence over ICAO SARPs.



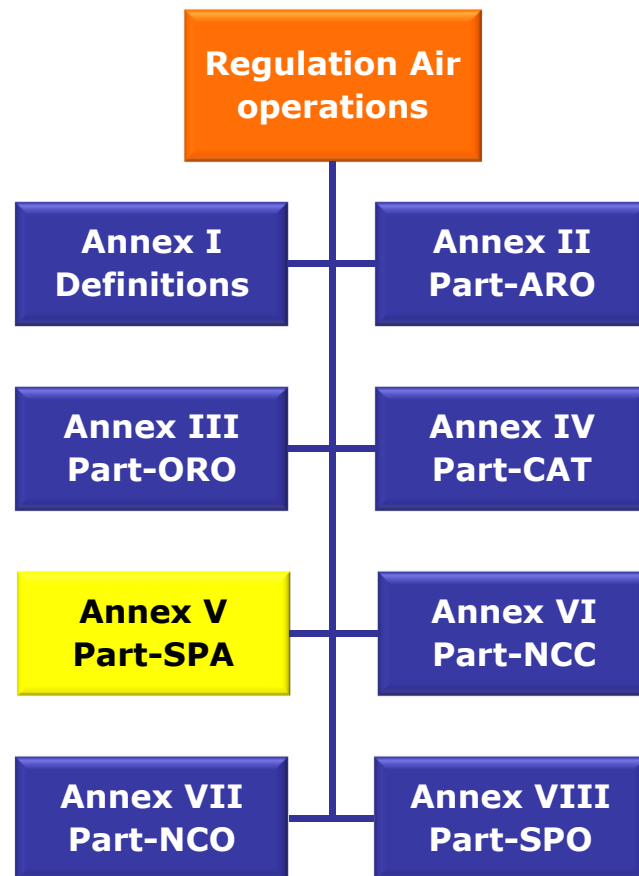
# Annex III: Part-CAT

## Introduced changes:

- CAT.GEN.MPA.100 Crew responsibilities
- CAT.IDE.A.195 Data link recording
- CAT.POL.H.420 Helicopter operations over a hostile environment located outside a congested area



# Annex V: Part-SPA

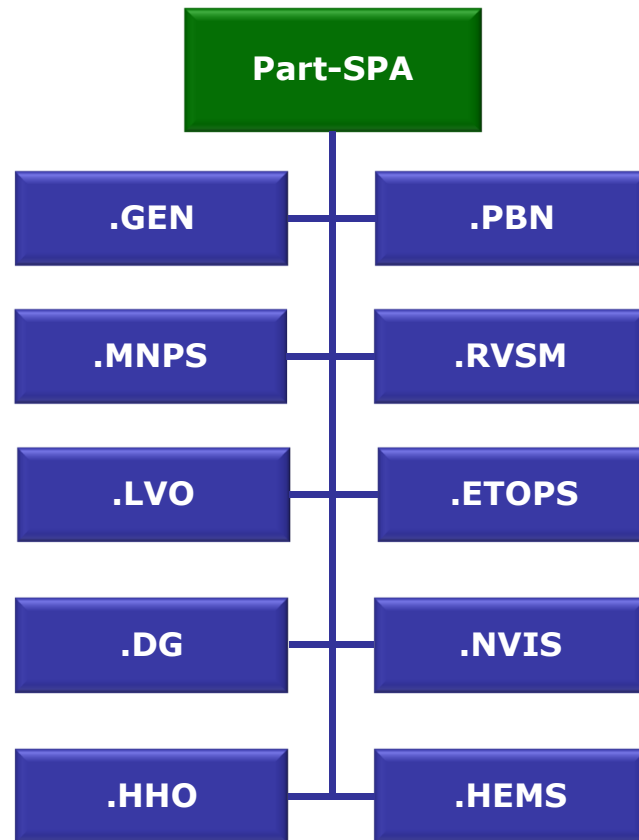


## Applicability:

- Operators which wish to conduct an operation requiring a specific approval.
- To be documented in;
  - OPSPECS for certified operators,
  - list of specific approvals for non-certified operators.



# Annex V: Part-SPA



- **.GEN** – general requirements.
- **.PBN** – performance based navigation
- **.MNPS** – minimum navigation performance specifications.
- **.RVSM** – reduced vertical separation minima.
- **.LVO** – low visibility operations.
- **.ETOPS** – extended range operations with two-engined aeroplanes.
- **.DG** – dangerous goods.
- **.NVIS** – night vision imaging systems.
- **.HHO** – helicopter hoist operations.
- **.HEMS** – helicopter emergency medical services.





# Annex V: Part-SPA

## **SPA.GEN.100 Competent authority**

### **For commercial operations;**

- » operator's principal place of business.

### **For non-commercial operations;**

- » place where the operator is established or residing,
- » when using an aircraft registered in a third country, the approvals for PBN, MNSP, RVSM may be issued by the third country State of Registry.



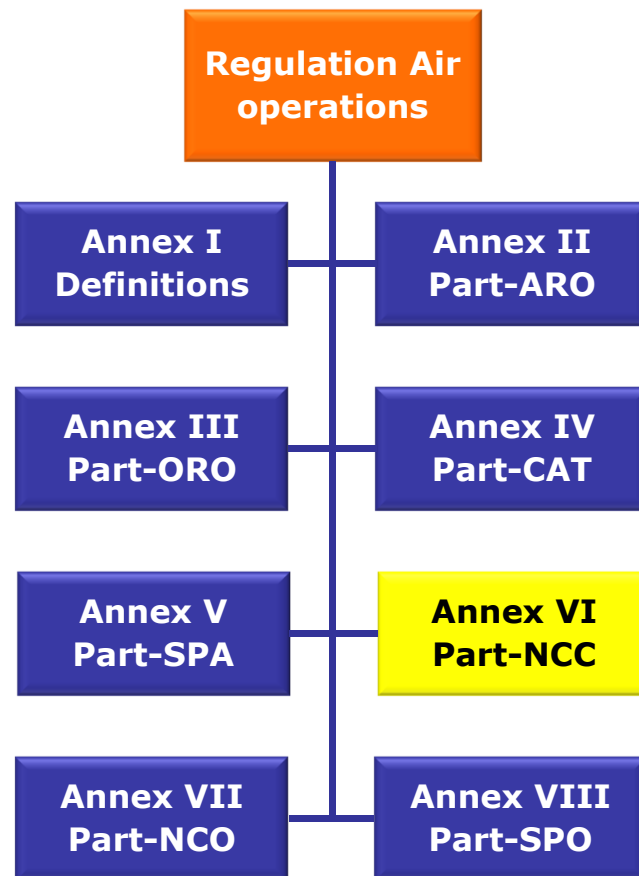
# Annex V: Part-SPA

## **SPA.GEN.110**

- **Documentation of specific approvals**
  - for commercial operations in the “operations specifications” (OPSPECS)
  - for non-commercial operations in the “list of specific approvals”
  
- **The corresponding authority requirements are specified in Part-ARO including the forms for**
  - OPSPECS and
  - list of specific approvals



# Annex VI: Part-NCC

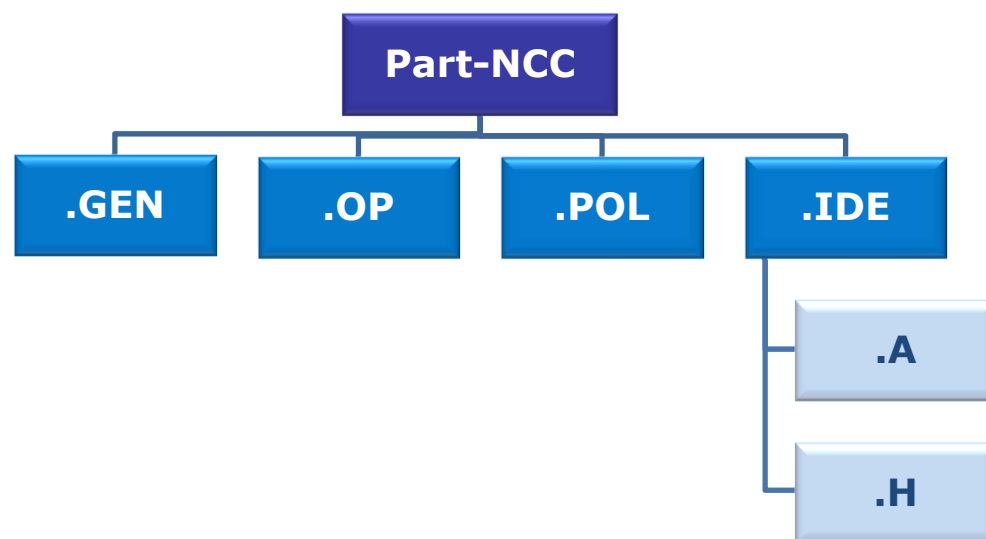


## Applicability:

- Technical rules for non-commercial operations of complex motor-powered aircraft;
  - complex aeroplanes,
  - complex helicopters.



## Annex VI: Part-NCC



**NCC** – non-commercial operations with complex motor-powered aircraft

**.GEN** – general requirements

**.OP** – operational procedures

**.POL** – performance and operating limitations

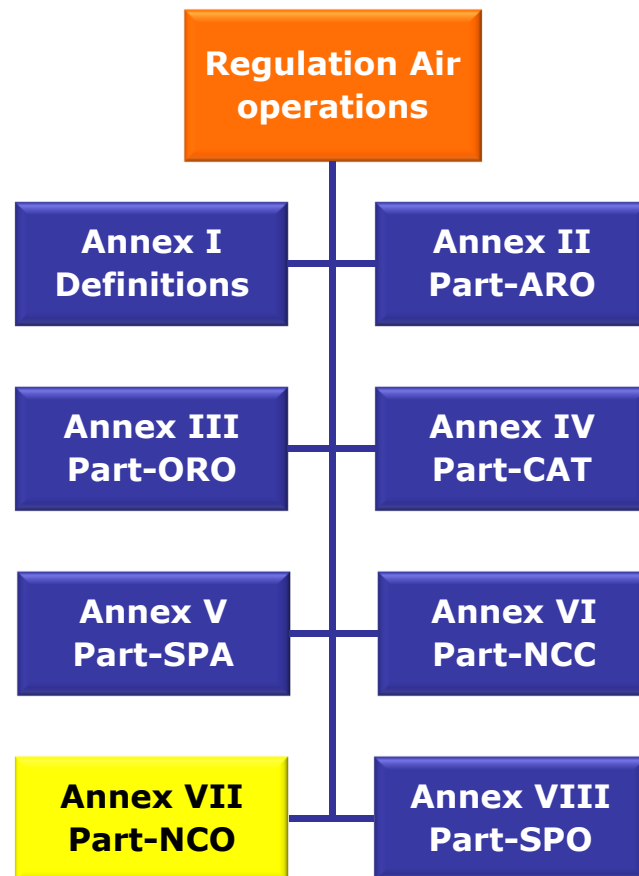
**.IDE** – instruments, data, equipment

**.A** - aeroplanes

**.H** - helicopters



# Annex VI: Part-NCO

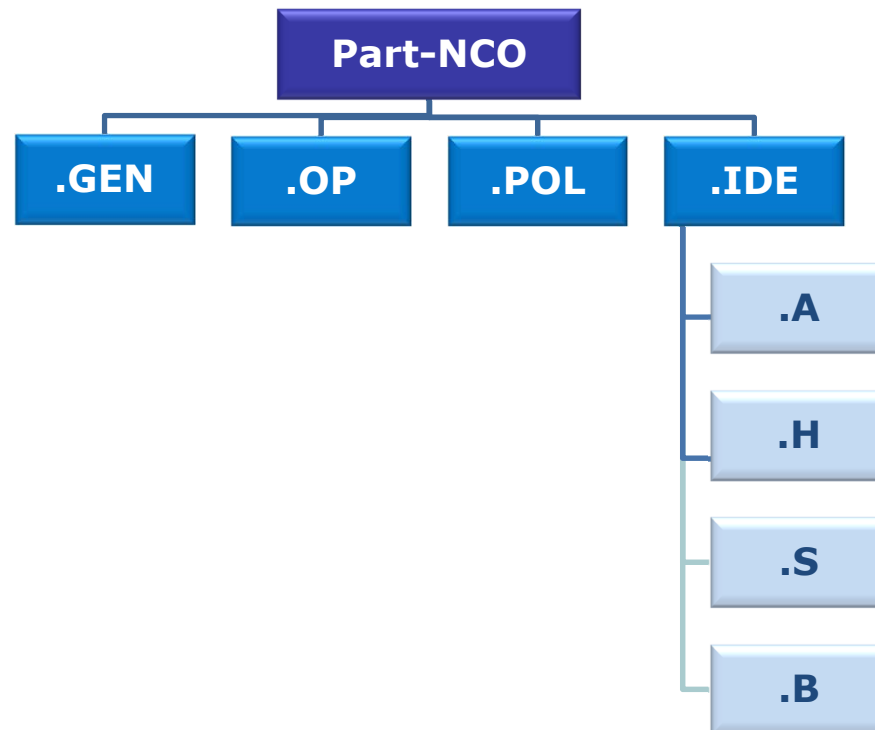


## Applicability:

- Technical rules for non-commercial operations of other-than-complex motor-powered aircraft:
  - Non-complex aeroplanes
  - Non-complex helicopters
  - Sailplanes
  - Balloons



