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

01. Etat des lieux de la règlementation Européenne

Séminaire Air OPS

09-10 April 2014
Paris

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Basic regulation (BR)

The BR is part of the EU regulatory framework for air transport .

Territorial scope of the BR

28 EU states

4 EFTA states

Scope of the BR

BR does not cover:

Airworthiness and environmental protection of aircraft	- while carrying out military, customs, police, SAR, fire fighting, coastguard or similar services - when referred to in Annex II
Pilots and operations	- of aircraft referred to in Annex II, unless used for commercial operations
Aerodromes	- that are controlled and operated by the military - 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)
ATM/ANS	- that are provided or made available by the military

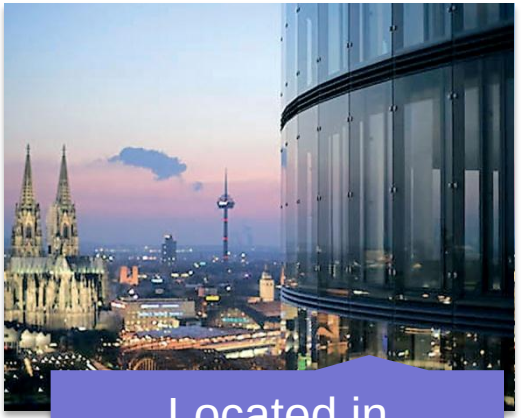
Consequence: The national rules apply.

The EU aviation safety system

About EASA

Founded in 2002

Built on experience from the JAA

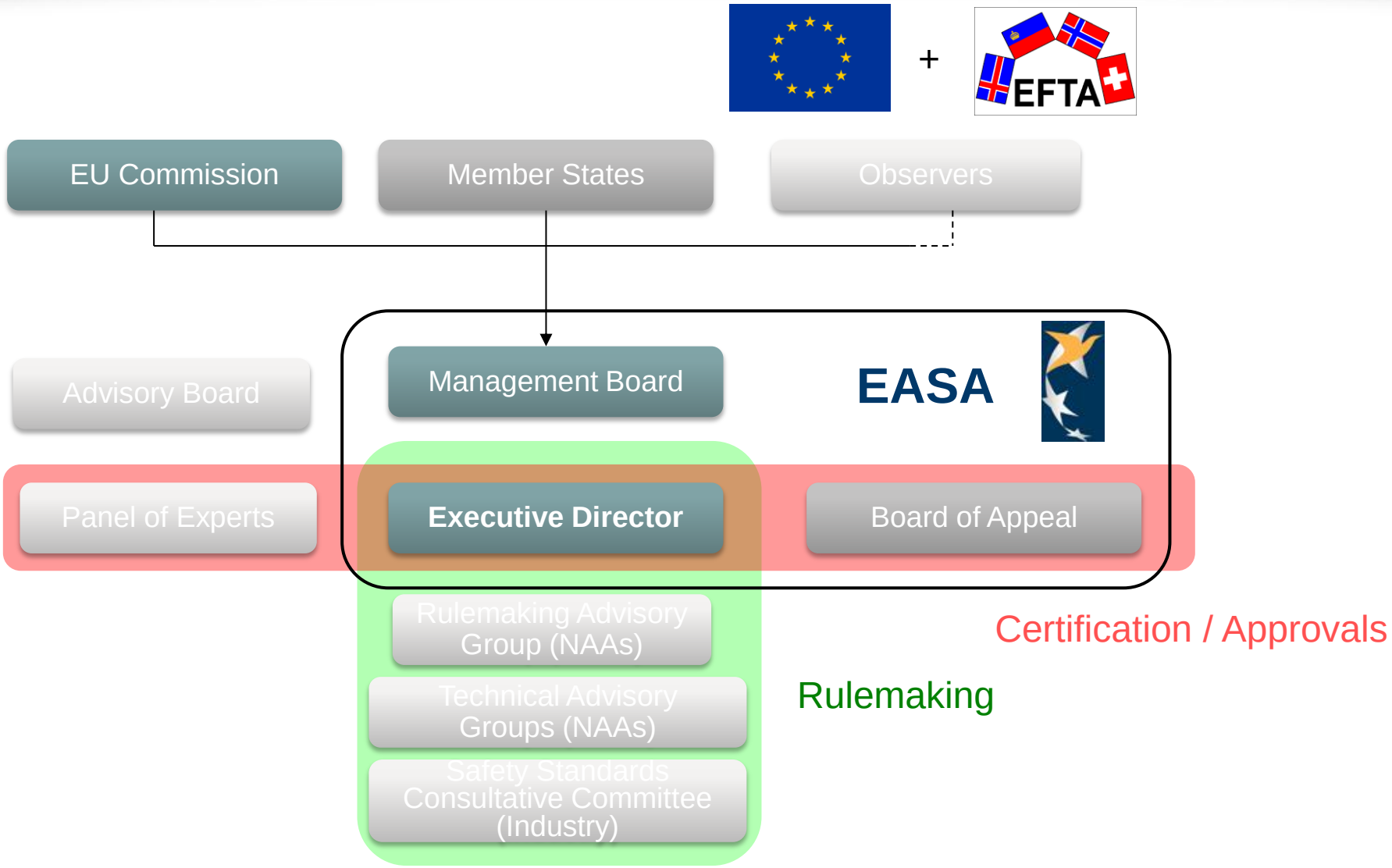


Located in Cologne, Germany

700 Staff members

Headed by Mr Patrick Ky

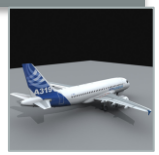
EASA Governance



Current Regulations

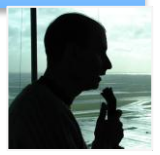
Basic Regulation (EC) No 216/2008

- **Airworthiness**
  - Initial Airworthiness
  - Continuing Airworthiness
- **Flight Standards**
  - Aircrew
  - Air Operations
- **ATM/ANS**
  - ANS common requirements
  - ATM/ANS safety oversight
  - Air Traffic Controllers Licensing
  - Airspace usage requirements
  - SERA Standardised European Rules of the Air







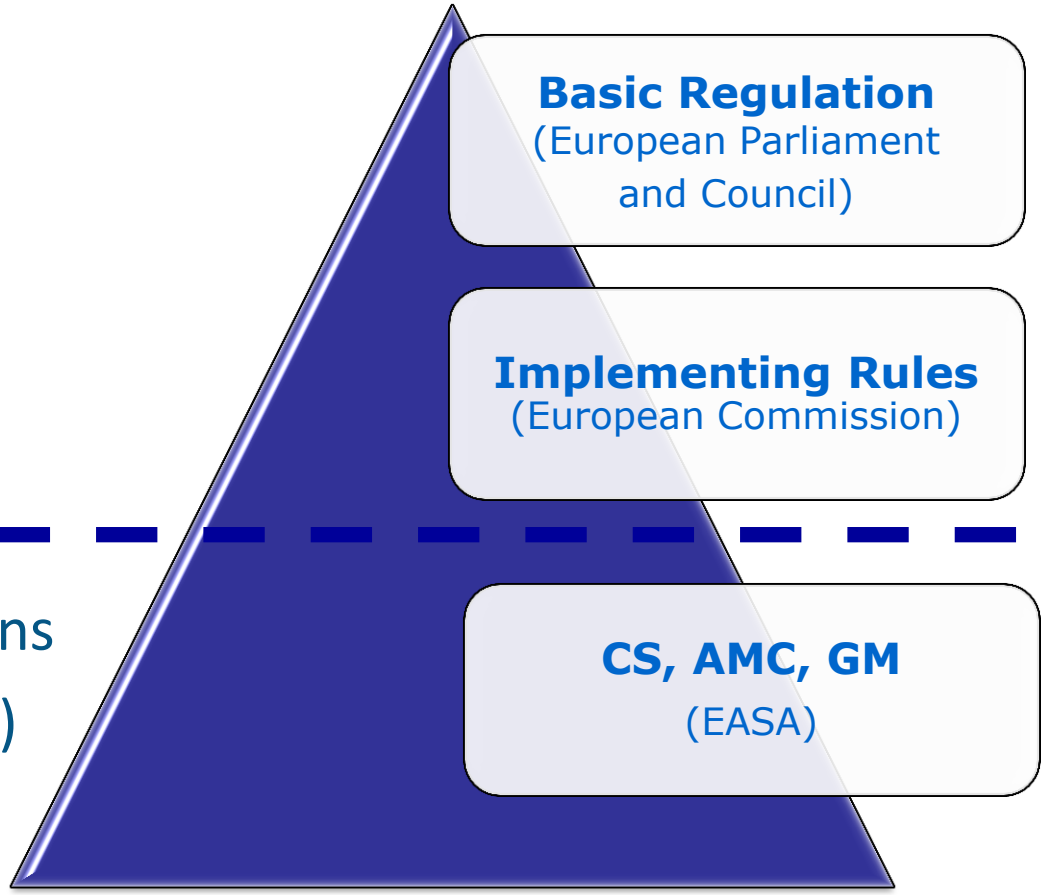


European aviation rules

Rule hierarchy and responsible actors

Binding rules

« *shall* »



Compliance provisions

('non-binding' rules')

« *should* »

ER, IR

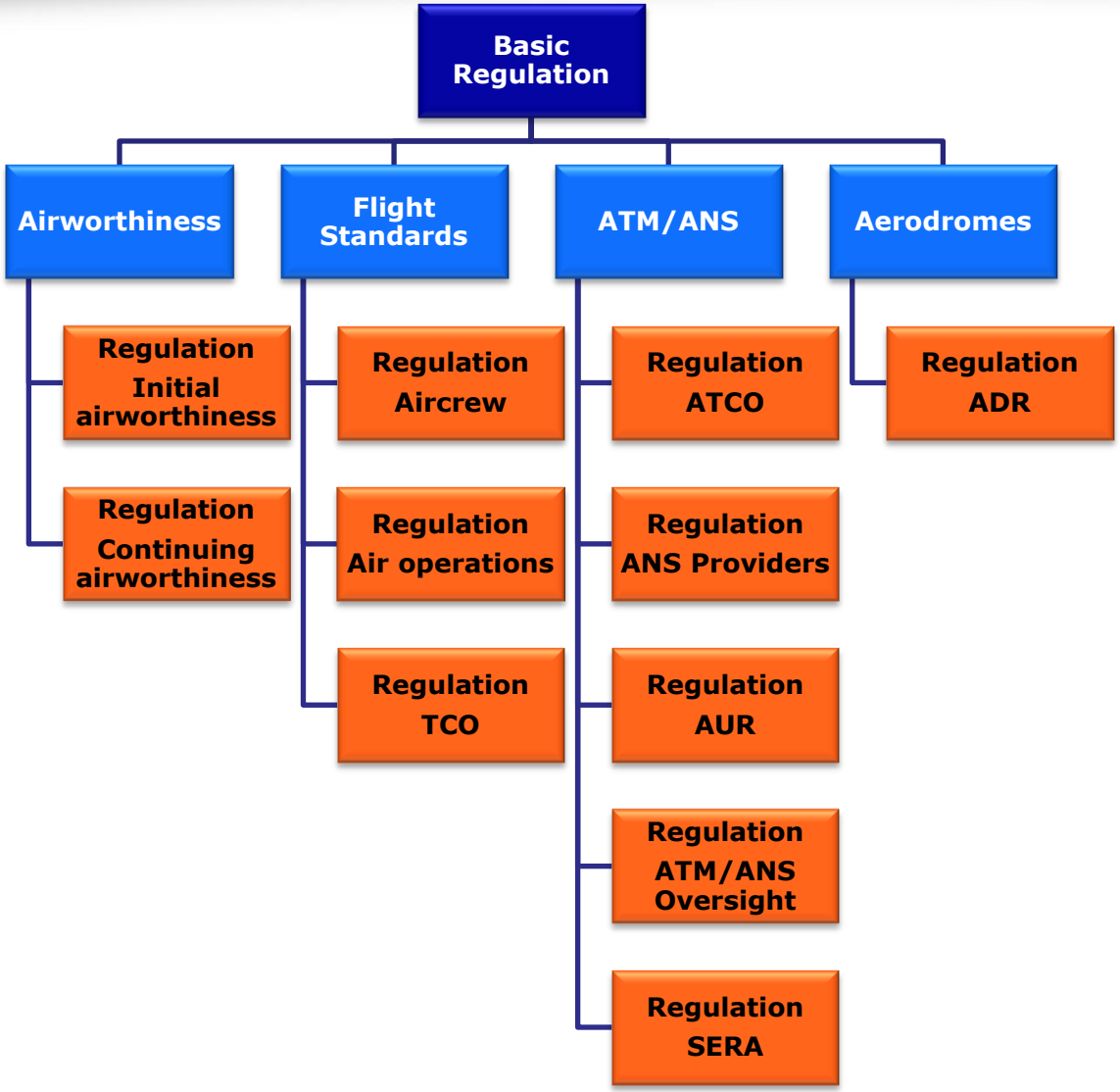
Essential requirements (ER)