## Annex VII: Part-NCO



**NCO** – non-commercial operations with other-than-complex motor-powered aircraft

**.GEN** – general requirements

**.OP** – operational procedures

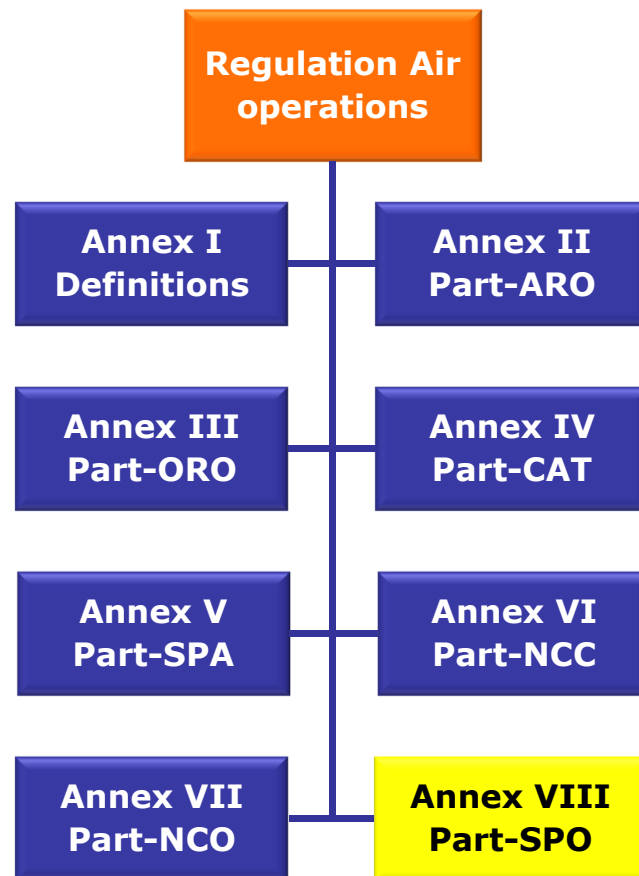
**.POL** – performance and operating limitations

**.IDE** – instruments, data, equipment

**.A, .H, .S, .B** - aeroplanes, helicopters, sailplanes, balloons



# Annex VIII: Part-SPO

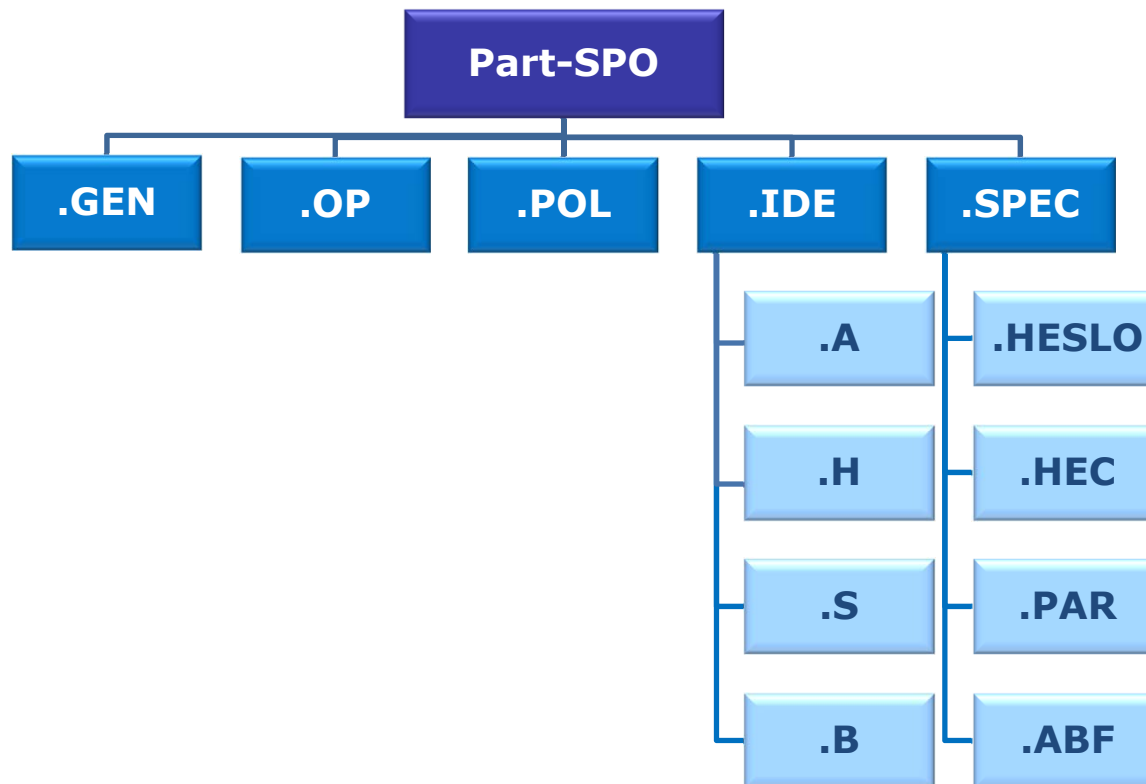


## Applicability:

- Technical rules for commercial and non-commercial specialised operations, e.g. aerial work:
  - Aeroplanes
  - Helicopters
  - Sailplanes
  - Balloons



## Annex VIII: Part-SPO



**SPO** – specialised operations – commercial and non-commercial, all type of aircraft

**.SPEC** – specific requirements

**.HESLO** – helicopter external sling load operations

**.HEC** – human external cargo operations

**.PAR** – parachute operations

**.ABF** – aerobatic flights





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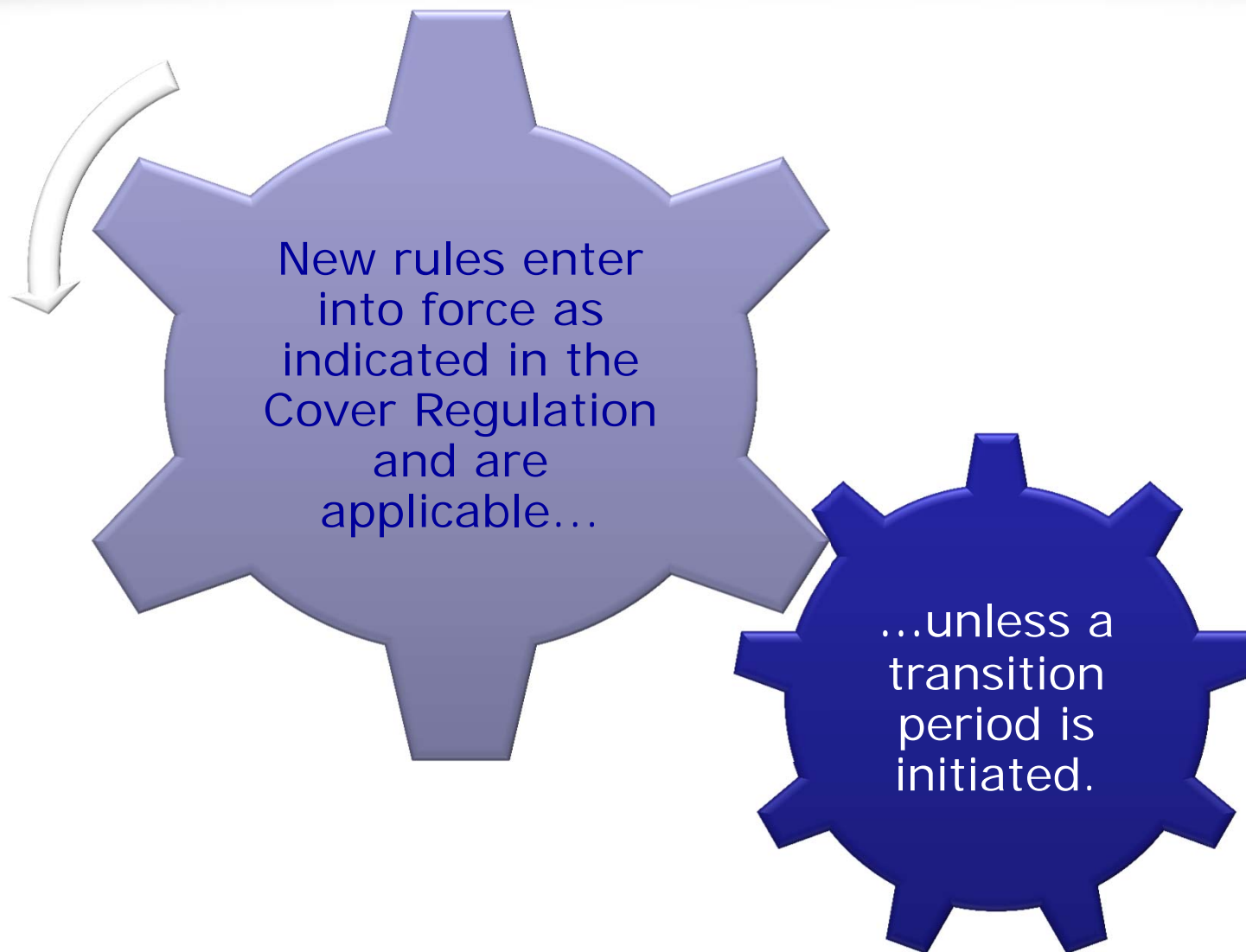
| **10<sup>TH</sup>** **ANNIVERSARY** |

- **Entry into force**
- **Transitioning**
- **Grandfathering**
- **Conversion of AOC**

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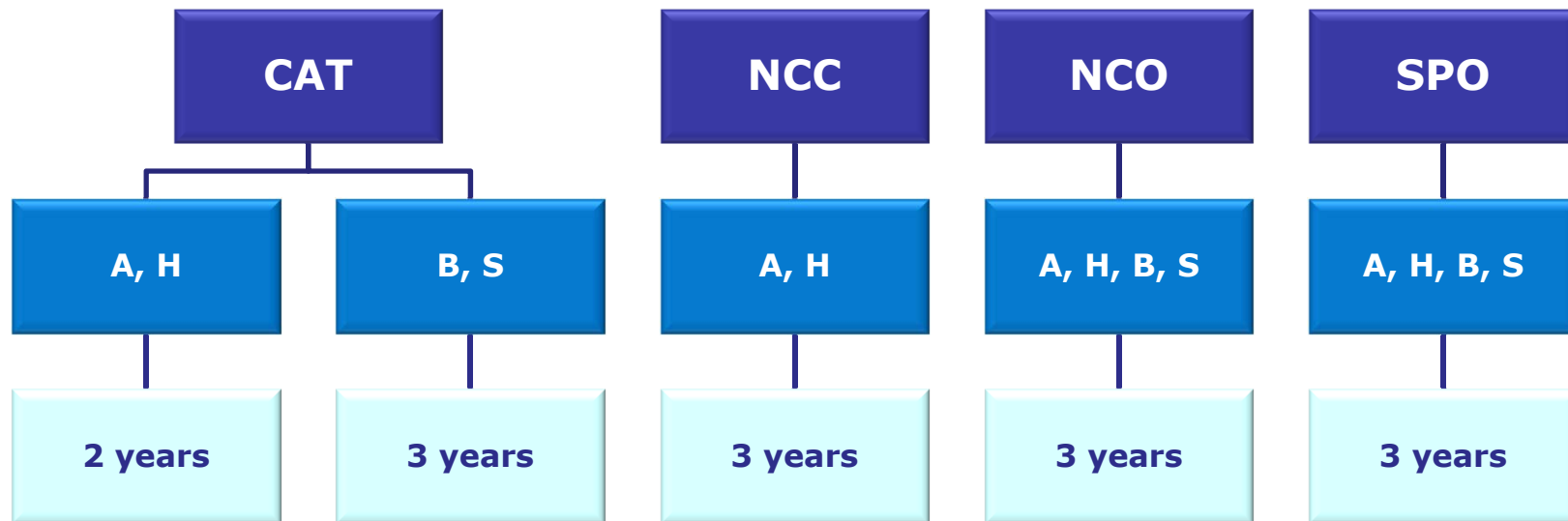
# Entry into force





# Transitioning

## Transition periods (opt outs)



### ➤ MS shall;

- inform EC and EASA within 2 months if opt-out is used,
- describe reasons, duration, implementation programme.



# Transitioning

## **Prior to applicability of Reg. 965/2012 (28 October 2014)**

- Competent authority
  - Adapt management procedures, inspector's handbooks, certification software, etc.
  - Prepare a conversion report for CAT(H) in consultation with EASA, describing how and when CAT(H) AOCs holders will move to full compliance with new rules.
- Operators
  - Adapt management systems, operational procedures, training programmes, manuals.

## **Around 6 months before the transition period elapses**

- Initial certification or AOC renewal to be based on new rules if likely not completed before end of opt-out period.



## **Grandfathering of EU-OPS AOC**

- Grandfathering.
  - AOC issued in accordance with EU-OPS are deemed to be compliant with the new regulation.
- Differences between EU-OPS and new rules.
  - During opt-out phase adaptation of operator's management system, training programmes, procedures and manuals.
- New AOC format.
  - To be issued when the operator is fully compliant.



# Conversion of AOC

## Conversion of JAR-OPS 3 (H) AOC

- MS to establish conversion report describing;
  - the national requirements on the basis of which the AOCs were issued,
  - the scope of privileges that were given to the operators,
  - the differences between the national requirements and the new rules,
  - how and when the operators will be required to ensure full compliance with new rules.
- New AOC.
  - To be issued when the operator is fully compliant.



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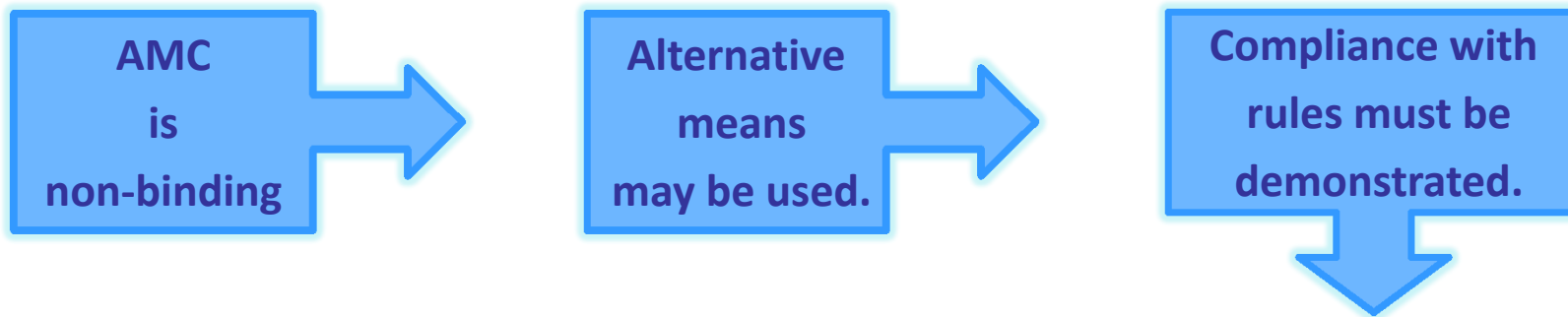
| 10<sup>TH</sup> ANNIVERSARY |

# Alternative means of compliance (AltMOC) – for CAT operations

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# AltMOC: Principles



Process must be established on the level of the operator, NAA and the Agency to ensure:

- No negative effect on safety
  - Transparency
  - Harmonisation



# AltMOC: Principles

- alternative means of compliance means (AltMOC)
  - ▶ those means that propose an alternative to an existing acceptable means of compliance or
  - ▶ those that propose new means to establish compliance with Regulation (EC) No 216/2008 and its Implementing Rules for which no associated AMC have been adopted by the Agency



# AltMOC: The operator process

- When a CAT operator wishes to use an AltMOC to the AMC adopted by the Agency it shall provide the competent authority with a full description of the AltMOC
- The description shall include
  - ▶ any revisions to manuals or
  - ▶ procedures that may be relevant, as well as
  - ▶ an assessment demonstrating that the Implementing Rules are met
- The operator may implement these AltMOC subject to prior approval by the competent authority and upon receipt of the approval notification



# AltMOC: The NAA process

NAA needs a system in place to evaluate the compliance of AltMOC with existing rules:

- for AltMOC proposed by organisations
- for AltMOC proposed by the NAA itself



# AltMOC: The NAA process

NAA evaluates proposed AltMOC through:

- Analysis of documentation provided and, if needed, by inspection.

When AltMOC complies with the rule, NAA shall:

- Notify applicant and change certificate, if needed
- Notify the Agency of the content, including copies of relevant documents
- Inform other MS



# AltMOC: The NAA process

NAA proposes  
AltMOC itself

- Make it available to all organisations and persons under its oversight
- Notifies the Agency;
  - Full description of the AltMOC, including any revisions to procedures
- Demonstrate compliance with rules



# AltMOC: The Agency process

## Standardisation

- Risk based approach

## Rulemaking

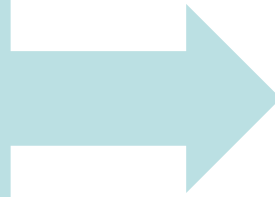
- Recurrent task
- Simplified procedure





### **Agency receives notification from NAA**

Information  
included in  
database.



Quarterly review by  
focal points in S & R



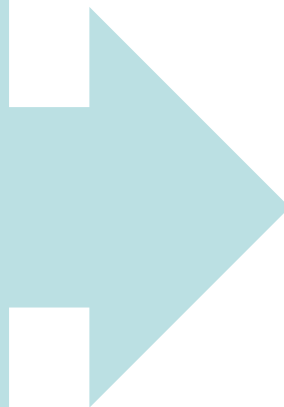
- Identification of significant AltMOC, requiring further assessment
- Statistical report to S & R management



# AltMOC: The Agency process

Significant  
AltMOC reviewed  
by internal  
experts:

- Compliance with rules
- Regularity of procedure



Input to  
Standardisation:  
for use during  
Standardisation visits

Input to Rulemaking:  
for possible new  
rulemaking task



# AltMOC: references

## ➤ References

- Definition defined in Annex I – Definitions
- ARO.GEN.120 Means of compliance
- ARO.GEN.220 Record-keeping
- ORO.GEN.120 Means of compliance



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# Flight Time Limitations

**Opinion 04/2012 on flight and duty time limitations  
and rest requirements (FTL) for commercial air  
transport (CAT) with aeroplanes and other FTL  
rulemaking tasks**

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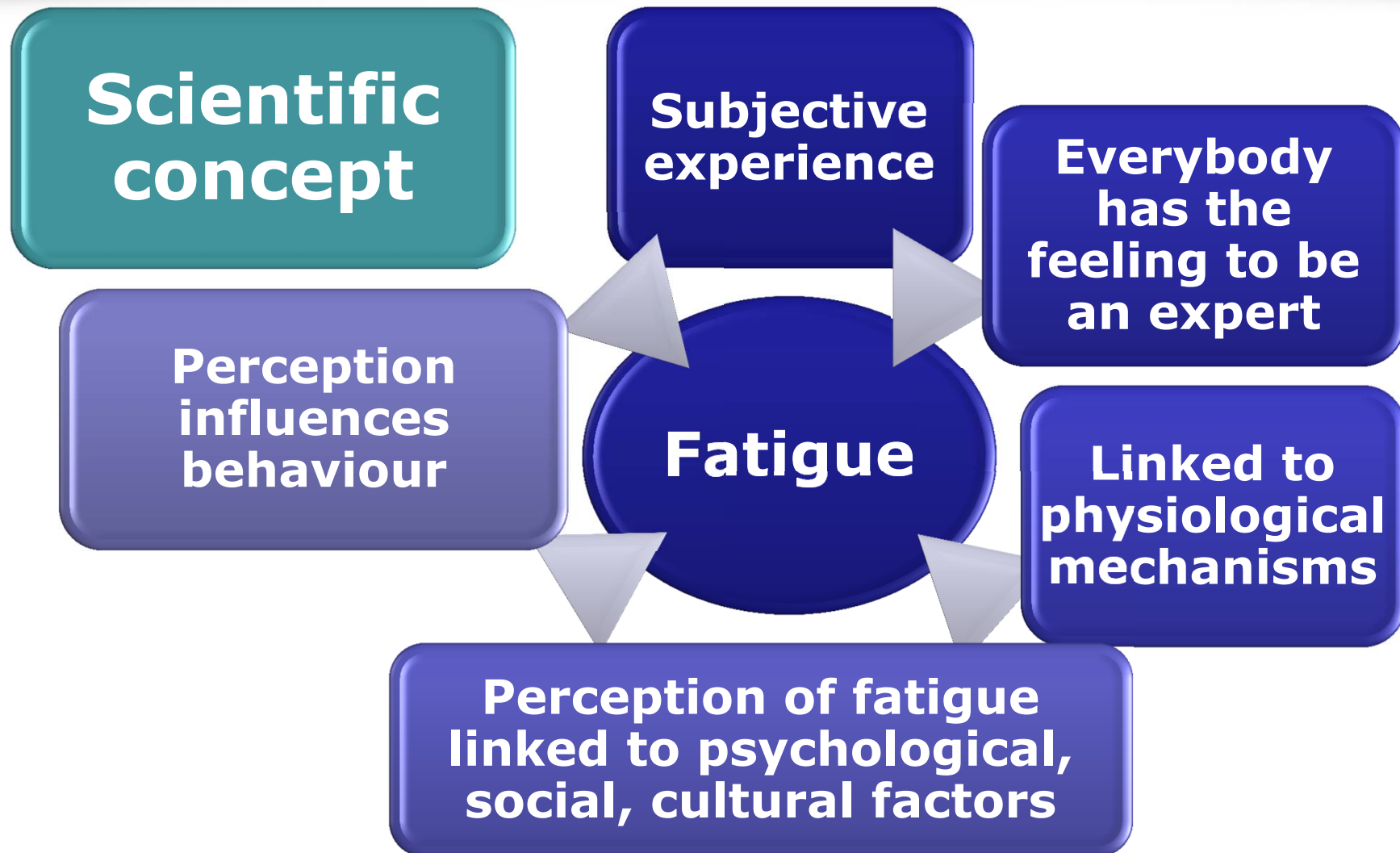


***“My mind clicks on and off...I try letting one eyelid close at a time while I prop the other open with my will. But the effort's too much. Sleep is winning. My whole body argues dully that nothing, nothing life can attain, is quite so desirable as sleep.”***

– Charles Lindbergh, describing the fatigue that struck him nine hours into his 33-hour solo Atlantic crossing.

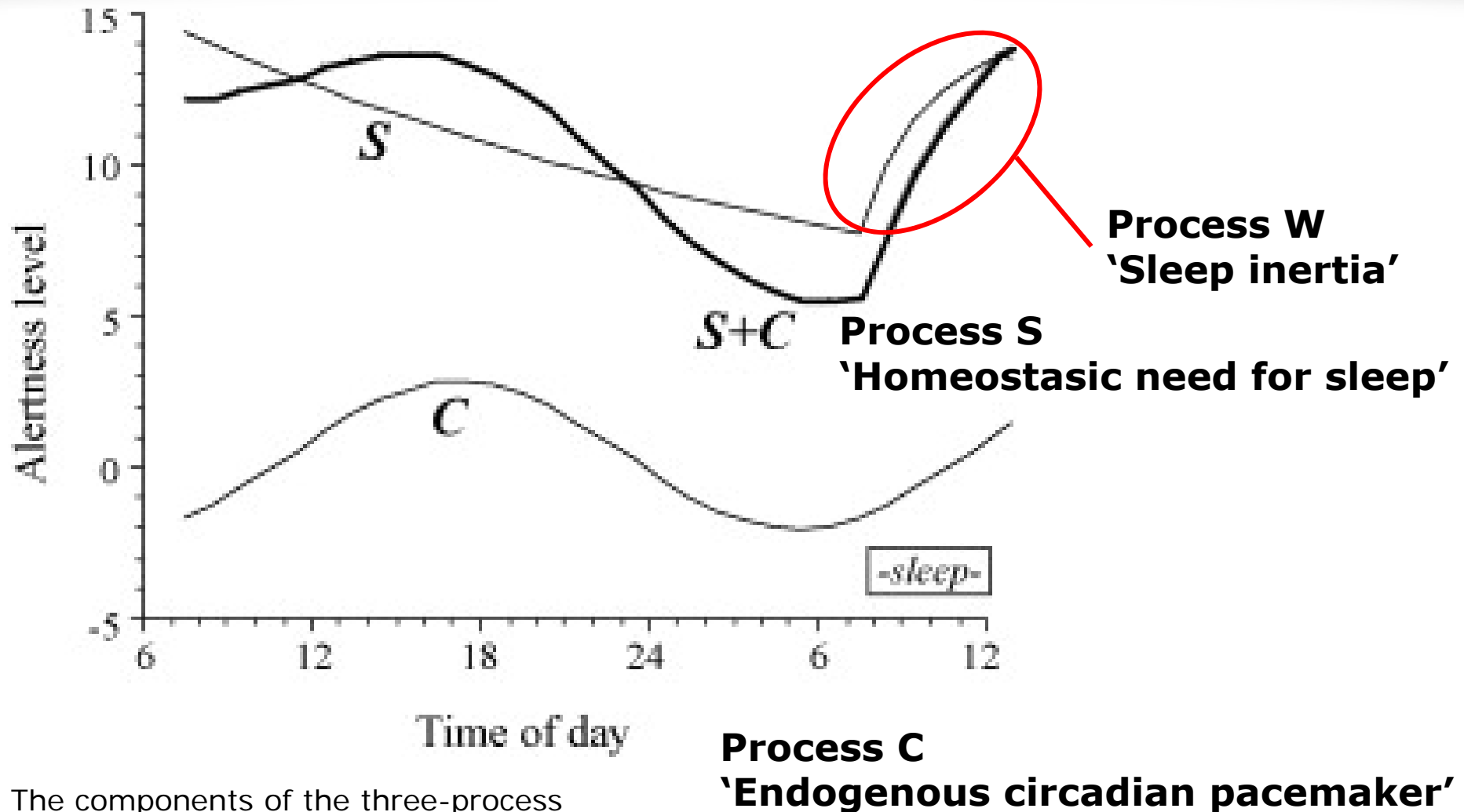


# From intuition to science





# Alertness components

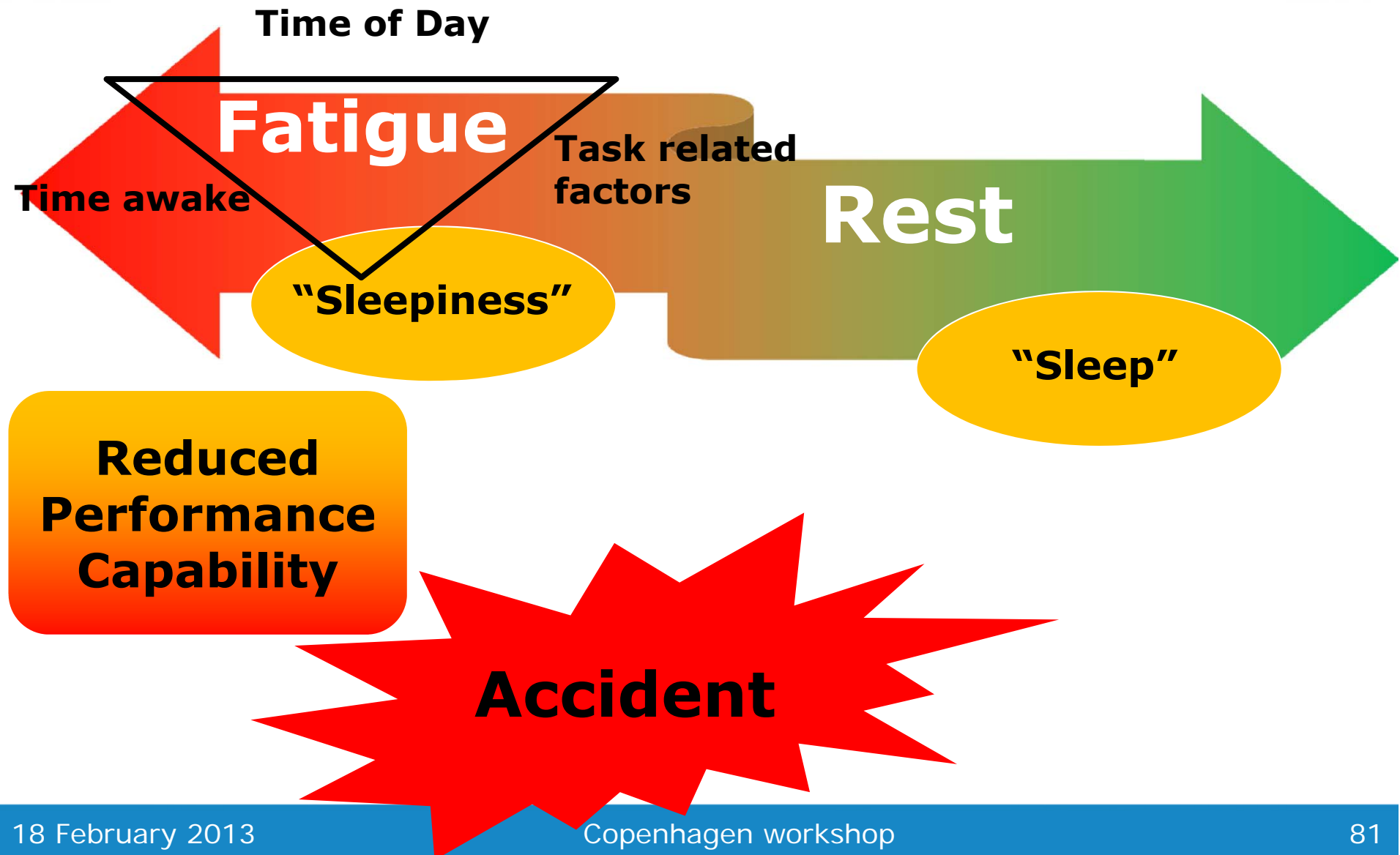


The components of the three-process  
Model of alertness, adapted from  
Åkerstedt et al, 2008