- legally binding requirements
- annexed to the Basic Regulation 216/2008

Implementing rules (IR)

- legally binding requirements adopted by the European Commission
- deviations from IRs are only possible through the flexibility procedures described in Article 14 of the Basic Regulation 2016/2008

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

Regulation 965/2012 and amendments

	965/2012	800/2013	71/2014	83/2014	xx/2014
	CAT(A,H)	NCC, NCO	OSD	FTL for CAT(A)	SPO, CAT(S,B,A-to-A)
Cover Regulation			Art. 9, Art. 9a	Art. 2, Art. 8, Art.9a	
Annex I - DEF					
Annex II - ARO				ARO.OPS.230, 235	
Annex III - ORO			GEN, MLR, FC, CC	FTL	
Annex IV - CAT					
Annex V - SPA			GEN		
Annex VI - NCC					
Annex VII - NCO					
Annex VIII - SPO					
opt out ends:	28.10.2014	25.08.2016	none	17.02.2017	*April 2017*

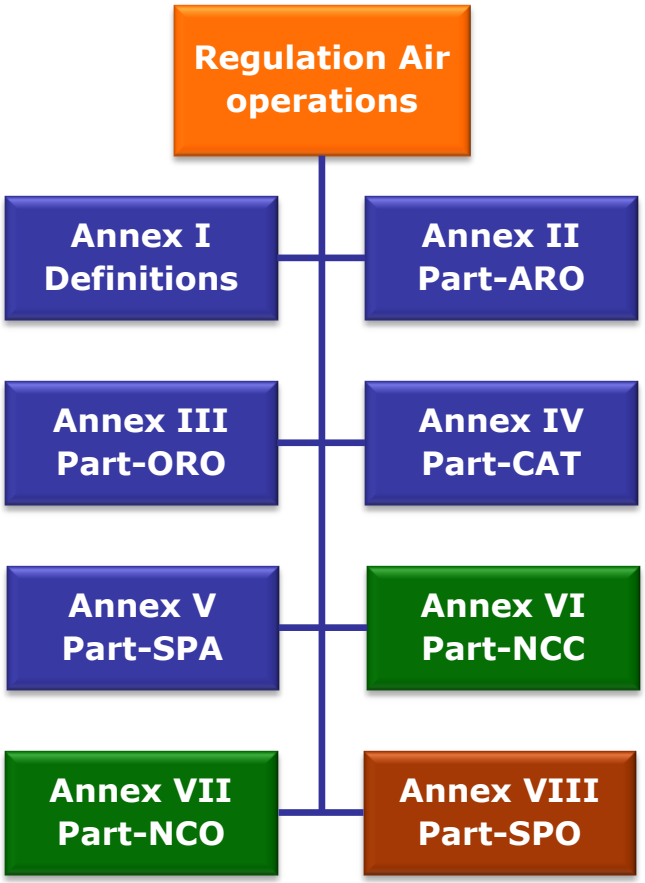
initial versions **amendments**

Decisions with AMC/GM to Reg. 965/2012 and amendments

	CAT(A,H)	volcanic ash	NCC, NCO	PED	OSD	FTL for CAT(A)	SPO, CAT(S,B,A-to-A)
Cover Regulation							*2014/XXX/IR*
Annex I - DEF	2012/015/R		2013/017/R				
Annex II - ARO	2012/016/R	2013/007/R	2013/018/R				*2014/XXX/IR*
Annex III - ORO	2012/017/R	2013/009/R	2013/019/R		2014/009/R	2014/003/R	*2014/XXX/IR*
Annex IV - CAT	2012/018/R			2013/028/R			*2014/XXX/IR*
Annex V - SPA	2012/019/R		2013/020/R				
Annex VI - NCC			2013/021/R				
Annex VII - NCO			2013/022/R				*2014/XXX/IR*
Annex VIII - SPO							*2014/XXX/IR*

initial versions | **amendments**

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

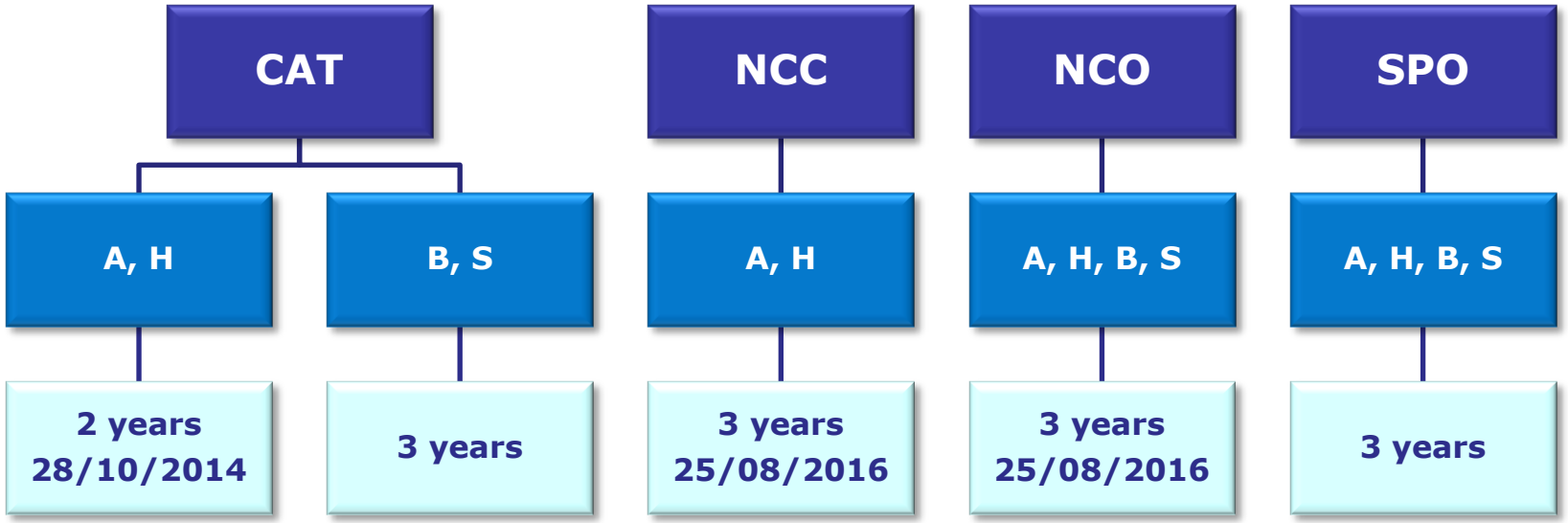
Regulation 800/2013

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

Regulation xxx/2014

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

Transition periods (opt-outs)



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

Links to Documents (1)

- Regulations with Implementing Rules for air operations
  - http://easa.europa.eu/regulations/regulations-structure.php

- Decisions containing AMC and GM for air operations
  - http://easa.europa.eu/official-publication/acceptable-means-of-compliance-and-guidance-materials.php

Links to Documents (2)

- Cross reference table – final version
  - http://easa.europa.eu/flightstandards/doc/Cross%20reference%20table_Final%20Version.xlsx
- Official Publication
  - http://www.easa.europa.eu/official-publication/index.php
- Derogations to Regulation Air operations
  - http://easa.europa.eu/regulations/opt-out-to-regulations.php

Links to Documents (3)

- Revised rulemaking programme 2014-2017
  - http://easa.europa.eu/rulemaking/annual-programme-and-planning.php
- Flight Standards mini-website
  - http://easa.europa.eu/flightstandards/
- Questions should be directed to
  - Air_OPS@easa.europa.eu

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02. Processus de standardisation

Séminaire Air OPS

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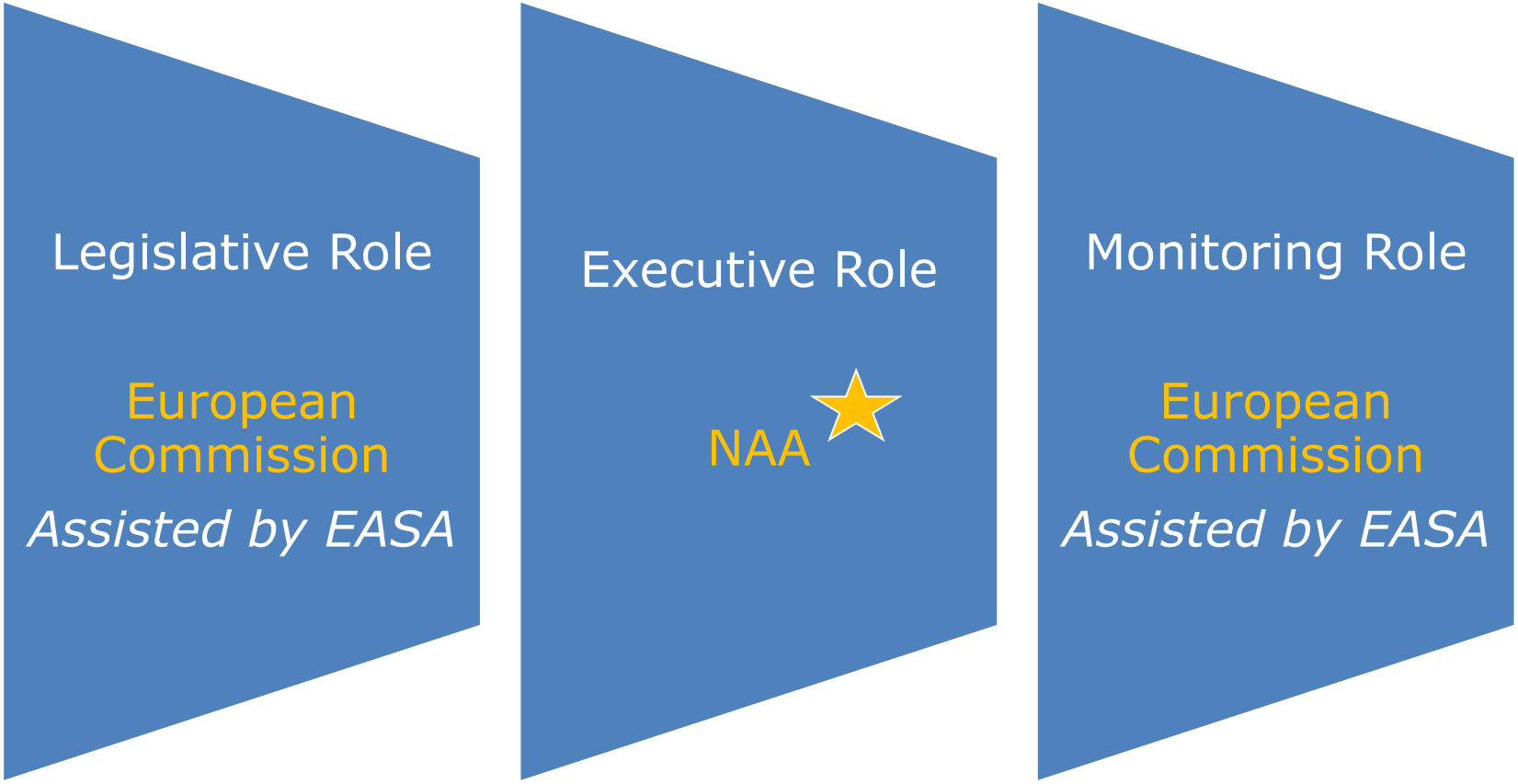
The European regulatory system