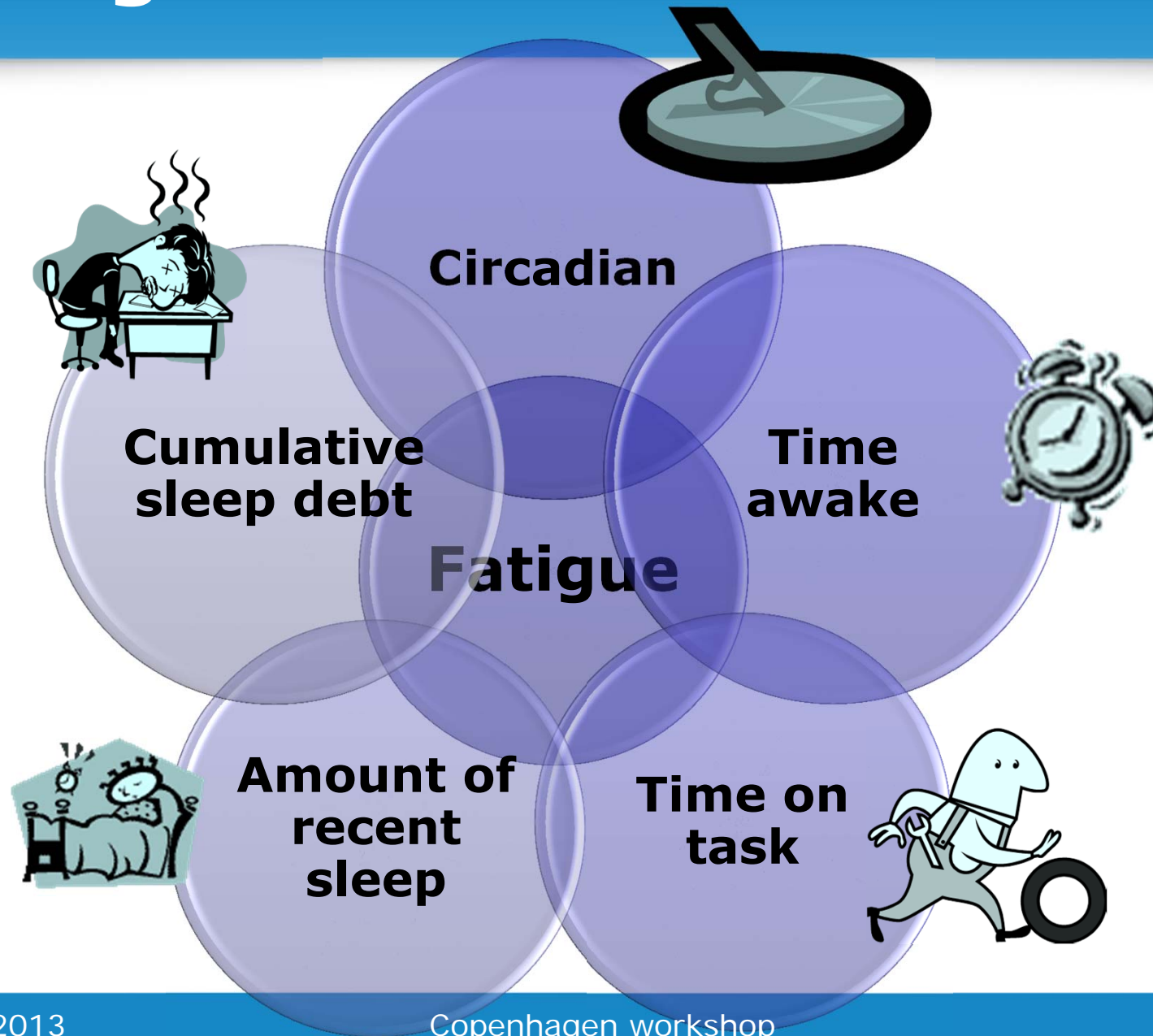


# Fatigue is a biological drive for recuperative rest





# Fatigue Factors



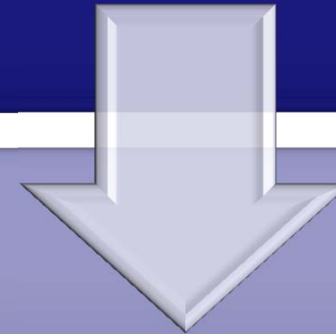


# FTL – Background

**Present**

## **Regulation 1899/2006 (EU-OPS)**

- **Recital 7: Non-regression clause**
- **Recital 11: MS may apply more stringent FTL**
- **Art. 8(4): Areas not covered by Subpart Q**



## **Regulation 216/2008 (Basic Regulation) Art. 22(2):**

- **EASA shall issue CS and IR including substantive Subpart Q provisions**

**Future**



# FTL – Article 8(4) Provisions

OPS 1.1105 point 6 – extended FDP (**split duty**);

OPS 1.1110 point 1.3 rest compensating **time zone differences**;

OPS 1.1110 point 1.4.1 –**reduced rest** arrangements;

OPS 1.1115 – extension of flight duty period due to **in-flight rest**; and

OPS 1.1125 point 2.1 – other forms of **standby**.



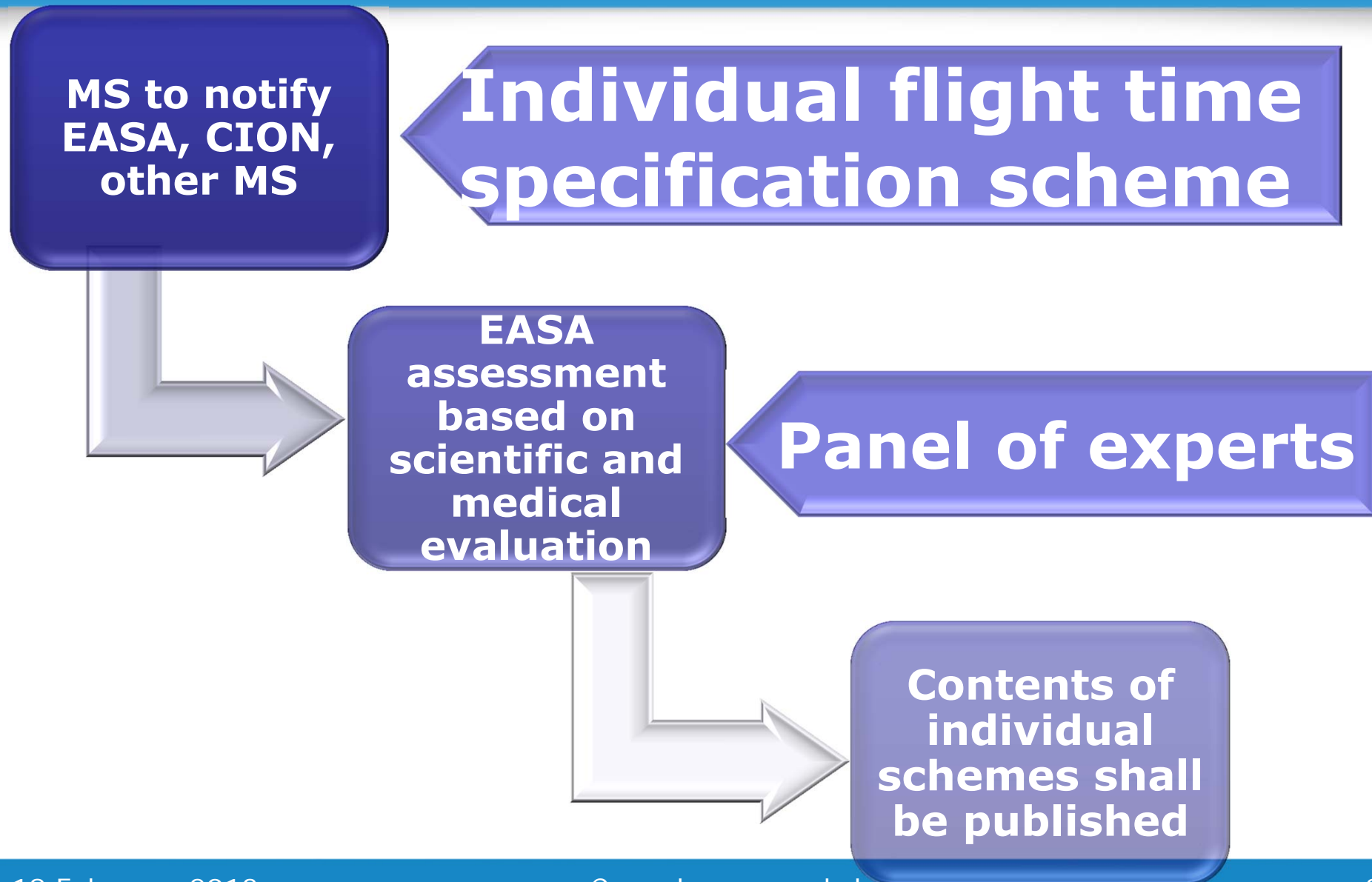
# FTL – Rule Structure

**Core FTL  
elements in  
IR, based on  
Subpart Q**

**Art. 8  
provisions in  
CS, based on  
MS & industry  
best practices**



# FTL – Flexibility Art. 22(2)





# Science in FTL



**...regulations shall be based upon scientific principles and knowledge,...**



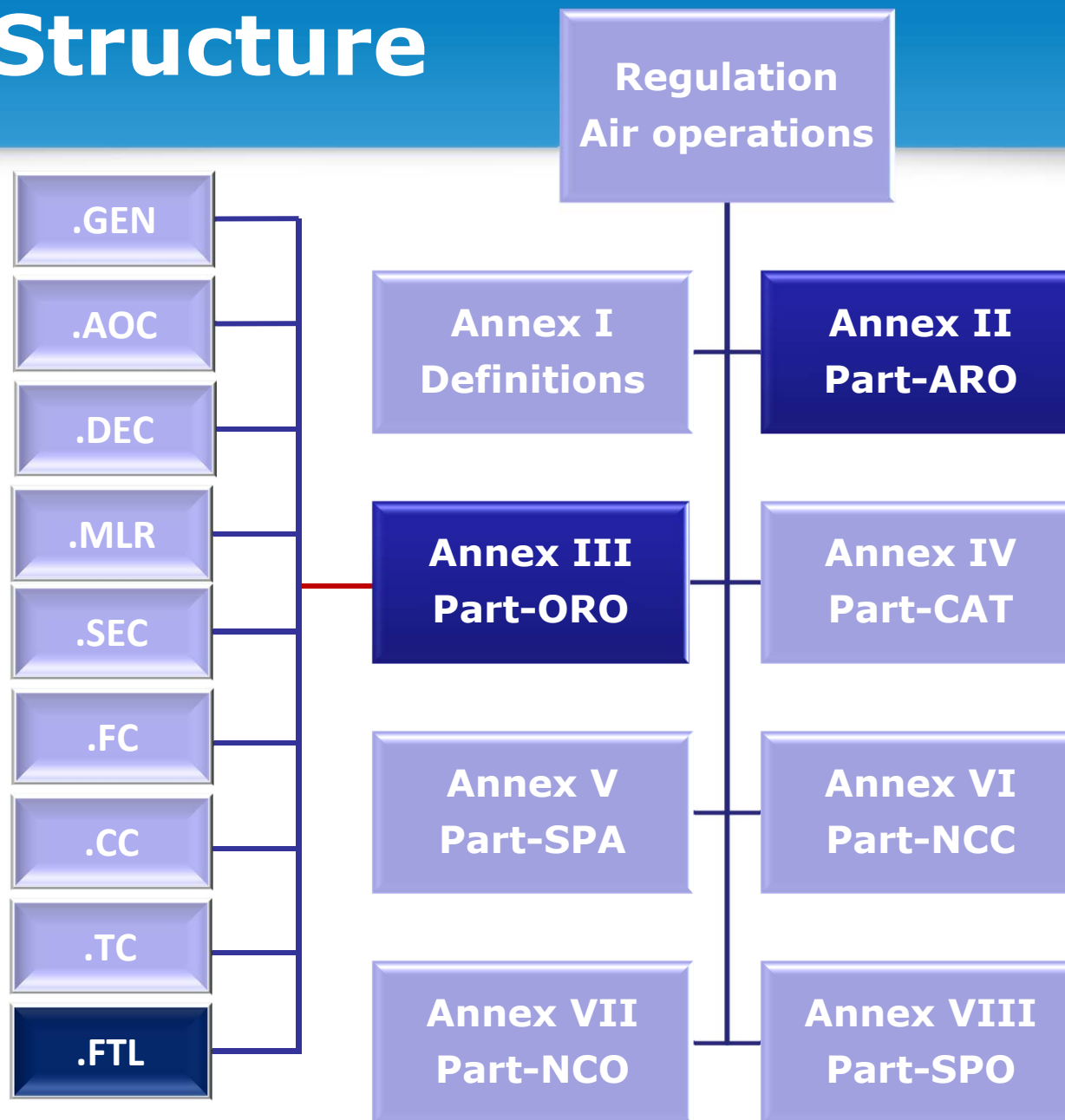
**...rules based on scientific knowledge and best practices...**



**...taking into account the latest scientific and technical evidence...**



# FTL - Structure

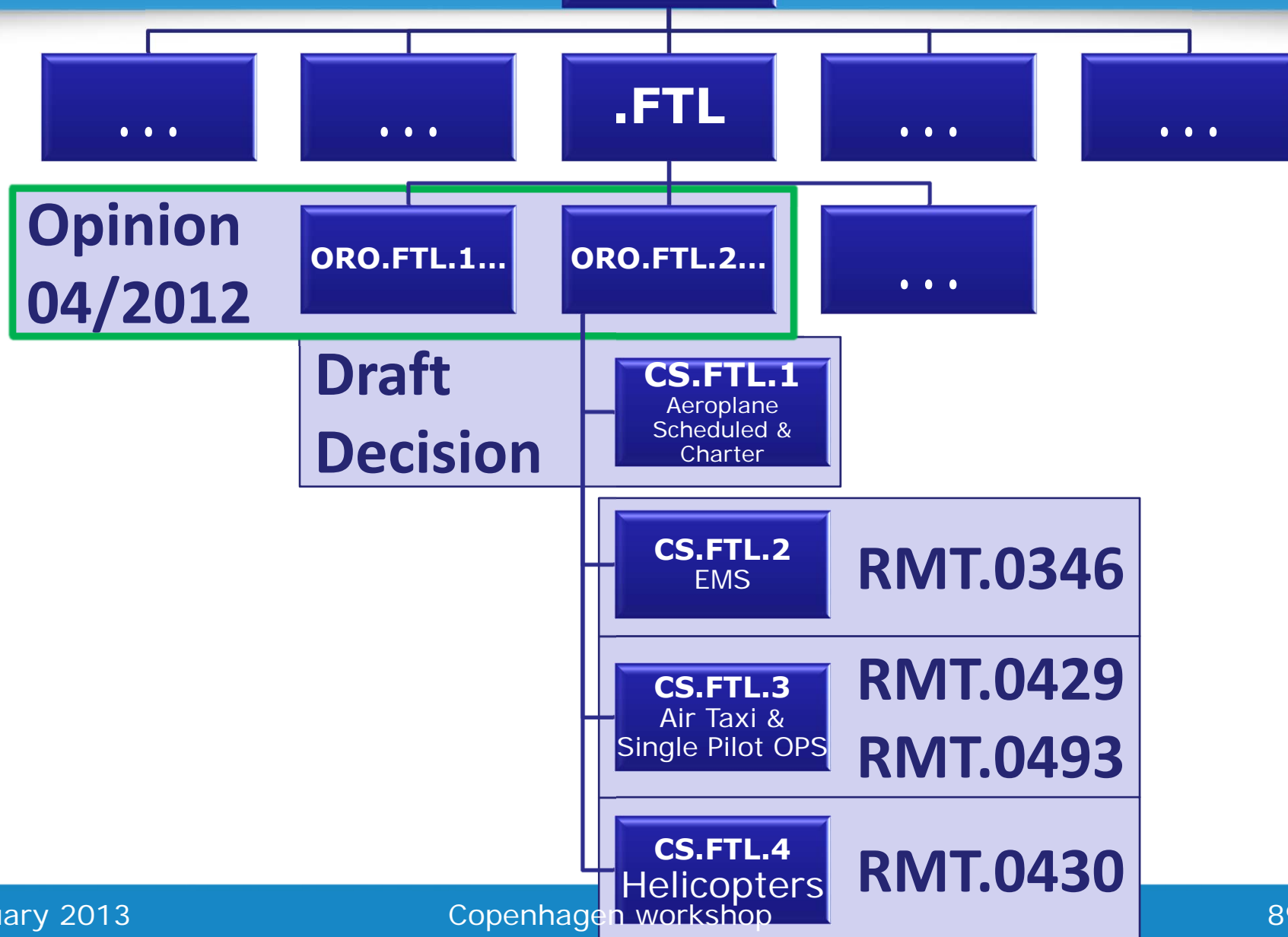






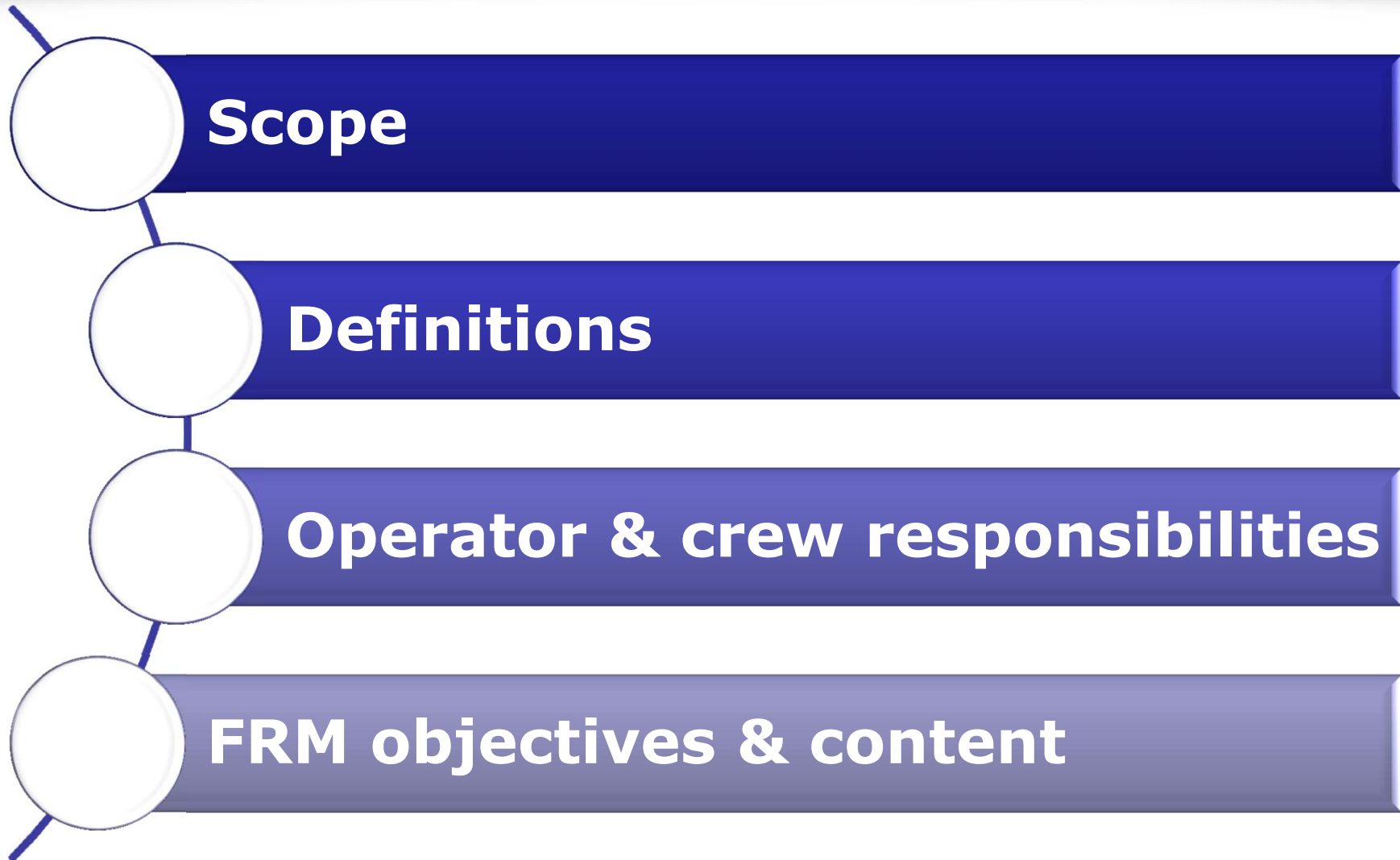
# Link with other FTL Tasks

## Annex III Part-ORO





# FTL – Section 1





# Technical requirements

## Section 1 – Definitions (1)

### Acclimatised

- ✓ **Reference time for 48 hours after departure**
- ✓ **Afterwards 'un-known state of acclimatisation'**
- ✓ **Acclimatisation depends on how many TZ have been crossed and the time elapsed since reporting**

### Reference time

- ✓ **To allow for operations based on local time for crew members with home bases in neighbouring time zones**



# Technical requirements

## Section 1 – Definitions (2)

### **Accommodation**

- ✓ **Used for airport standby and split duty**

### **Suitable accommodation**

- ✓ **Used for split duty and back-to-back**

### **Rest facility**

- ✓ **Criteria & objectives for in-flight rest facilities**



# Technical requirements

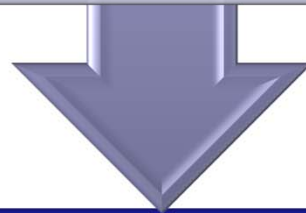
## Section 1 - FRM

### Fatigue risk management

**Compliant with  
ICAO**

**Integrated in  
management  
system**

**Mandatory only  
for certain  
provisions**



### Fatigue management training

**In Section 2**

**Mandatory for CAT  
operators**



# FTL – Section 2

**Home base**

**FDP**

**Without extensions**

**Different reporting times CC**

**Conditions for FDP extensions**

**Cumulative limits**

**Standby**

**Rest periods**

**Nutrition**

**Record keeping**



# Technical requirements

## Section 2 – Home base

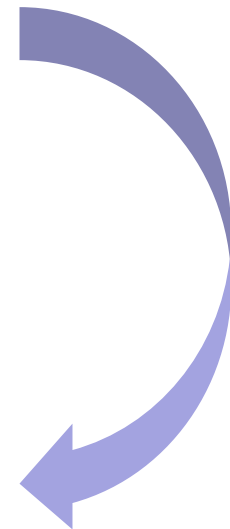
### Obligation to assign a home base

**Single  
airport  
location**

**High degree  
of  
permanence**

**Additional  
rest for  
change of  
home base**

**IR**



**CS**



# Technical requirements

## Section 2 – FDP

Start of FDP	1–2 Sectors	3 Sectors	4 Sectors	5 Sectors	6 Sectors	7 Sectors	8 Sectors	9 Sectors	10 Sectors
0600–1329	<b>13:00</b>	12:30	12:00	11:30	11:00	10:30	10:00	09:30	09:00
1330–1359	12:45	12:15	11:45	11:15	10:45	10:15	09:45	09:15	09:00
1400–1429	12:30	12:00	11:30	11:00	10:30	10:00	09:30	09:00	09:00
1430–1459	12:15	11:45	11:15	10:45	10:15	09:45	09:15	09:00	09:00
1500–1529	12:00	11:30	11:00	10:30	10:00	09:30	09:00	09:00	09:00
1530–1559	11:45	11:15	10:45	10:15	09:45	09:15	09:00	09:00	09:00
1600–1629	11:30	11:00	10:30	10:00	09:30	09:00	09:00	09:00	09:00
1630–1659	11:15	10:45	10:15	09:45	09:15	09:00	09:00	09:00	09:00
1700–0459	<b>11:00</b>	10:30	10:00	09:30	<b>09:00</b>	09:00	09:00	09:00	09:00
0500–0514	12:00	11:30	11:00	10:30	10:00	09:30	09:00	09:00	09:00
0515–0529	12:15	11:45	11:15	10:45	10:15	09:45	09:15	09:00	09:00
0530–0544	12:30	12:00	11:30	11:00	10:30	10:00	09:30	09:00	09:00
0545–0559	12:45	12:15	11:45	11:15	10:45	10:15	09:45	09:15	09:00

Consecutive night duties are limited to 4 sectors  
 'Night duties' of  $\geq 10$  hours should be *managed*







# Technical requirements

## Section 2 – FDP extensions

CS

Start of FDP	1–2 sectors	3 sectors	4 sectors	5 sectors
0600–0614	Not allowed	Not allowed	Not allowed	Not allowed
0615–0629	13:15	12:45	12:15	11:45
0630–0644	13:30	13:00	12:30	12:00
0645–0659	13:45	13:15	12:45	12:15
0700–1329	14:00	13:30	13:00	12:30
1330–1359	13:45	13:15	12:45	12:15
1400–1429	13:30	13:00	12:30	12:00
1430–1459	13:15	12:45	12:15	Not allowed
1500–1529	13:00	12:30	12:00	Not allowed
1530–1559	12:45	12:15	11:45	Not allowed
1600–1629	12:30	12:00	11:30	Not allowed
1630–1659	12:15	Not allowed	Not allowed	Not allowed
1700–1729	12:00	Not allowed	Not allowed	Not allowed
1730–1759	11:45	Not allowed	Not allowed	Not allowed
1800–1829	11:30	Not allowed	Not allowed	Not allowed
1830–1859	11:15	Not allowed	Not allowed	Not allowed
1900–0359	Not allowed	Not allowed	Not allowed	Not allowed
0400–0414	Not allowed	Not allowed	Not allowed	Not allowed
0415–0429	Not allowed	Not allowed	Not allowed	Not allowed
0430–0444	Not allowed	Not allowed	Not allowed	Not allowed
0445–0459	Not allowed	Not allowed	Not allowed	Not allowed
0500–0514	Not allowed	Not allowed	Not allowed	Not allowed
0515–0529	Not allowed	Not allowed	Not allowed	Not allowed
0530–0544	Not allowed	Not allowed	Not allowed	Not allowed
0545–0559	Not allowed	Not allowed	Not allowed	Not allowed