★ or directly EASA, *when the legislator decides this is more convenient (principle of subsidiarity)*

EASA Standardisation - Mission

Monitoring, on behalf of the EU Commission, how the National Aviation Authorities apply the EU aviation safety regulations in the fields under their competence

Binding by law:

Regulation (EC) No 216/2008 Art. 24 and 54

Working methods regulated by:

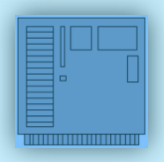
Regulation (EU) No 628/2013

Standardisation Continuous Monitoring

MONITORING

Web-based interface

COLLECT INFORMATION



ANALYSE AND PRIORITISE

The Model

(Multi)annual Programme

Continuous Monitoring Status

ACT AS APPROPRIATE

- Comprehensive Inspection
- Focused Inspection
- Ad Hoc Inspection
- Off-site Finding

FOLLOW-UP

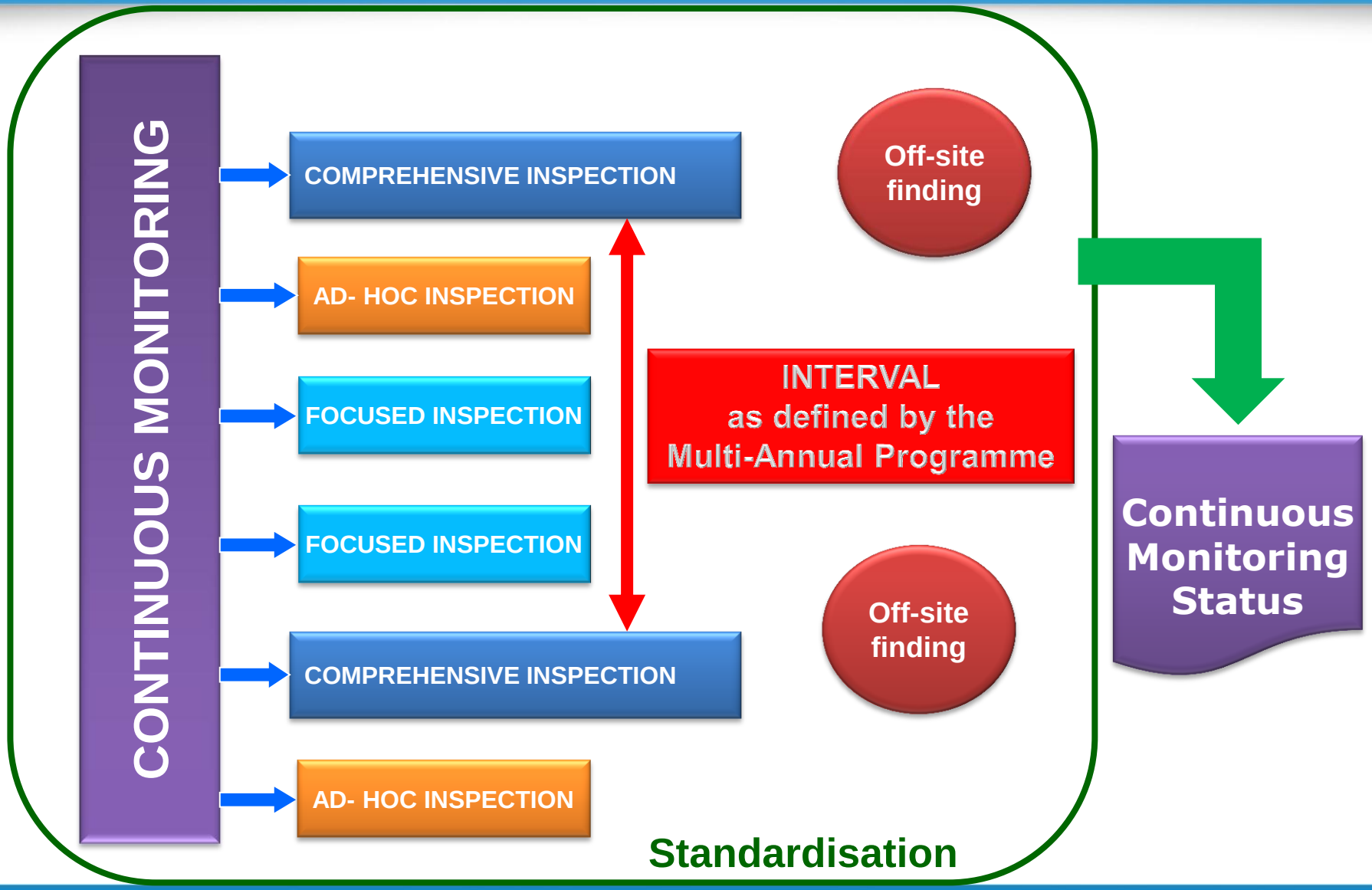
INSPECTING

Standardisation inspections

Traditional "system and process" audits

Competent Authority (CA)	Undertaking under CA oversight
Raising findings Agreeing on corrective actions Ensuring the actions are implemented	"product" samples of the CA oversight

Inspection intervals – risk based



Standardisation Activities in 2013

Inspections conducted in 2013

Inspections	AIR	OPS	FCL	MED	FSTD	ATM/ ANS	SAFA	total
2013	22	16	16	12	9	15	13	103

Total Inspections

Findings raised in 2013

Class C: non-conformity with the applicable requirements, raising mainly standardisation concerns;

Class D: non-conformity with the applicable requirements, raising standardisation concerns and safety concerns if not timely corrected;

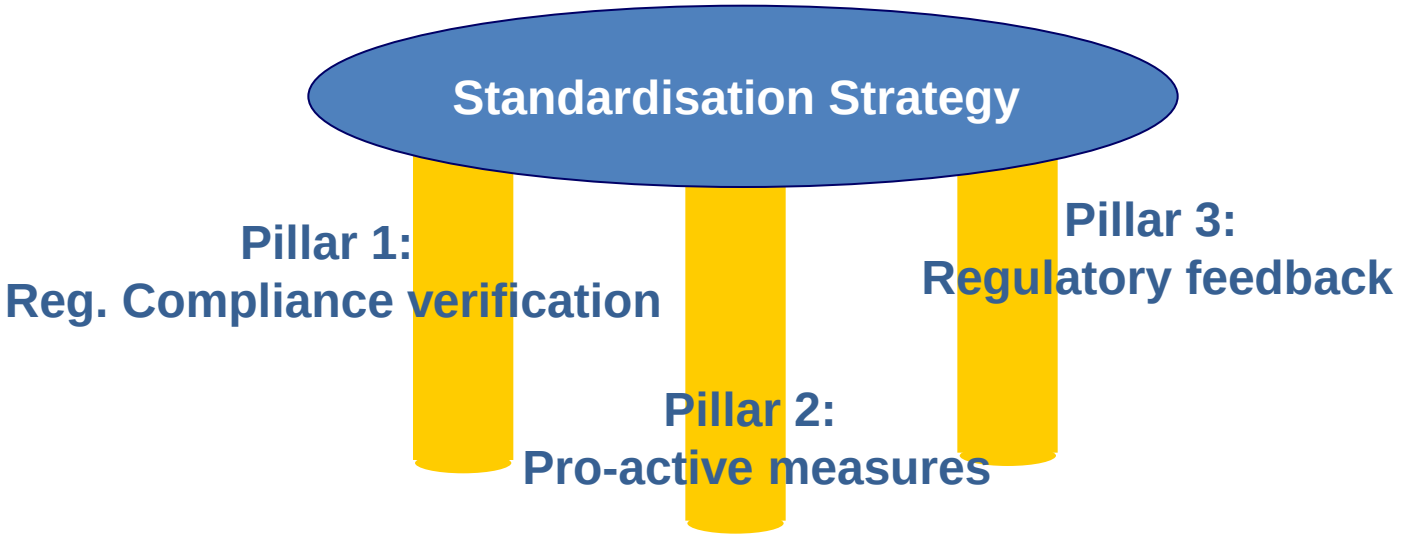
In both cases, corrective actions are required

	Class C	Class D	Total
AIR	207	37	**244**
OPS	22	44	**66**
FCL	41	7	**48**
MED	39	9	**48**
FSTD	35	6	**41**
ATM/ANS	128	173	**301**
SAFA	45	9	**54**
Total	**517**	**285**	**802**

Total Findings

Standardisation Strategy

- Successful standardisation can not depend on regulatory compliance verification alone; there is more…..
- EASA's strategy is based on three pillars:



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03. Tâches règlementaires en cours

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Programme des tâches (RMT)

- Revised rulemaking programme 2014-2017
  - http://easa.europa.eu/rulemaking/annual-programme-and-planning.php

RMT en cours

No	Titre	Fin (Opinion)
256/257	Revision of operational approval criteria for performance-based navigation	2016
352/353	Non-commercial operations of aircraft listed in the operations specifications by an AOC holder	2016
435/441	SACA and SAFA	2016
132/515	Helicopter H-V limitation	2016
325/326	HEMS performance and public interest site	2016
348/349	Flight related to design and production activities	2016
400/401	Amendment of requirements for flight recorders and underwater locating devices	2015
411	CRM training (FC and CC)	2016
409/410	Helicopter offshore operations	2014

RMT en cours

No	Titre	Fin (Opinion)
232/233	CAT SET-IMC	2015
269/270	Carriage of special categories of passengers	2015
369/370	Prediction of windshear for aeroplane CAT operations	2016
371/372	TAWS operation in IFR and VFR and TAWS for turbine powered aircraft under 5700 kg MTOM able to carry 6 to 9 passengers	2016
346/492	FTL rules for CAT operations of AEMS and HEMS	2016
429/493	FTL requirements for CAT operations - air taxi and single-pilot operations (aeroplane)	2016
516/517	Updating Parts ARO and ORO	2016

RMT à venir

No	Titre	Début	Fin
271/272	Recorders for small aircraft	**Q4/2013**	Q4/2016
350/351	Helicopter vibration health monitoring	**2013**	2014
430/494	FTL requirements for CAT operations of helicopters	**2014**	2017
573/574	Fuel planning and management	2014	2017
379/380	All weather operations	2014	2018
292/293	Editorial review Reg.965/2012	2014	2017
296/297	Aeroplane CAT performance taking into account the European Action Plan for the prevention of Runway Excursions	2014	2017
392	AltMOC	2015	X
599/600	Review of ORO.FC	2015	2018
601/602	EFB	2015	2018

RMT à venir

No	Titre	Début	Fin
318/319	Single engine helicopter operations over hostile environment	2016	2019
431/495	FTL requirements for commercial operations other than CAT	2016	2019
308/309	Amendment of requirements for data recorders II	2016	2019
577/578	EDTO	2016	2019
414/415	Operations and equipment for high performance aircraft	2016	2019
383	On-board medical supplies	2016	2017
432/496	FTL requirements for non-commercial operations of complex motor-powered aircraft	2017	2020
300/301	Operations with airships	2017	2020
338/339	Review of equipment requirements	2017	2020

RMT.411 CRM: main objectives

- Modernisation of current AMC and GM by incorporating new items taking into account recent developments and experience gained
- Restructuring and rewording to improve the clarity and readability of the text

RMT.411 CRM: items considered

- Qualification and training for inspectors of competent authorities
- Oversight of CRM training by inspector of competent authorities
- Expansion of combined CRM training
- CRM training and SMS
- Competency-based CRM training
- Monitoring and intervention
- Surprise and startle effect
- Qualification, training, assessment and revalidation of CRM trainer
- Qualification of CRM trainer examiner

RMT.411 CRM: time frame

- NPA planned to be published in June 2014 for a 3-month comment period
- No Opinion since the scope of the task is limited to AMC/GM
- Decision to be published in the second quarter 2016

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Points clé du nouveau système règlementaire Européen

Système s'appuyant sur :
- la gestion des risques,
- des qualifications centrées sur la compétence, et
- le partage des rôles et des responsabilités,

afin de promouvoir une participation plus effective de tous les acteurs

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04. Formation des équipages

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CDB effectuant des CHL ou CEL

- ORO.FC.230 (b)(5) & ORO.FC.230 (c)(2) permettent à un CDB formé aux concepts CRM et à l'évaluation des compétences CRM d'effectuer des contrôles. ***Quels sont les pré-requis nécessaires pour déterminer qu'un CDB est formé aux concepts CRM et à l'évaluation des compétences CRM ?***

En l'absence de dispositions plus précises, il est de la responsabilité de l'autorité compétente en coordination avec l'exploitant de déterminer le programme de formation qui pourra apporter au CDB les compétences requises pour exercer cette fonction. Il serait logique qu'une telle formation soit en cohérence avec la formation correspondante requise par AMC1 ORO.FC.230 (d)(5)(i) pour les TRE, CRE, SFE.

AMC1 ORO.FC.230 Personnel providing training and checking

(d)(5) recurrent checking by the following personnel:

(i) operator proficiency check by a type rating examiner (TRE), class rating examiner (CRE) or, if the check is conducted in a FSTD, a TRE, CRE or a synthetic flight examiner (SFE), trained in CRM concepts and the assessment of CRM skills.

Vols en ligne sous supervision (LIFUS)

Qui peut effectuer les vols en ligne sous supervision (LIFUS) ?

- Cette question est liée aux exigences FCL, en particulier celles définissant les privilèges.
- **FCL.910.TRI(a) et AMC1 FCL.930.TRI(k),** entre autres, apportent des éléments de réponse. Les contrôles sont effectués par un TRI ou un TRE.

- Le seul cas de LIFUS avec TRI pour les hélicoptères CAT est spécifié par **FCL.060(c)** Recent experience.
- Pour les avions, le TRI est aussi requis pour la formation en vol LIFUS après une qualification de type ZFTT (zero flight time training).
- Les autre cas de LIFUS requis par Air-Ops sont conduits par un commandant qualifié pour cette fonction.

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05. Flight time limitations (FTL)

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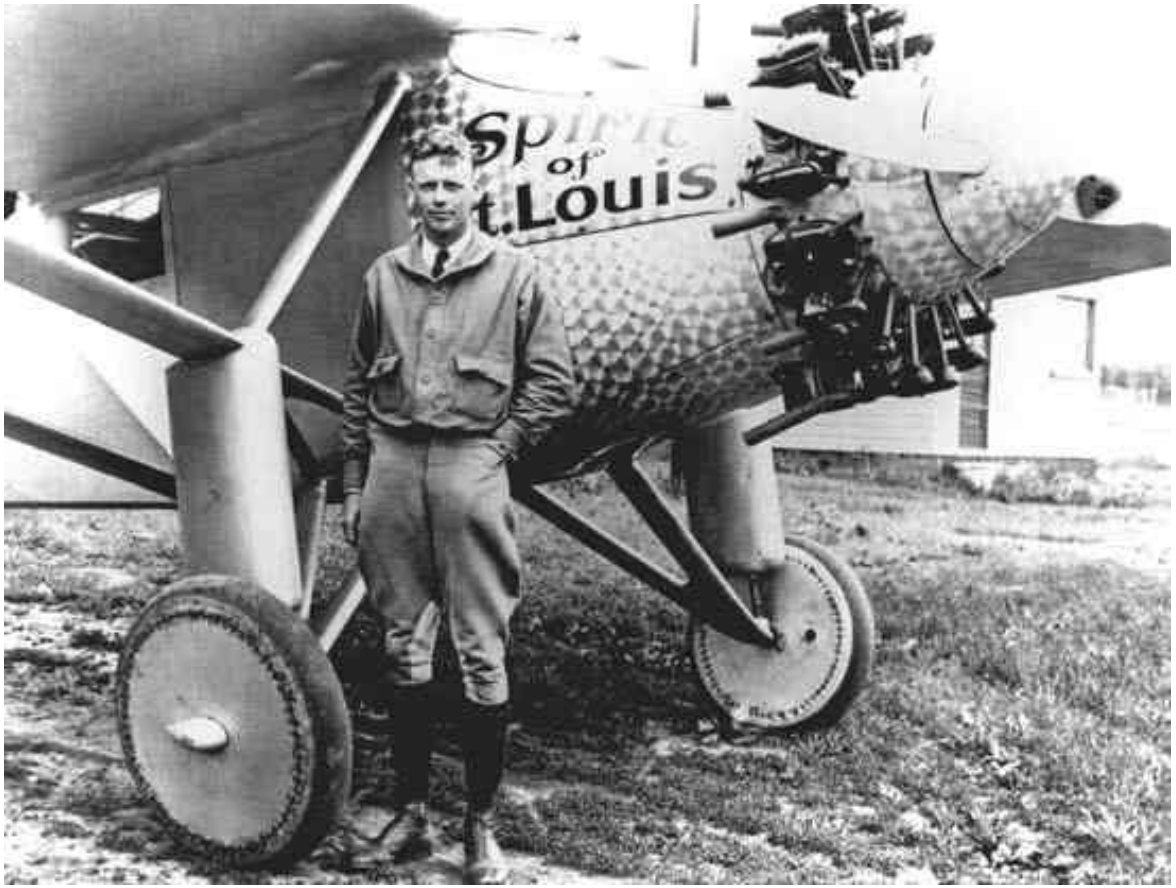
Overview

- What is fatigue?
- The science of sleep and circadian rhythms
- What are fatigue hazards in aviation?
- The new approach to fatigue management

What is fatigue?

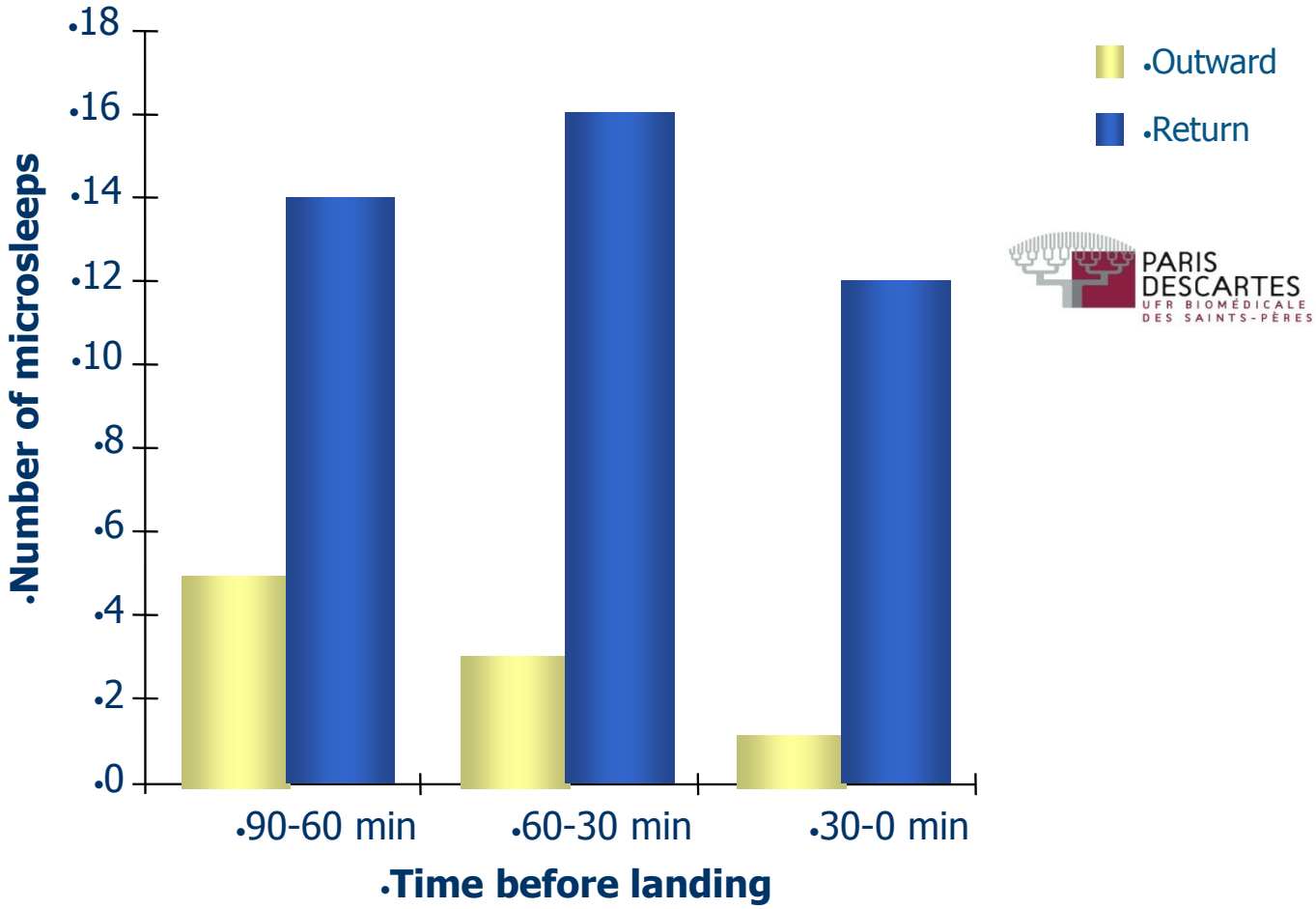
•What is fatigue?



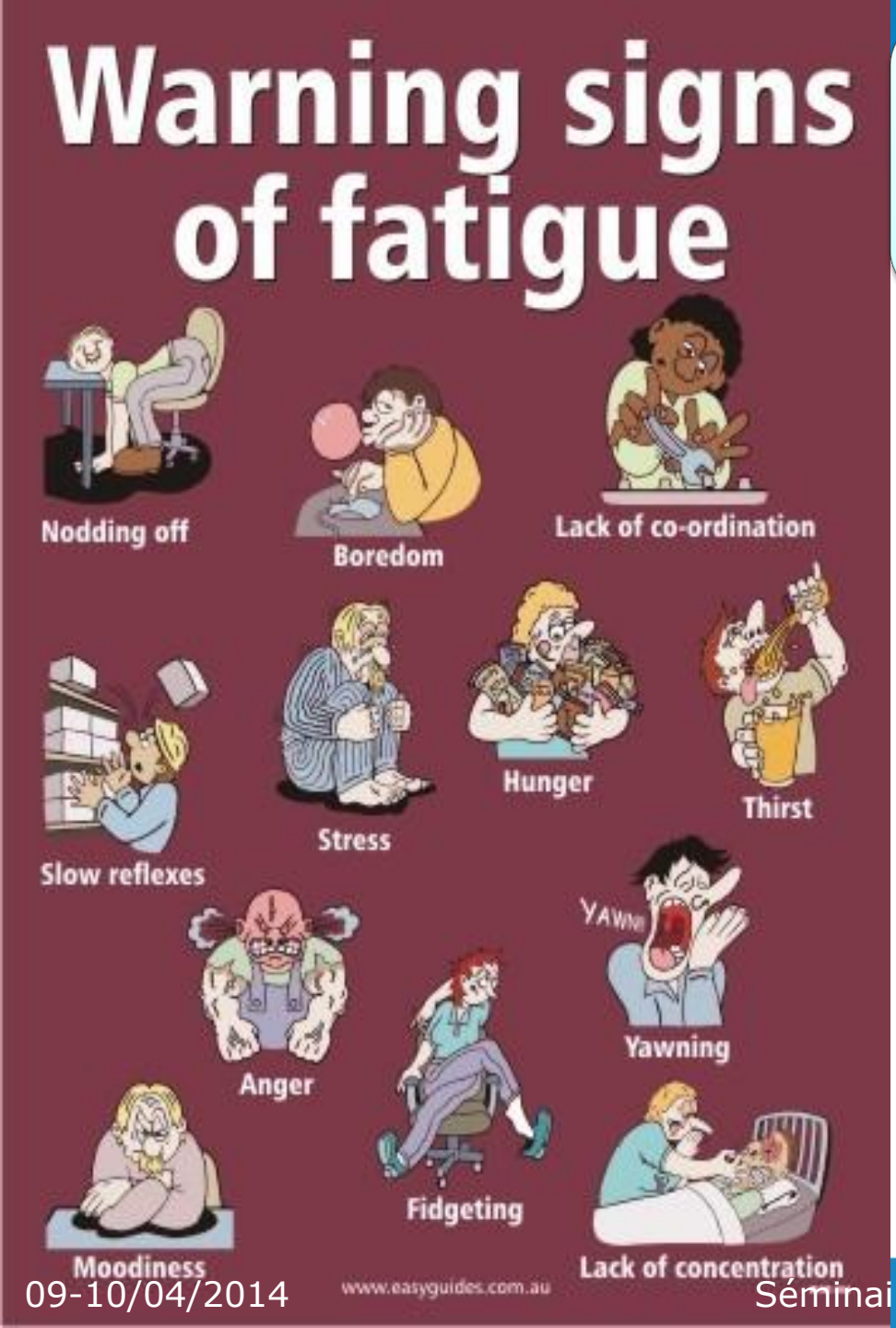
•*"My mind clicks on and off…I try letting one eyelid close at a time while I prop the other open with my will. But the effort's too much. Sleep is winning. My whole body argues dully that*