Up to 2 times per 7 days

Additional rest:

Pre- and post-flight + 2 hours

Post-flight + 4 hours

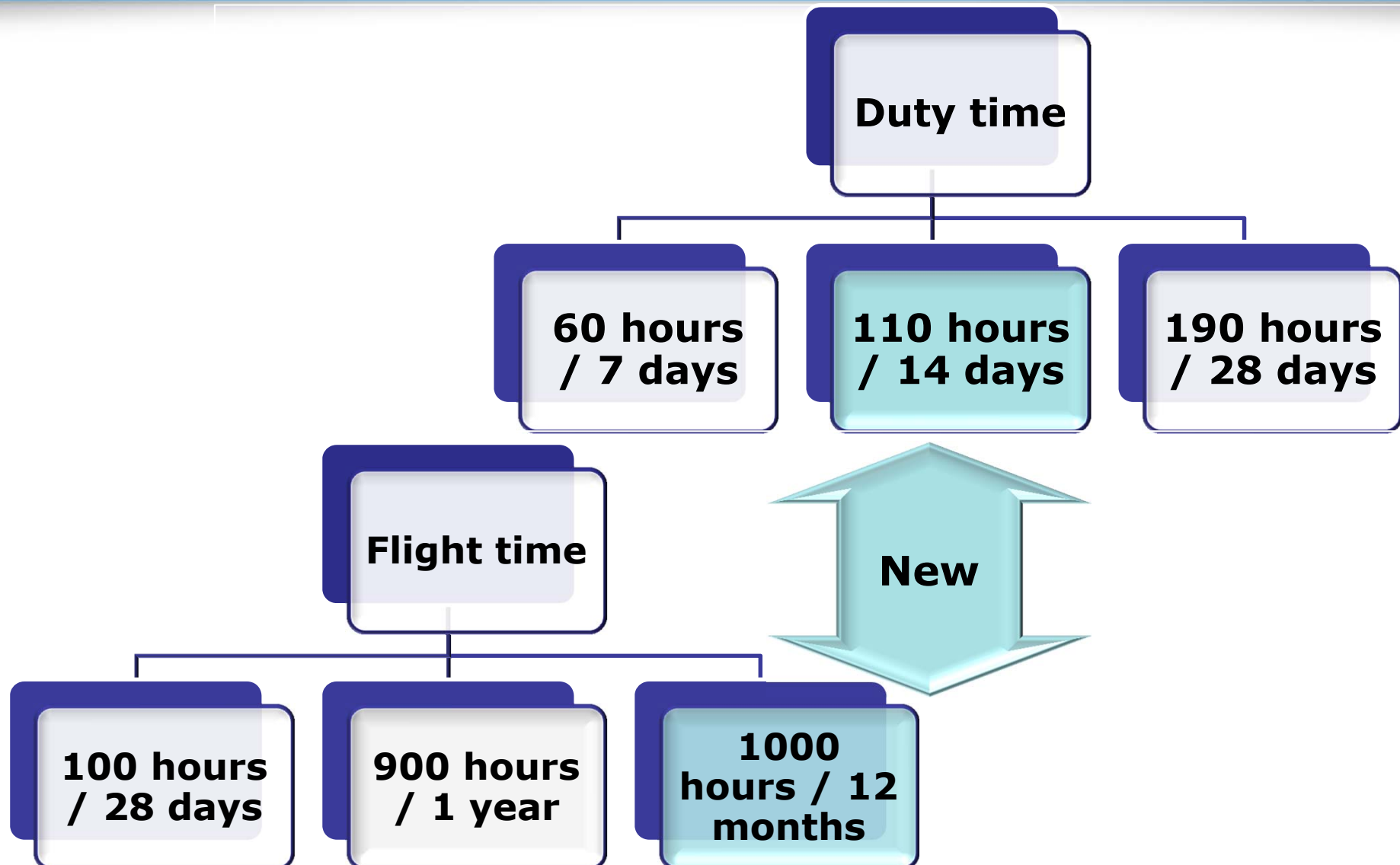
Planned in advance

Not to be combined with:

In-flight rest

Split duty

# Technical requirements Section 2 – Cumulative limits





# Technical requirements Section 2 – Rest

## Minimum rest

**Home base**  
**12h or FDP**

**IR**

**Away**  
**10h or FDP**

## Reduced rest

**12h home base – 10h away**

**CS**

**IR**

## Recurrent recovery rest

**36h incl. 2 local nights – 48h 2x/month**

**TZC**

**CS**

**Disruptive  
schedules**

**CS**

**Home base  
change**



# Technical requirements

## Section 2 – Split duty

**Split duty**  
**not after reduced rest**  
**break counts as FDP**

**IR**

**break  $\geq$  3h**

**FDP increase**  
**50% of break**

**(suitable)**  
**accommodation**

**CS**

**CS**

**Not combined with in-flight rest**

# Technical requirements

## Section 2 – Standby

**Standby & airport duty  
rostered  
start & end defined & notified**

**IR**

**CS**

**Other standby**  
**25% duty**  
**followed by rest**  
**16h max**  
**after 8h ↘ FDP**  
**response time**

**Airport duty**  
**100% FDP**

**IR**

**Accommodation**  
**Airport standby**  
**100% duty**  
**16h cap**  
**after 4h ↘ FDP**  
**followed by rest**

**IR**

**CS**

**Reserve - 10h notification**  
**- not duty**  
**- not during rest**



# Subpart Q vs. Opinion 04/2012

Item	Q	EASA FTL	
<b>Cumulative limits</b>	60h duty/7 days 190h duty/28 days  100h block/28 days 900h block/calendar year	60h duty/7 days <b>110h duty/14 days</b> 190h duty/28 days 100h flight/28 days 900h flight/calendar year <b>1000h flight/12 month</b> ♻	<b>++</b>
<b>FDP</b>	13h day / 11h night -30min 3 <sup>rd</sup> – 6 <sup>th</sup> sector Extension night 11:45h	13h day / 11h night -30min 3 <sup>rd</sup> sector – <b>9h</b> <b>No extension night</b>	<b>=</b> <b>+</b> <b>+</b>
<b>Rest</b>	12h or duty home base 10h or duty away 36h 2 local nights  2 <sup>nd</sup> local night exception	12h or duty home base 10h or duty away 36h 2 local nights <b>48h 2x/months</b> <b>No 2<sup>nd</sup> local night exception</b> <b>Disruptive schedules rest</b>	<b>=</b> <b>=</b> <b>=</b> <b>+</b> <b>+</b> <b>+</b>



# Key safety improvements (1)

## General

- Harmonised standards

## Home base

- Single airport location
- Additional rest upon change of home base

## Cumulative fatigue

- Improved extended recovery rest
- Compensation for disruptive schedules



# Key safety improvements (2)

## FDP

- Extended time window for night restrictions
- No extensions during night hours
- In-flight rest extension based on high quality of in-flight rest facilities

## Standby

- 'Cap' on combined duration of airport standby and FDP
- Other standby limited to 16 hours, FDP reduced after 8 hours
- Minimum rest after standby, 25% count as duty

## FRM

- Mandatory fatigue management training
- Operator responsibilities



<b>Publication dates</b>	<b>TOR</b>	<b>NPA</b>	<b>CRD</b>	<b>Opinion (or Decision if only CS)</b>	<b>Decision after Opinion</b>
A & H EMS RMT.0346	2012 18 April	2013 Quarter 3	2014 Quarter 1	2015 Quarter 1	One year later
<b>A Air Taxi RMT.0429</b>	<b>2012 21 August</b>	<b>2014 Quarter 1</b>	<b>2014 Quarter 3</b>	<b>2015 Quarter 3</b>	<b>One year later</b>
H Other CAT ops by H RMT.0430	2013 Quarter 3	2015 Quarter 1	2015 Quarter 3	2016 Quarter 3	One year later



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# Thank you for your attention

Comments and questions  
welcome!

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# On-going rulemaking tasks

- Volcanic ash
- Helicopter Offshore Operations
- EFB

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# ICAO International Volcanic Ash Task Force

- **Started in 2010 and ended in June 2012 after 4 meetings**
- **4 sub-groups were created**
  - Science SG
  - Airworthiness SG
  - Air Traffic Management SG
  - Volcano watch co-ordination SG
- **Tasks:**
  - Review global aviation standards related to VA
  - Improve guidance material when necessary/possible
- **Final report was issued with 24 recommendations**
  - Available on ICAO website
  - [http://www.icao.int/safety/meteorology/ivatf/Meeting MetaData/IVATF-4.Final Report.pdf](http://www.icao.int/safety/meteorology/ivatf/Meeting%20MetaData/IVATF-4.Final%20Report.pdf)



# ICAO IVATF main outcome

- **VA SRA methodology further refined (Resulted in Doc 9974, subset of SMS).**
- **VA detection improvement (radars, LIDAR, satellite,...).**
- **Crisis management and communication.**
- **Update of Doc 9691 (Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds).**
- **Not achieved:**
  - Definition of visible ash.
  - Full standardisation of VAAC products.
  - Definition of tolerance of products to VA.



# Rulemaking Strategy

3 stages approach (3 rulemaking tasks):

1. Operational SRA guidance.
2. Information to Operators. TCH to support operators' SRAs by assessing the susceptibility of their products to volcanic clouds.
3. Airworthiness limitations for engine VA ingestion.





# Task 1: Operational SRA guidance

## RMT.0460 for operational guidance:

Guidance Material to develop SRA for flight operations with known or forecasted volcanic cloud contamination.

## Objectives:

Based on ICAO DOC 9974;

Develop AMC and GM to Part-ORO/ORA;

- to provide guidance on how to develop VA SRA, and AMC and GM to Part ARO/ARA;
- to provide guidance on how to assess VA SRA.







# Management system requirements

## **ORO.GEN.200 Management system**

(a) The operator shall establish, implement and maintain a management system that includes:

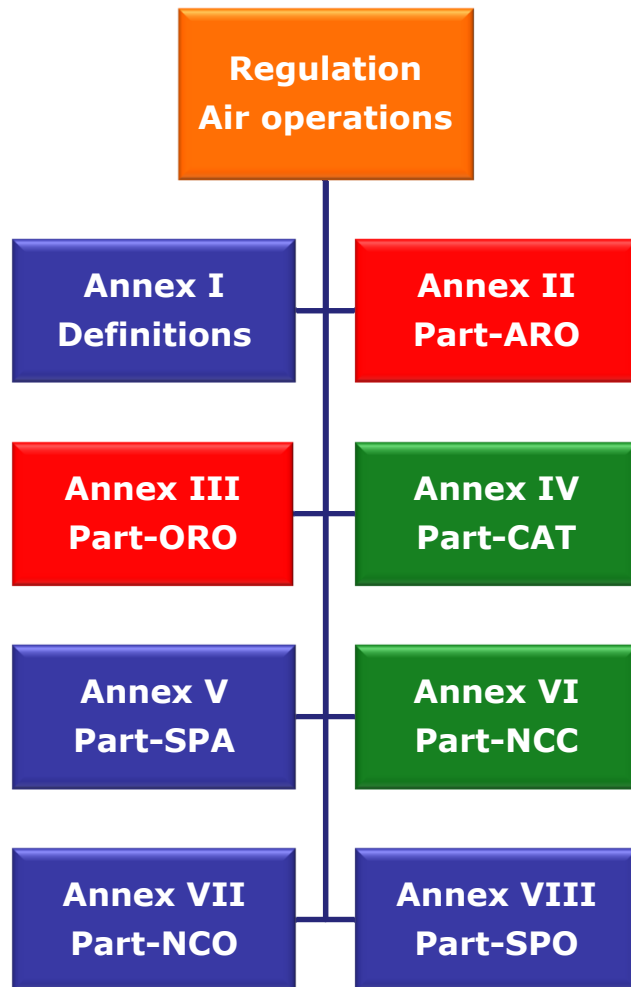
- (1) clearly defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the accountable manager;
- (2) a description of the overall philosophies and principles of the operator with regard to safety, referred to as the safety policy;
- (3) the identification of aviation safety hazards entailed by the activities of the operator, their evaluation and the management of associated risks, including taking actions to mitigate the risk and verify their effectiveness;
- (4) maintaining personnel trained and competent to perform their tasks;
- (5) documentation of all management system key processes, including a process for making personnel aware of their responsibilities and the procedure for amending this documentation;
- (6) a function to monitor compliance of the operator with the relevant requirements. Compliance monitoring shall include a feedback system of findings to the accountable manager to ensure effective implementation of corrective actions as necessary; and
- (7) any additional requirements that are prescribed in the relevant Subparts of this Annex or other applicable Annexes.

(b) The management system shall correspond to the size of the operator and the nature and complexity of its activities, taking into account the hazards and associated risks inherent in these activities.