.Microsleeps

Microsleeps detected using PSG

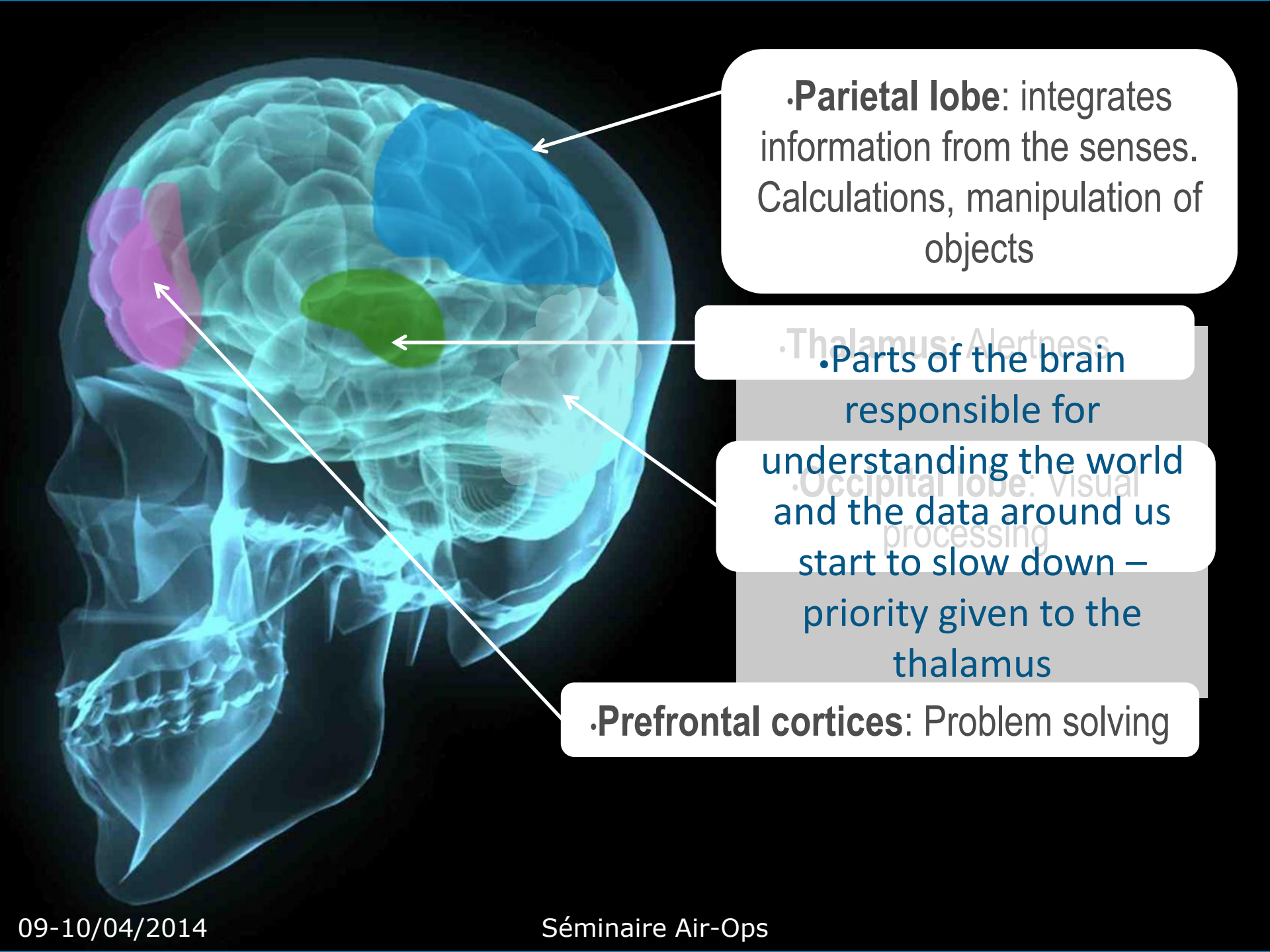


Number of microsleeps before landing
during A340 certification flights TLS-SFO-TLS and TLS-SIN-TLS

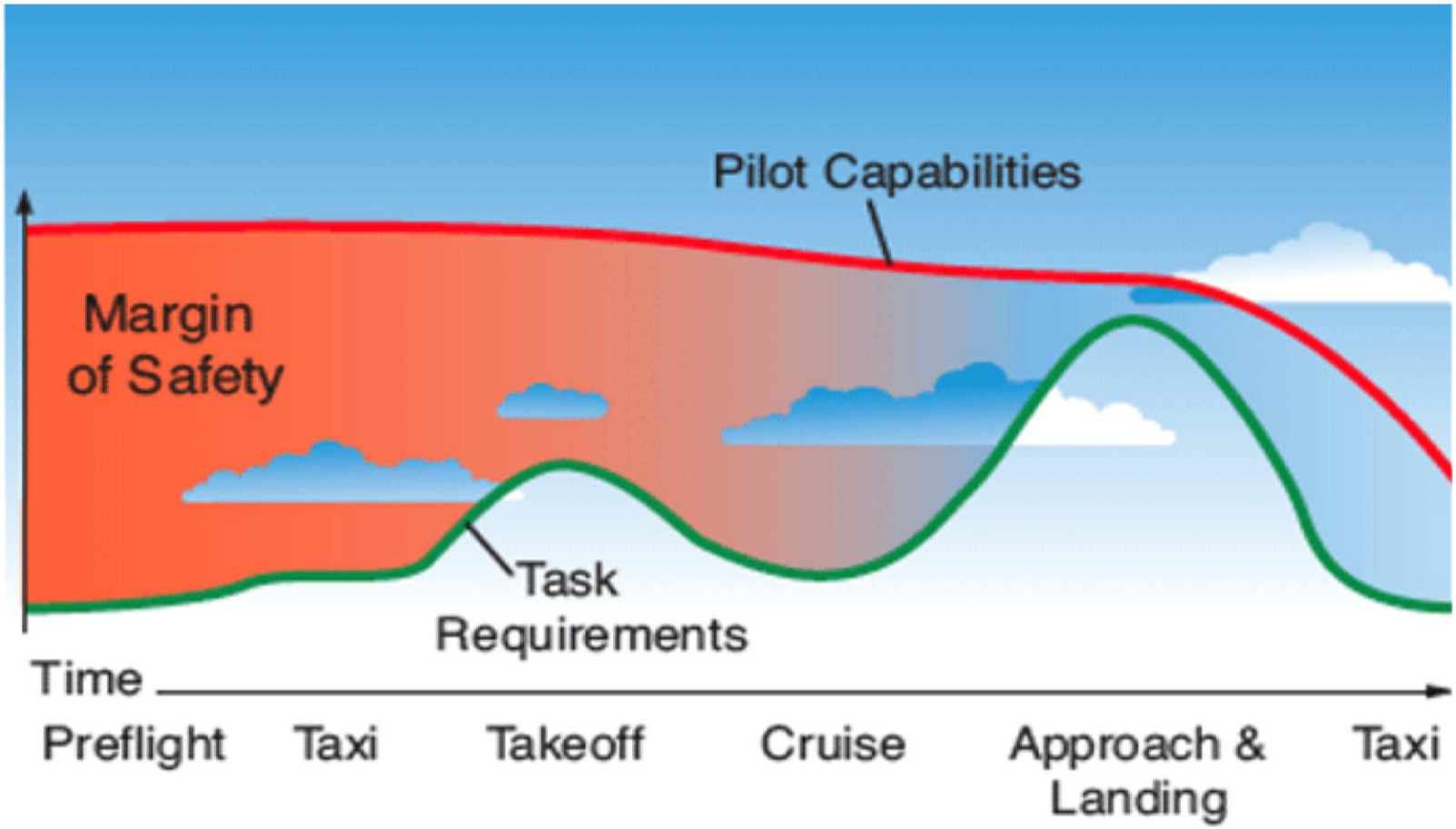


Fatigue degrades performance

- Perception of risk lowered
- Increased risk tolerance
- Situational awareness reduced
- Tunnel vision
- Tasks forgotten or ignored
- Increased errors
- …

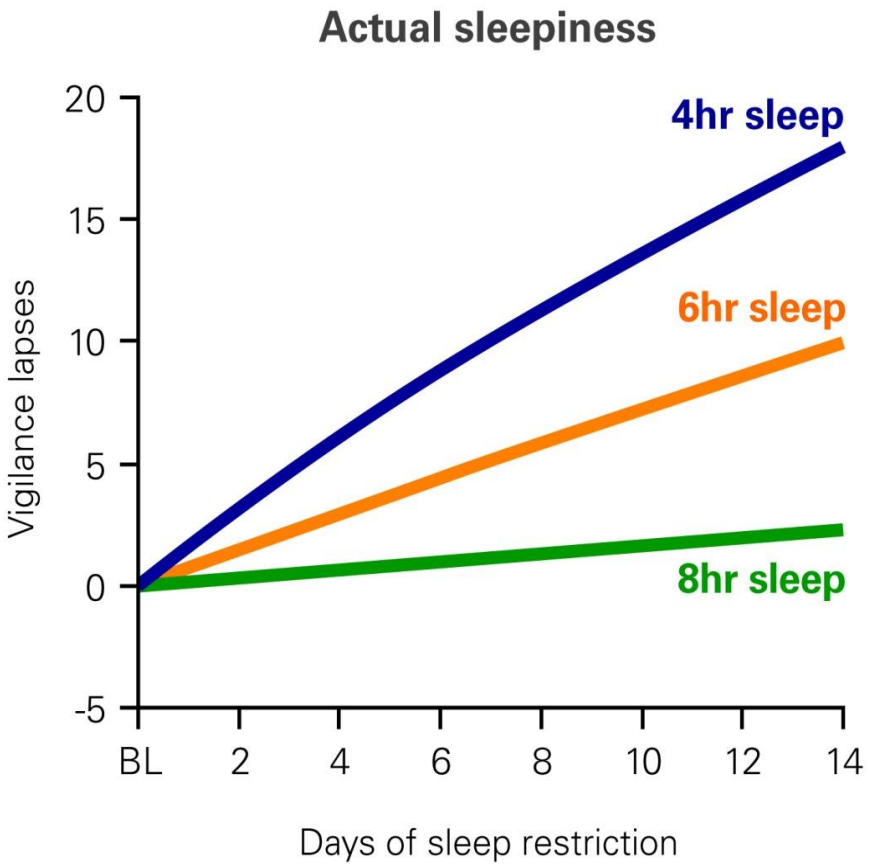

•Parietal lobe: integrates information from the senses. Calculations, manipulation of objects
•Thalamus: Alertness
•Parts of the brain responsible for understanding the world and the data around us start to slow down – priority given to the thalamus
•Occipital lobe: Visual processing
•Prefrontal cortices: Problem solving

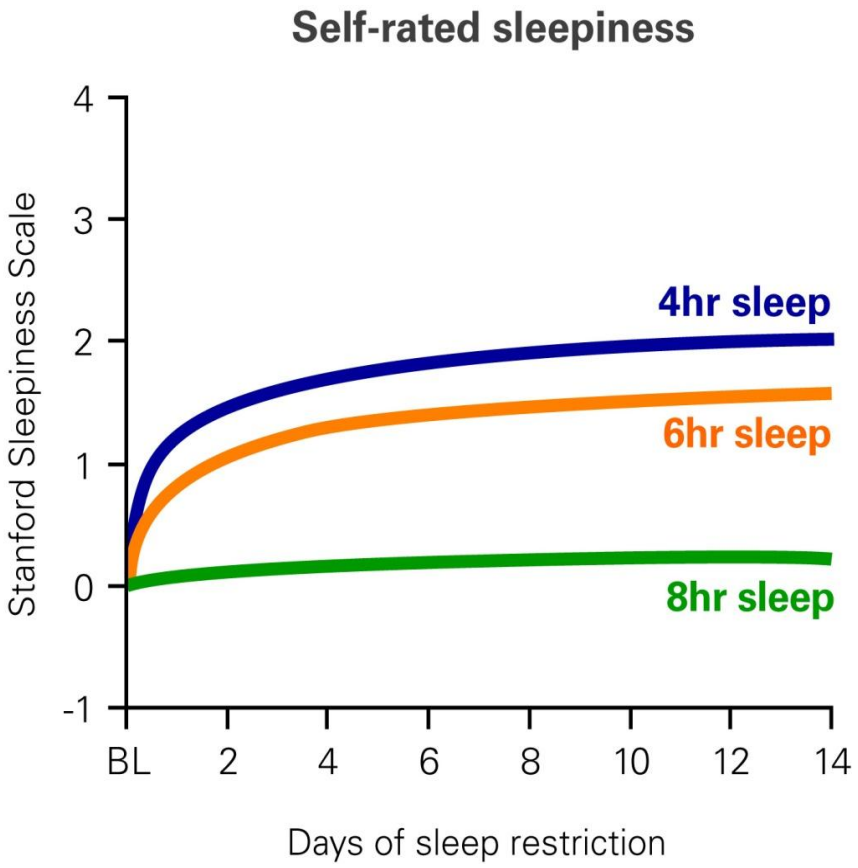
Fatigue reduces the safety margin



What is fatigue in aviation?

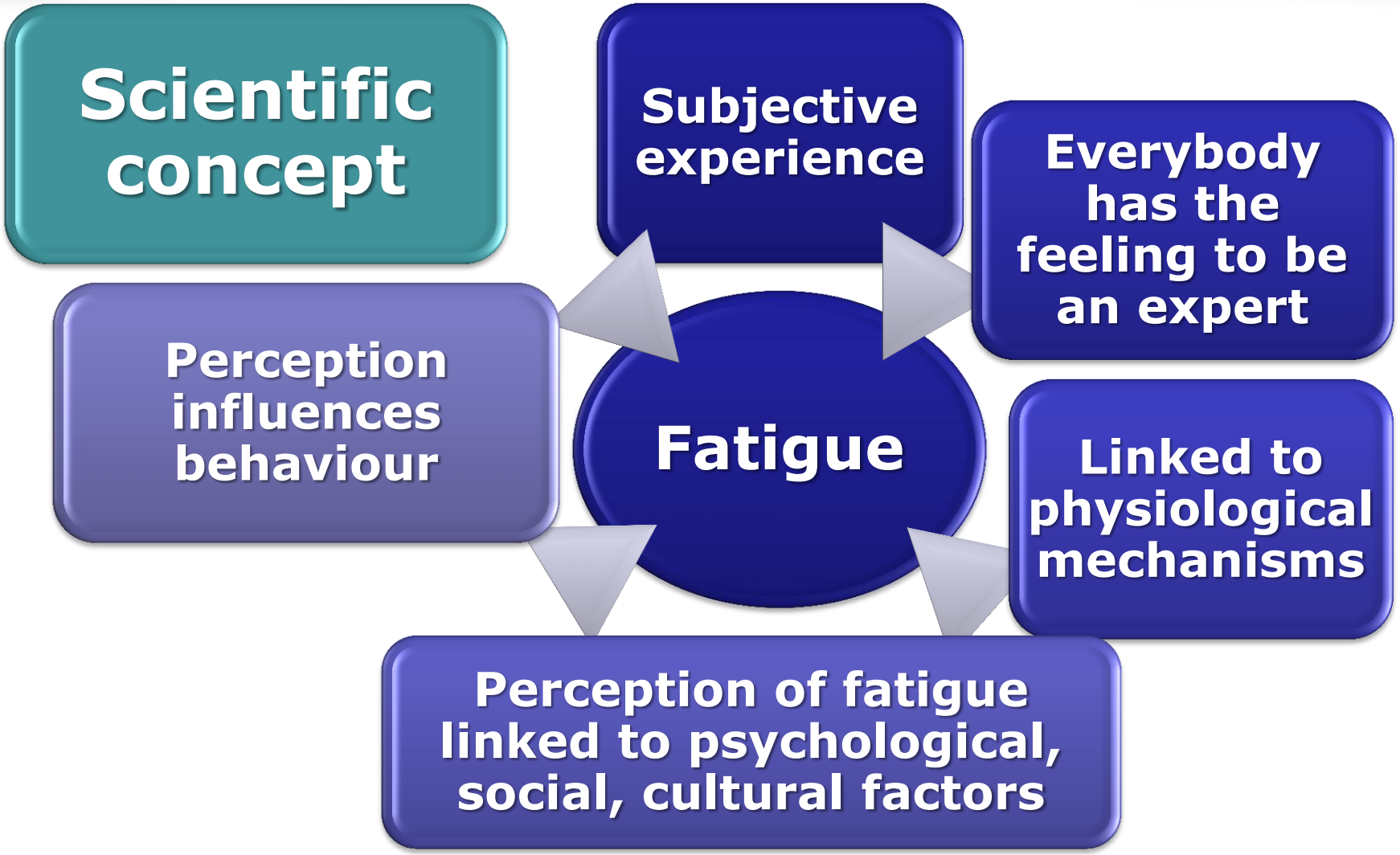
Self-assessments of fatigue are not accurate





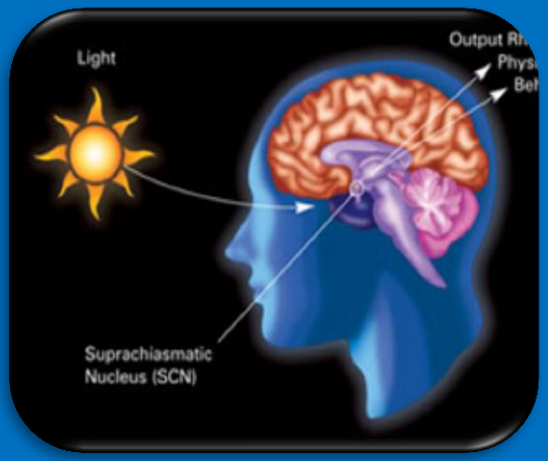
- *Van Dongen, Maislin, Mullington, and Dinges (2003)*

From intuition to science



Alertness is regulated by three processes

- **1. Sleep/wake**
- Alertness increases with sleep and decreases with hours awake



- **2. Circadian rhythms**
- Alertness varies
- in a 24-hour rhythm

- **3. Sleep inertia**
- Temporary grogginess experienced upon

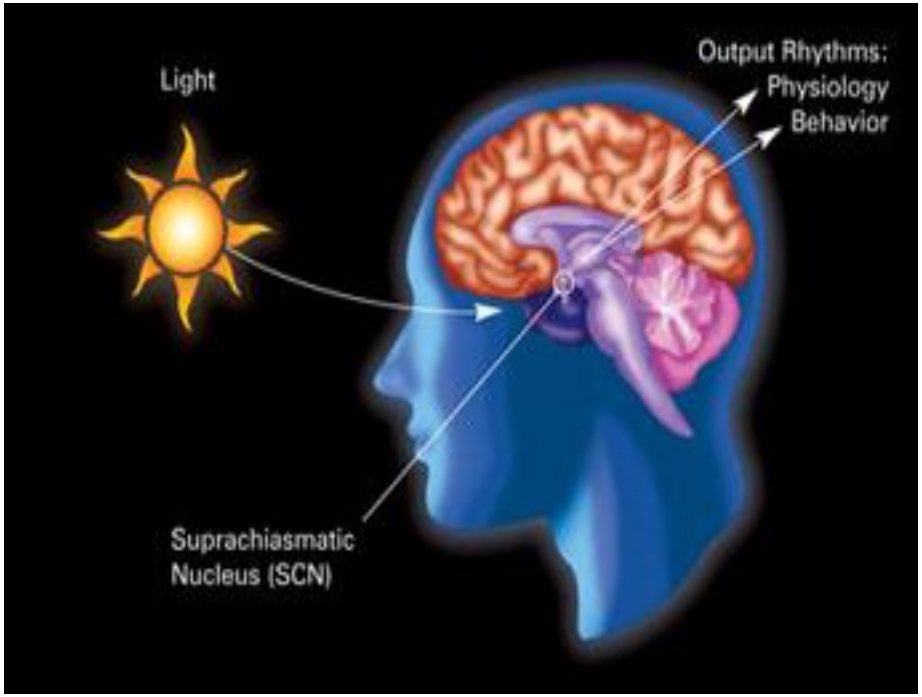
- *Folkard, S. and T. Akerstedt, (1991) A three-process model of the regulation of sleepiness and alertness. In Ogilvie, R. and Broughton, R. (eds.) Sleep, arousal and performance: problems and promises, Boston, Birkhäuser, 1991:11-26 .*

Circadian rhythms

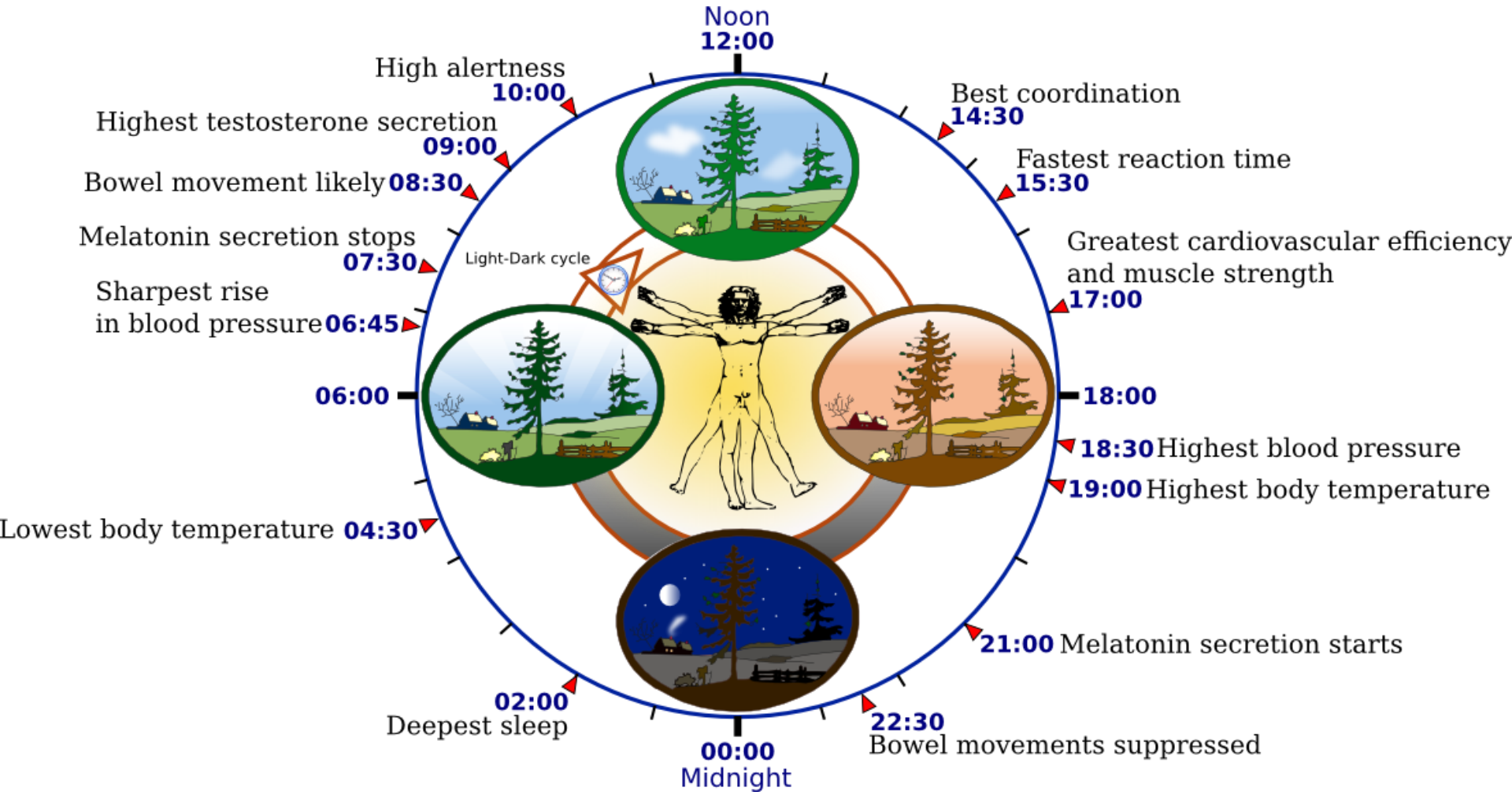
Generated by the **body clock**, located in the hypothalamus

Prepare us for **activity** during day and **sleep** at night

Timing influenced by external cues, particularly **light**.