# OPS rules impacted and applicability

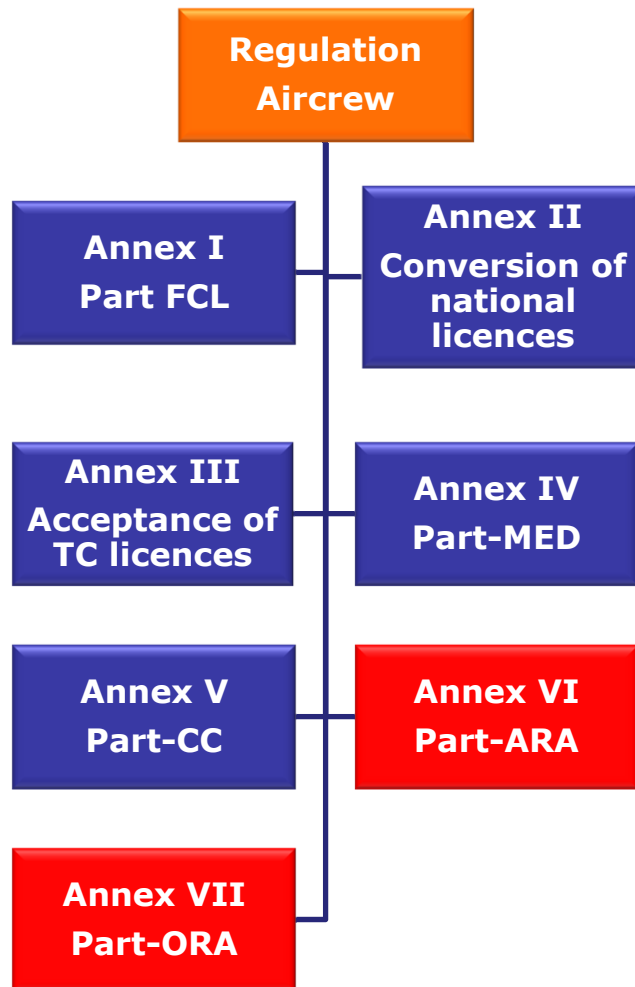


- **Part-ARO:** Authority requirements - OPS
- **Part-ORO:** Organisation requirements - OPS
- **Part-CAT:** Commercial air transport operations

- **Part-NCC:** non-commercial operations with complex motor-powered aircraft (CMPA)



# Aircrew rules impacted and applicability



**Amended Regulation 1178/2011 + Decisions  
2012/06-07/R**

- **Part-ARA:** Authority requirements - OPS
- **Part-ORA:** Organisation requirements – OPS



# RMT.0460: Status



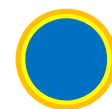
**ToR**  
Terms of  
Reference



**NPA**  
Notice of Proposed  
Amendment



**CRD**  
Comment Response  
Document



**Decision**  
AMC/GM

Objectives  
Method  
Timeline

**ToR published  
19/06/2012**

Text proposal  
Public  
consultation

**NPA 2012-07  
19/07/2012**

Individual  
answers  
Amended text

**CRD planned  
Q4 2012**

Decision adopted  
by EASA

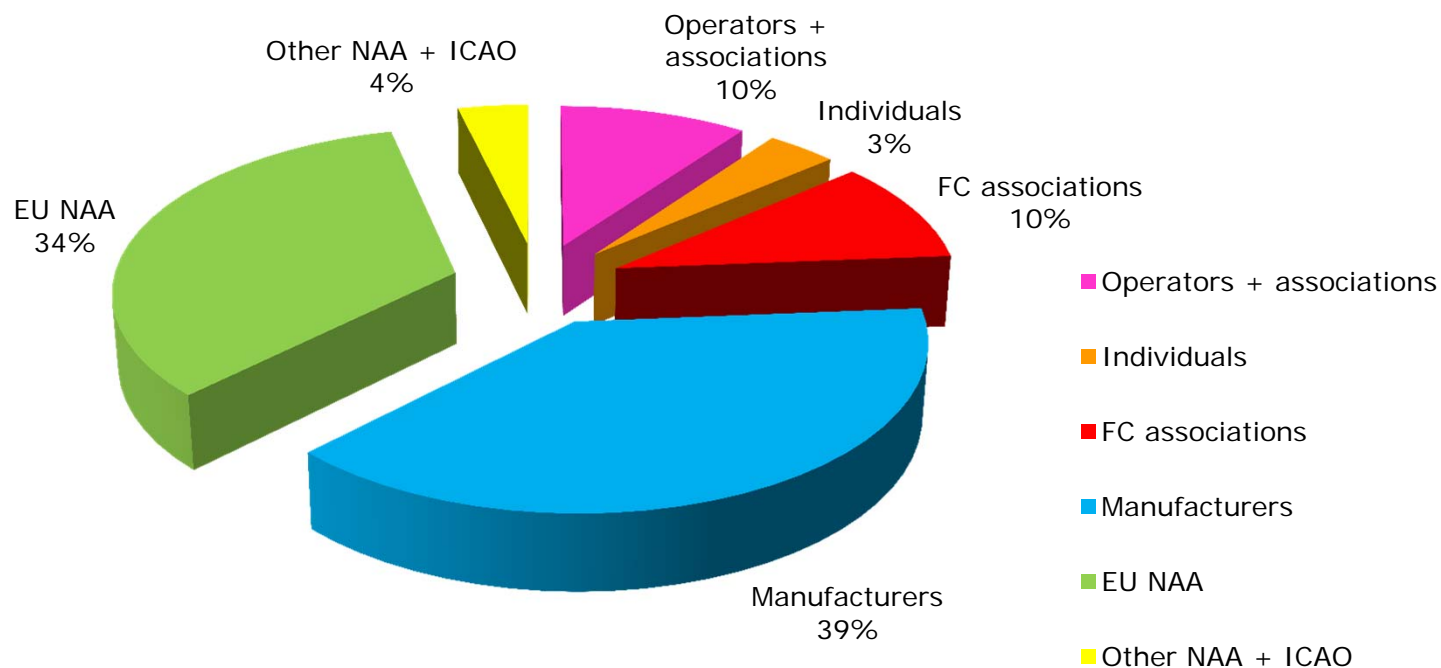
**Decision  
planned  
Q1 2013**

CRD and Decision Q1 2013 due to new rulemaking process.



# RMT.0460: comments received

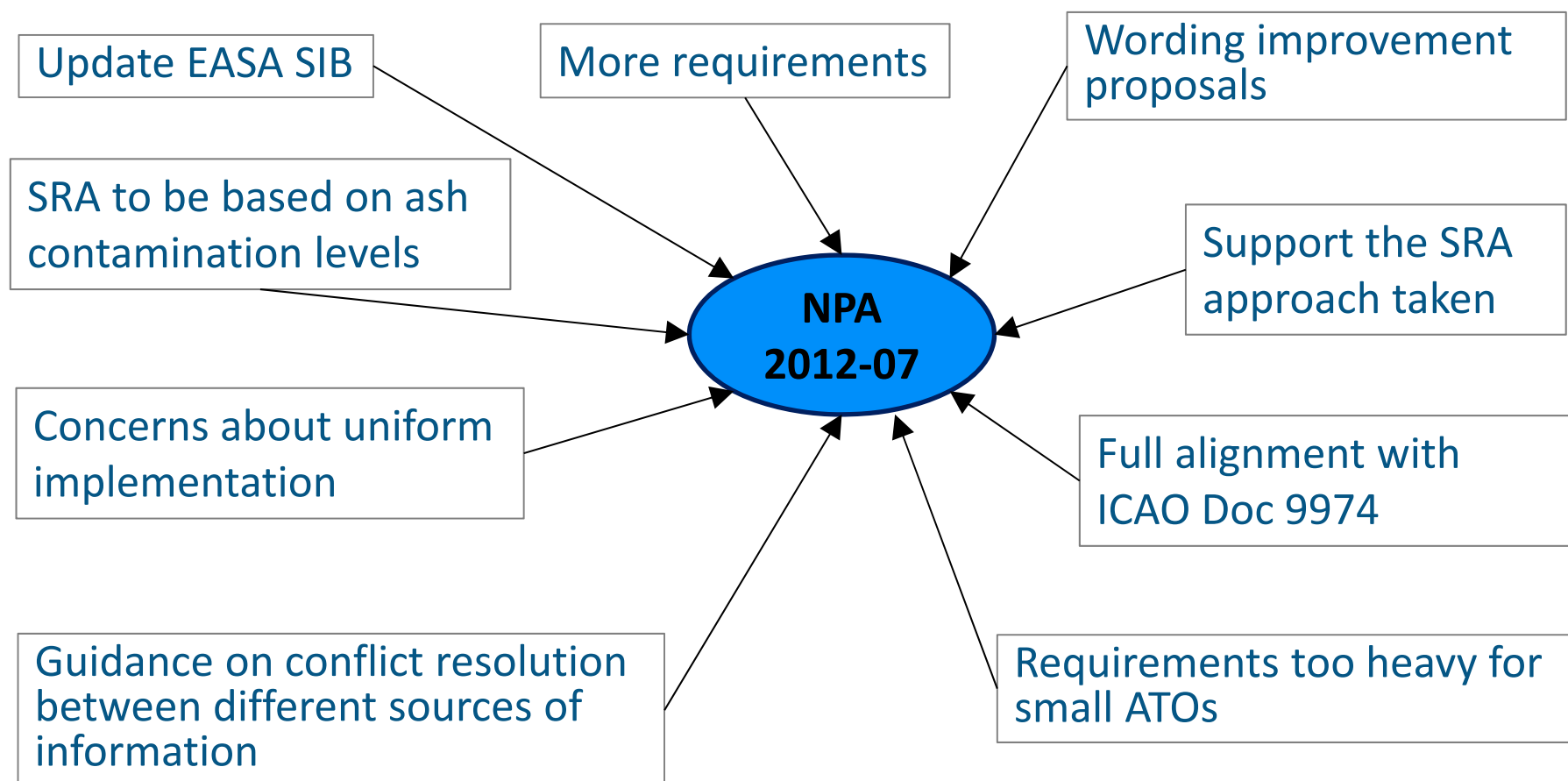
- 80 comments received
- 22 commenters





# RMT.0460: comments received

## Summary of main comments to the NPA





# Task 2: Information to Operators

## Task RMT.0364 *Certification Specifications for Aircraft and Engines – Volcanic ash.*

### Objectives:

- » Change CSs to better reflect existing TCH obligations to supply information on VA.
- » To proposes changes to CS-23, CS-25, CS-27, CS-29, CS-E, CS-P, CS-APU.
- » To support operator when developing their VA SRAs.

### Status:

- » NPA 2011-17 publication 03/09/2011.
- » CRD 2011-17 publication 08/10/2012.
- » Expected completion – 2013.



# Task 3: Airworthiness limitations for engine VA ingestion

*Task RMT.0364: Certification Specifications for Aircraft and Engines - Volcanic ash ingestion in turbine engines.*

## Objectives:

- To look at possible long-term solutions to flight a known VA environment.
- Aims to establish;
  - whether VA SRA principle is sufficient,
  - if potential benefits can be achieved with the possible use of airworthiness limits,
  - what would be the cost and impacts,
  - if it's practical to define limits and tests.

## Status:

- A-NPA 2012-21 published 28/11/2012.
- Comment period ends 28/02/2013.
- Estimated publication of Decision in Mid-2013?





# Mutual recognition of SRA

## **Actual situation:**

- VA SRA recommended through SIB 2010-17.
- MS are recommended to notify EASA of VA SRA acceptance.
- All VA SRA accepted are uploaded on a file accessible to all MS.





# Mutual recognition of SRA

## Short term situation:

- First OPS rules package was published 25/10/12.
- Management system required for all CAT operators to obtain an AOC (ORO.AOC.100).
- ORO.GEN.200: All hazards need to be identified and risks managed.
- Within Europe, mutual recognition of AOC.
- Outside Europe: EASA management system requirements are compliant with ICAO Annex 6 SMS requirements.



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# Electronic Flight Bag (EFB)

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# History and status of the EFB task

- **Issue 1 of the ToR published Dec 2006**
  - To transpose JAA TGL 36
  - Consider FAA AC 120-76A
- **Drafting Group established Jan 2007**
- **NPA originally planned June 2007 (i.e. before first extension)**
- **NPA 2012-02 has been published in March 2012**
- **CRD 2012-xxx planned in the first half of 2013**
- **Opinion/Decision expected end 2013/beginning 2014**





# Main modifications to NPA (1/2)

- **General**

- Clarification between airworthiness and OPS
  - . AMC20-25 text reorganised
  - . Long term view: split AMC 20-25 into 2 AMCs (AMC for OPS + separate rules for airworthiness)
- Evaluation of type B application done by EASA
  - . Only on a voluntary basis, as it is already the case
- Enhance the EFB administrator requirements
  - . Experience and knowledge requirements introduced
  - . Responsibilities clarified
- Clarification of the update process
  - . Management of minor updates





# Summary of main comments received (2/2)

- **EFB classes**

- Enhanced definitions Of EFB classes
  - . Only 2 EFB classes are kept (portable and installed)
- Data connectivity for class 2 EFB
  - . Provisions has been added for such connectivity under specific conditions
- Use of viewable stowage
- Sharing of installed resources with class 2 EFB (keyboard,...)