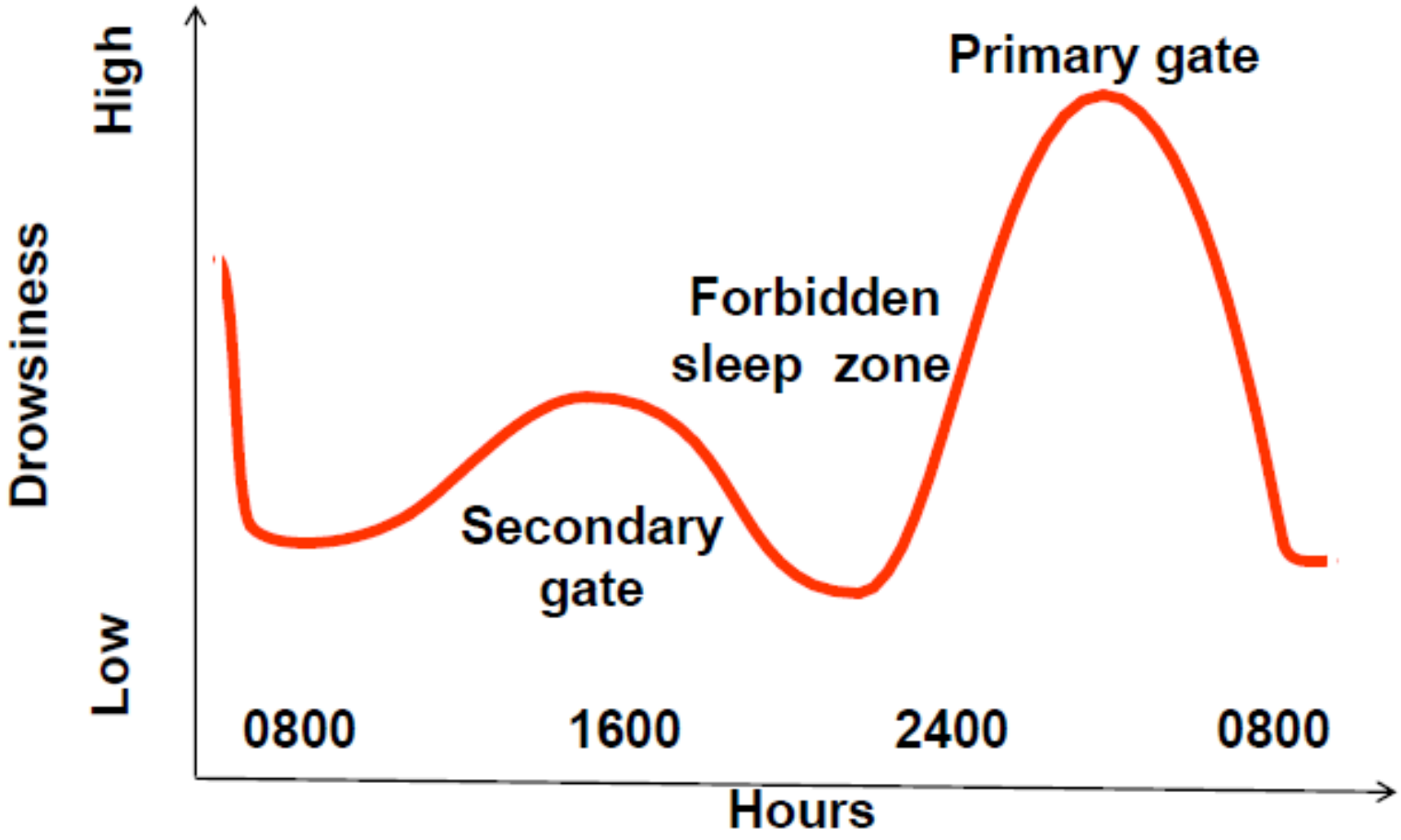


The body clock



- Taken from Wikimedia Commons

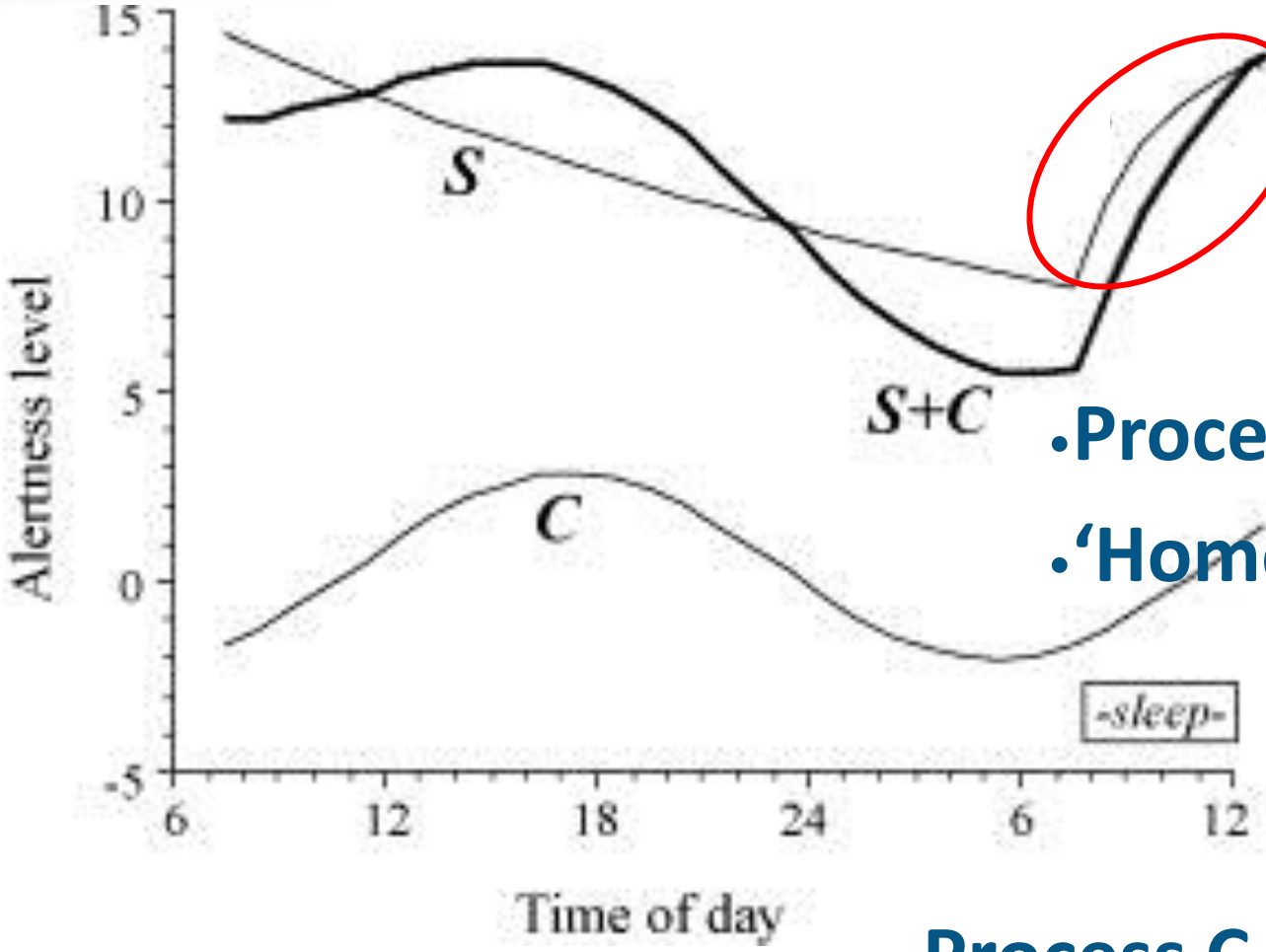
Sleep propensity



ematic representation of time periods favouring sleep or

(from Stampi, 1988)

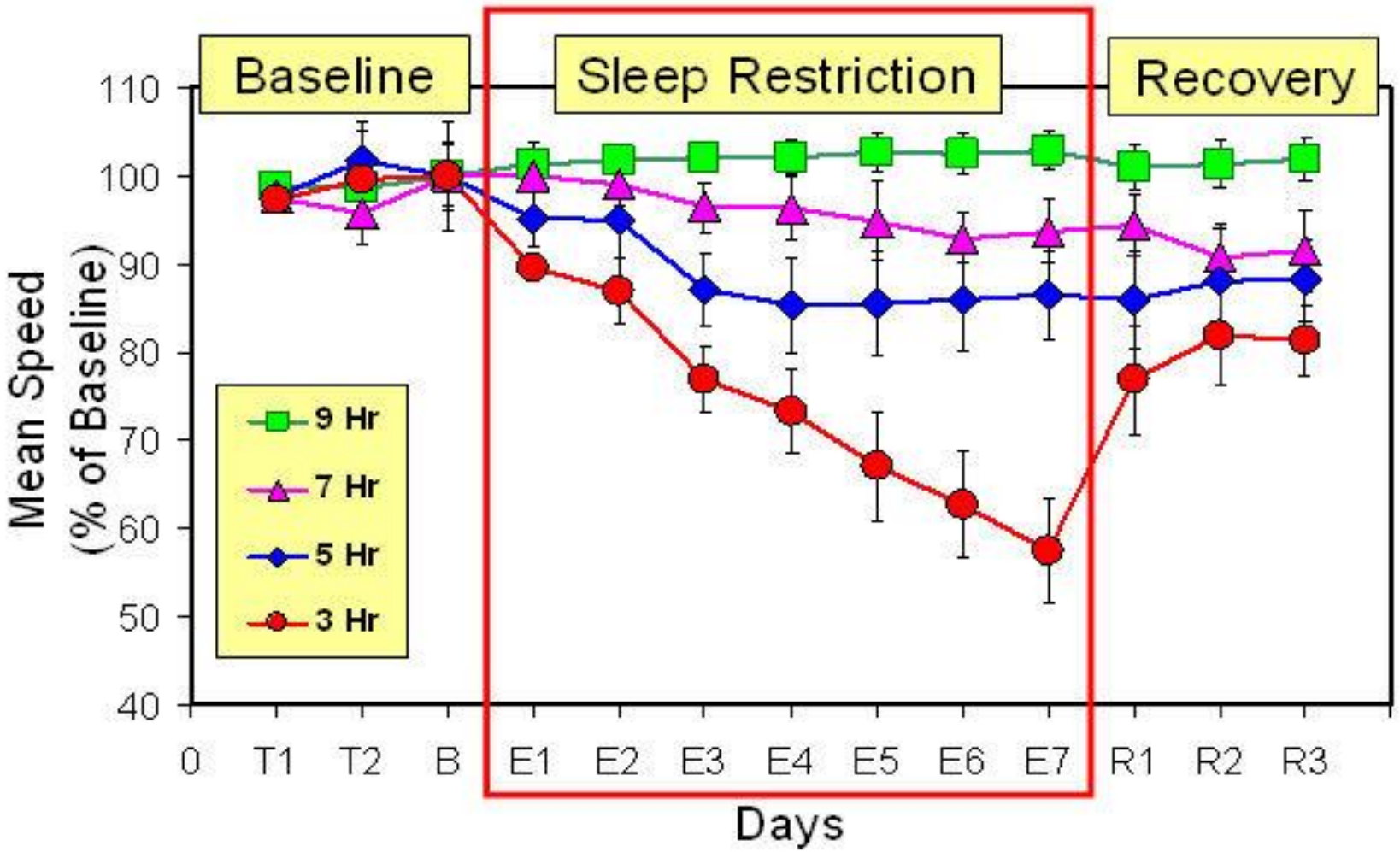
Alertness components



- Process W
- Process S ‘Sleep inertia
- ‘Homeostasic need for
- Process C
- ‘Endogenous circadian pac

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

What is cumulative sleep loss?