- **EFB applications**

- Enhanced Type A and B definitions
- Type C application removed as potential EFB application
- AMMD included in type B applications list
- Clarification of non-EFB software





## Way Forward

- ❑ **Workshop organised with TAG members on April 18th**
- ❑ **Publication of CRD with individual answers to comments, proposal of revised text (opinion+AMC20-25+ETSO)**
- ❑ **Possibility to 'react' to CRD kept since complex and controversial task and task initiated before the new RM process**
- ❑ **Publication of Opinion/Decisions end 2013/beginning 2014**
- ❑ **Decisions will be adapted to be adopted simultaneously**





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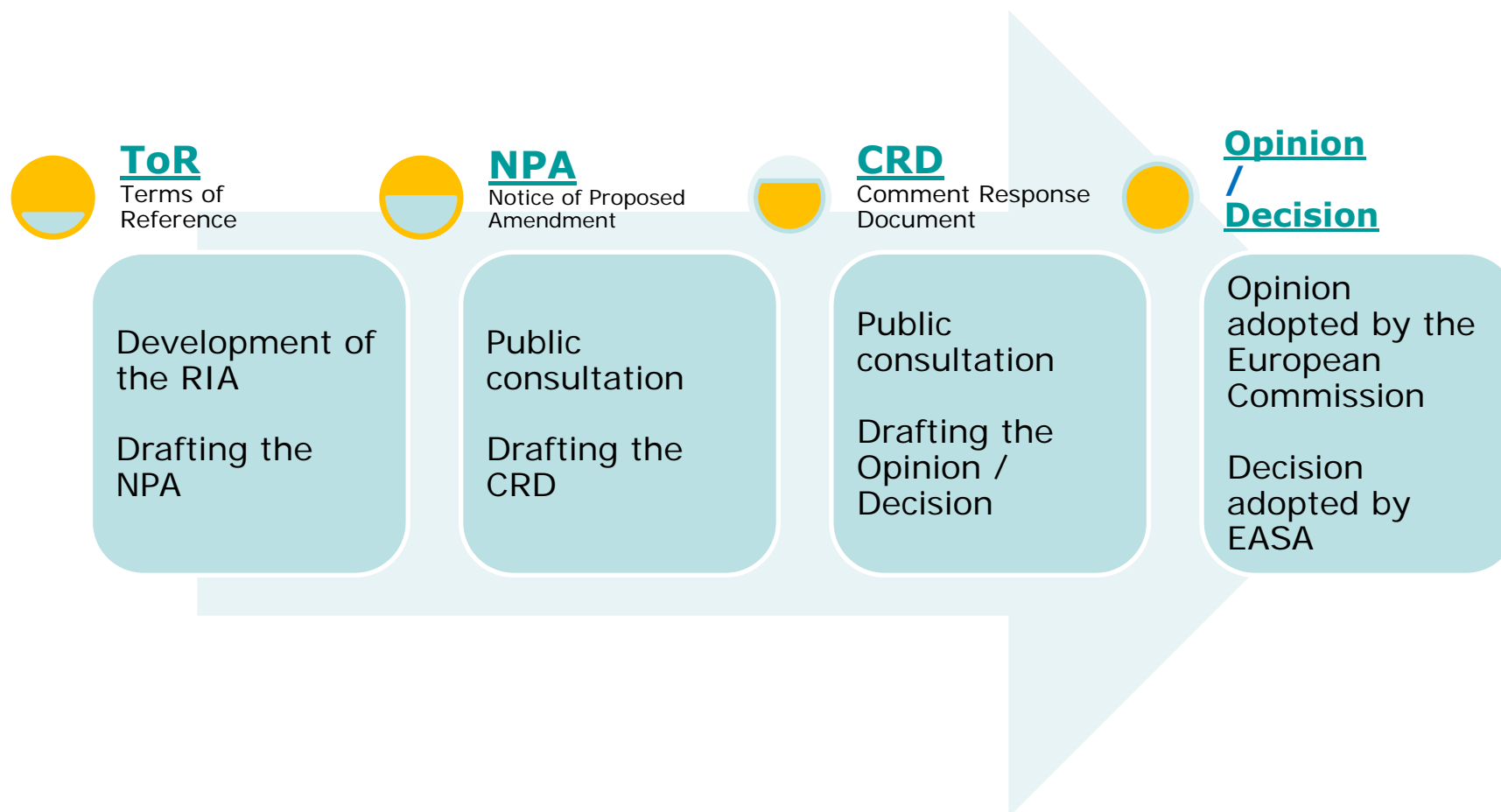
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# Additional RMTs

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# EASA rulemaking process (simplified)





# On-going OPS Rulemaking

- Guidance material on volcanic ash safety risk assessment (VA SRA) (RMT.0460)
  - final AMC/GM to be published 1q 2013
- Sterile Flight Deck Procedures (RMT.0416, 0417)
  - Comment Response Document (CRD) to be published 1q 2013
  - Opinion (final rule) expected before end 2013
- Electronic Flight Bags (RMT.0001)
  - CRD to be published 2q 2013
- Maintenance check flights (RMT.0393, 0344)
  - CRD to be published 3q 2013



# On-going OPS Rulemaking

- Transfer of JAA cabin safety tasks (RMT.0327, 0328)
  - Incapacitation and replacement of senior cabin crew
  - Communication between a person on board the aeroplane and aerodrome
  - emergency services during ground operations with passengers on board
  - and in the absence of flight crew members
  - CRD to be published 1q 2013
  - Opinion (final rule) 3q 2013



# On-going OPS Rulemaking

- Notice of Proposed Amendments (NPA) under preparation:
  - Helicopter offshore operations (RMT.0409, 0410) - 1q 2013
  - Additional guidance material and requirements ramp inspections – 1q 2013
  - FTL for CAT Emergency Medical Services (A+H) (RMT.0346) – 3q 2013
  - Carriage of special categories of passengers (RMT.0269, 0270) – 3q 2013
  - PBN operational approvals (RMT.0256, 0257) – 3q 2013
    - Review necessity for particularly general aviation
    - Enforce pilot training requirements



# On-going OPS Rulemaking

- Notice of Proposed Amendments (NPA) under preparation:
  - Commercial air transportation aeroplane operations single engine IMC (RMT.0232, 0233) – 4q 2013
  - Updating of existing recorder installations and equipment (RMT.0400, 0401) - 4q 2013
    - ULB 90 days
    - CVR recording duration 2 hours
    - Discontinuation of magnetic tape recorders
    - carriage of low-frequency, long-range ULBs
  - Runway overrun protection system (RMT.0047, 0569, 0570) – 1/2q 2013



# On-going OPS Rulemaking

- Other on-going tasks (NPA publication 2014):
  - Crew resource management (RMT.0411)
  - HEMS performance and public interest site (RMT.0325, 0326)
  - Flights of design and production organisations (RMT.0348, 0349)
  - FTL for CAT operations - air taxi and single-pilot operations (aeroplane) (RMT.0429)
  - Helicopter height velocity diagram (RMT.0132, 0515)



# On-going OPS Rulemaking

- Tasks to be initiated 2013:
  - New PBN applications (RMT.0519, 0520) - 1q 2013
  - Updating authority and organisation requirements (RMT.0516, 0517)
  - FTL requirements for CAT operations for helicopters (RMT.0430)
  - Passenger seating and briefing (RMT.0575, 0576)
  - Prediction of windshear for aeroplane CAT operations (IRs) (RMT.0369, 0370)
  - Operator's description of non-revenue flights (RMT.0352, 0353)
  - Carbon monoxide detector on board all piston-engined aircraft (RMT.0329, 0330)





# On-going OPS Rulemaking

- Tasks to be initiated 2013:
  - Recorders for small aircraft (RMT.0271, 0272)
  - Remotely piloted aircraft (RMT.0229, 0230)
  - TAWS for smaller aircraft (RMT.0371, 0372)



# On-going OPS Rulemaking

- Further important tasks (starting 2014 and beyond):
  - Low visibility operations and advanced vision systems
  - Extended diversion time operations
  - Fuel
  - TCO non-commercial and commercial other than CAT
  - FTL other commercial operations
  - CAT single engine helicopter operations over hostile environment
  - CAT aeroplane performance



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# Flight Standards Mini-Website

**EASA**

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# Flight Standards mini-website content

- **Stand-alone Flight Standards website within EASA main website**
- **General aviation information**
- **FAQ – questions and answers on:**
  - General issues
  - Crew Licensing
  - Air Operations
  - Medical
  - Third country Operators
  - News & Events:
    - <http://easa.europa.eu/flightstandards/latestnews.html>



# Cross reference table

- **Comparison EASA OPS with JAR-OPS 3 and EU-OPS**
- **Difference statements**
- **Status: version 02 was published at the end of 2012**

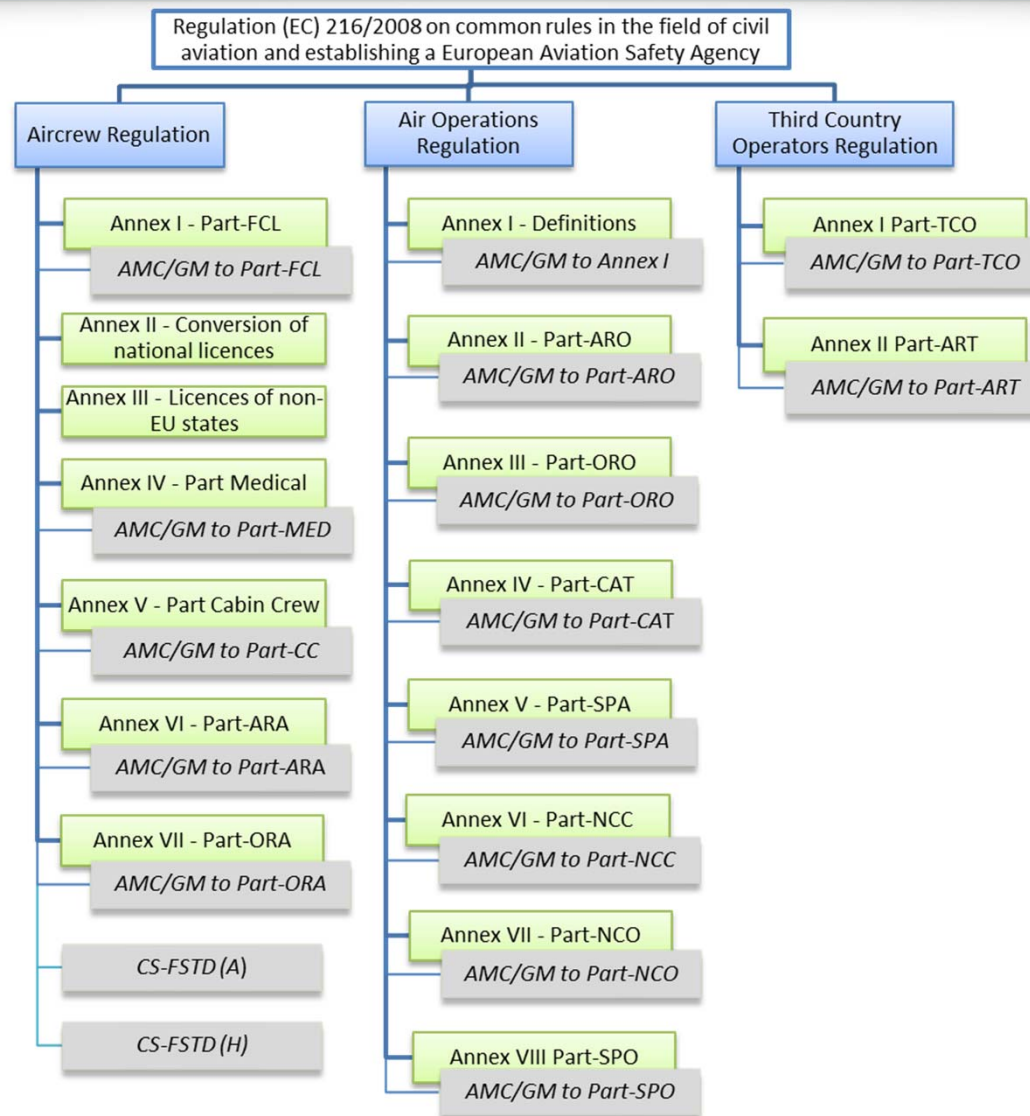
• [http://easa.europa.eu/flightstandards/doc/Cross%20reference%20table\\_version02.xlsx](http://easa.europa.eu/flightstandards/doc/Cross%20reference%20table_version02.xlsx)

Sec #	European rule IR/AMC/GM	European rule reference	European rule title	EU-OPS/JAR-OPS3 IR/ACJ/AMC/IEM	EU-OPS rule reference	JAR-OPS3 rule reference	EU-OPS/JAR-OPS3 rule title	Difference to EU-OPS Classification	Difference to EU-OPS Description	Difference to JAR-OPS3 Classification	Difference to JAR-OPS3 Description
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	-	3.005(f) - Appendix 1, (a)(1)	Operations for small helicopters (VFR day only)	-	-	Amended	The definition in EASA OPS is more specific. Small helicopters (as defined in JAR-OPS 1) are treated as non-complex helicopters (in the sense of the Basic Regulation).
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.037(a)4.	-	Accident prevention and flight safety programme	No change	Definition for 'flight data monitoring' extracted from EU-OPS rule	-	-
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.1150(a)1, 4 - 6, 15	3.1150(a)(1), (3), (4), (15)	Terminology	No change	-	No change	-
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.165(a)	3.165(a)	Leasing	Amended	The terms are aligned with Art. 2 of Reg. (EC) No 1008/2008	Amended	The terms are aligned with Art. 2 of Reg. (EC) No 1008/2008
1	IR	Annex I	Definitions for terms used in Annexes II to VII	ACJ	1.345 2.a, 2.g, 2.k	-	Ice and other contaminants	Amended	Anti-icing and 'de-icing' refer to aircraft, not only aeroplanes. 'Hold-over time' aligns with ICAO Doc 9640, 2nd ed..	New	Definitions from EU-OPS refer to aircraft, not aeroplanes and therefore apply to helicopters too.
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.430 - Appendix 1 (f)1.(i), (ii)	3.430 - Appendix 1, (d)(1)	Precision approach — Category II and other than Standard Category II operations	No change	-	Amended	The scope of OTS CAT II has been extended to helicopter operations.
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.430 - Appendix 1 (New), (b)(3)	-	Aerodrome operating minima	Amended	Approach procedure with vertical guidance: does not provide for the authority to approve lower minima [Placed in main Annex I with Opinion 1/2012]	-	-
1	IR	Annex I	Definitions for terms used in Annexes II to VII	IR	1.430 - Appendix 1 (New), (b)(1)	-	Aerodrome operating minima	Amended	CAT I approach operation: GNSS using SBAS is included	-	-



# Rule structure:

<http://easa.europa.eu/flightstandards/structure.html>





# Easy ways to stay up to date

- **EASA official publications [weblink](#)**

- Filter your search

- Implementing rules (IR)

- AMC/Guidance Material/Certification Specifications (CS)

- **Technical publications website**

- receive automatic email notification [updates](#)

- **General publications website**

- receive automatic email [notifications](#)

- **List of Member State [Opt-outs](#) to OPS Regulation 965/2012**





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