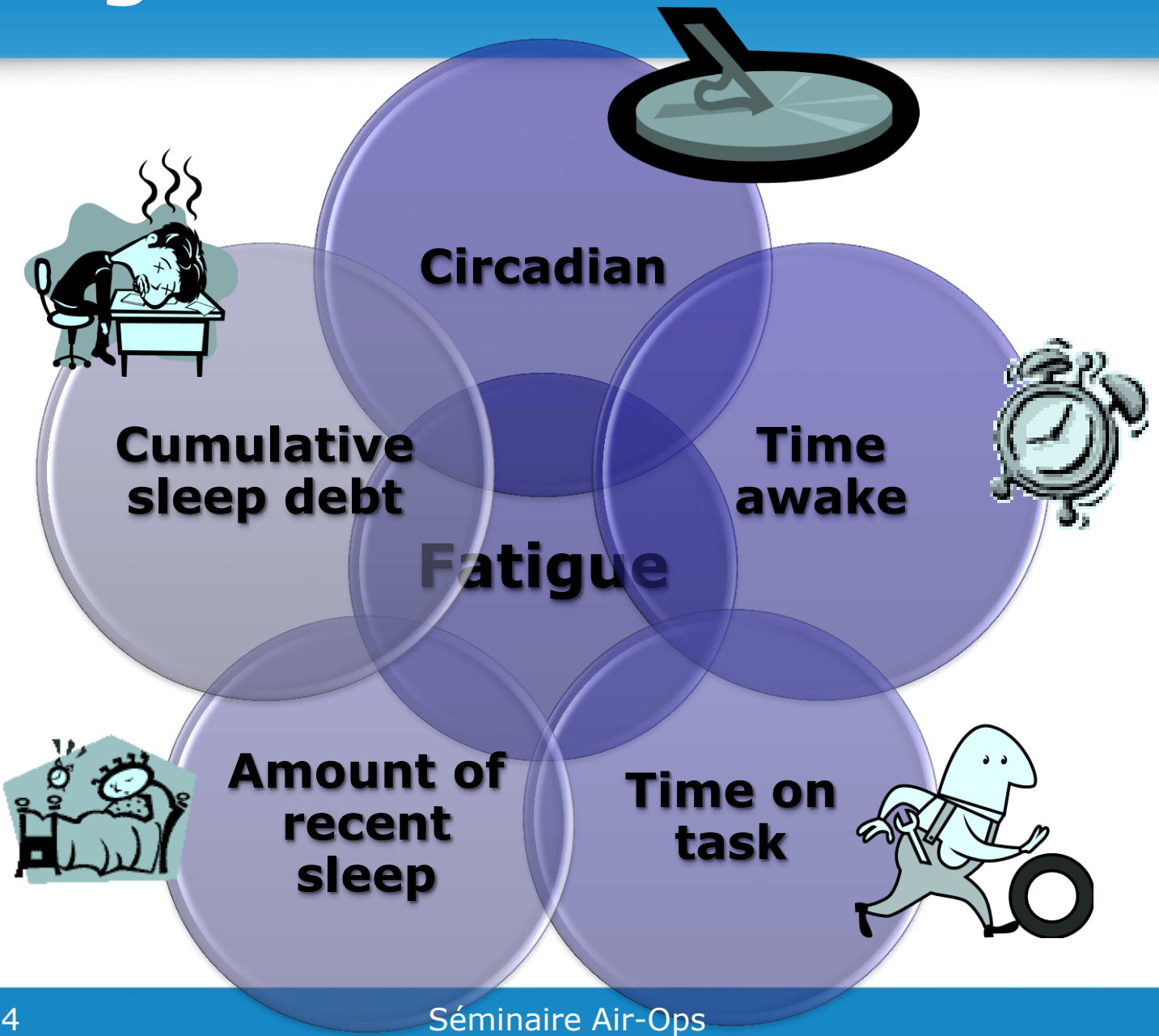


•From Belenky G, Wesensten NJ, Thorne DR, Thomas ML, Sing HC, Redmond DP, Russo MB, Balkin TJ (2003). Patterns of performance degradation and restoration during sleep restriction and subsequent recovery: a sleep dose-response study. Journal of Sleep Research 12: 1-12.

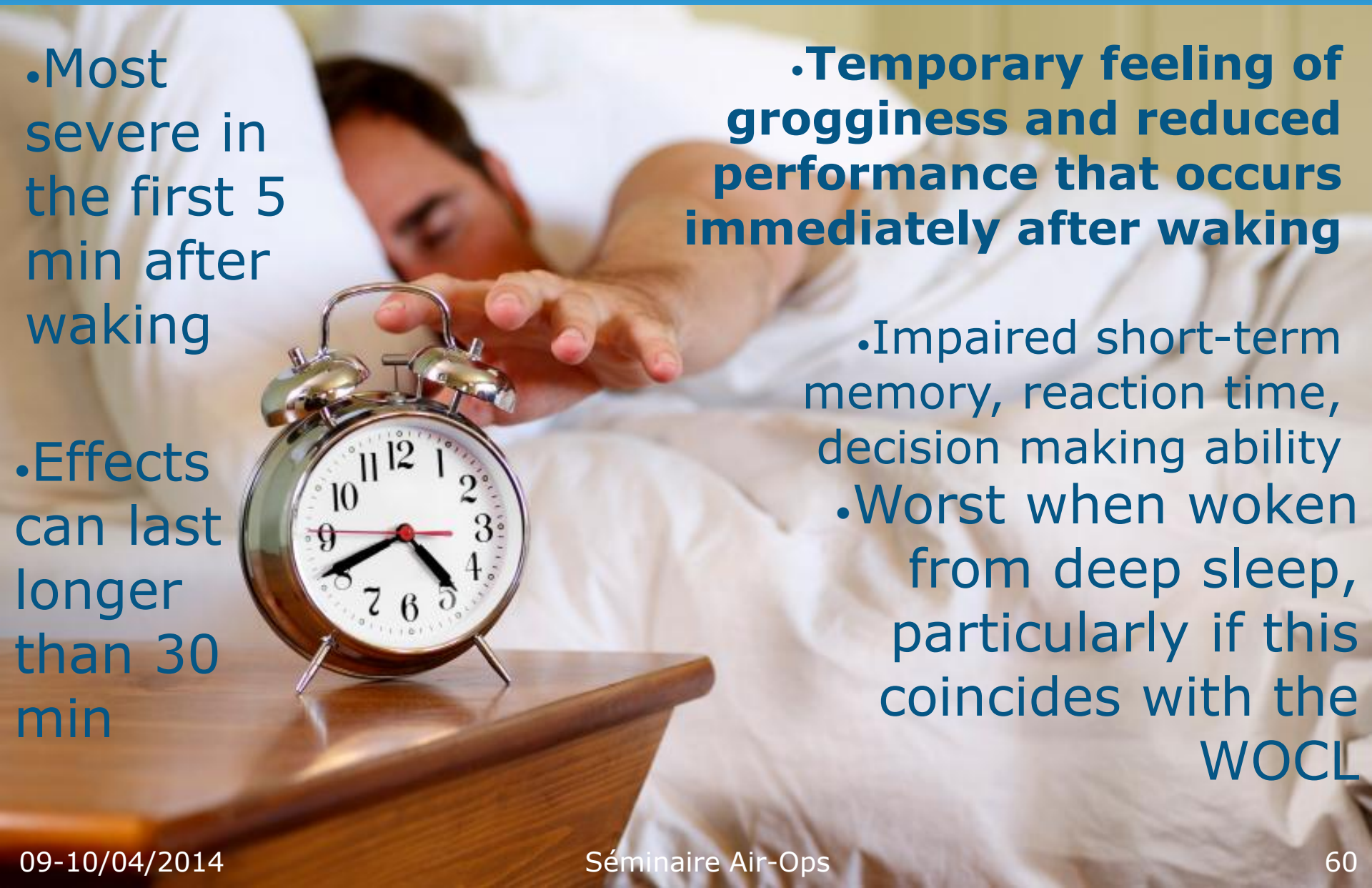
Types of sleep loss

	Transient	Cumulative
What is it?	Short-term e.g. 24h	Longer-term e.g. multiple days, weeks, months. years
Other terms	Acute	Cumulative Chronic
British aviation distinction	Tired	Fatigued
Research and understanding	Significant	Limited

Fatigue factors



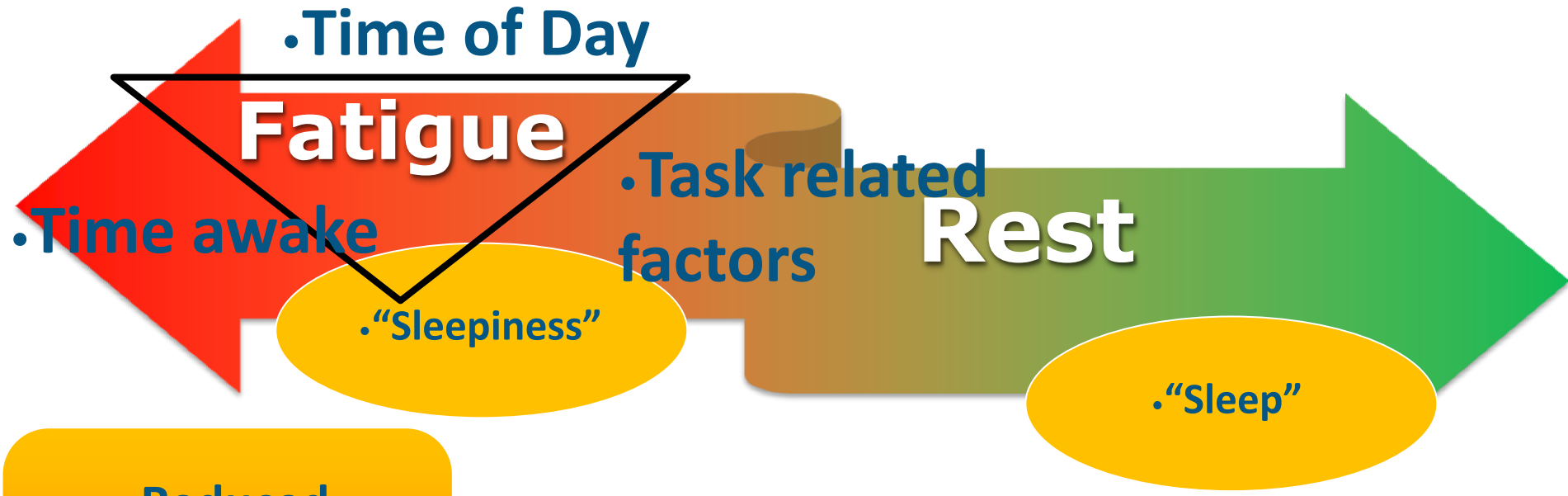
Sleep inertia



- Most severe in the first 5 min after waking
- Effects can last longer than 30 min

- **Temporary feeling of grogginess and reduced performance that occurs immediately after waking**
- Impaired short-term memory, reaction time, decision making ability
- Worst when woken from deep sleep, particularly if this coincides with the WOCL

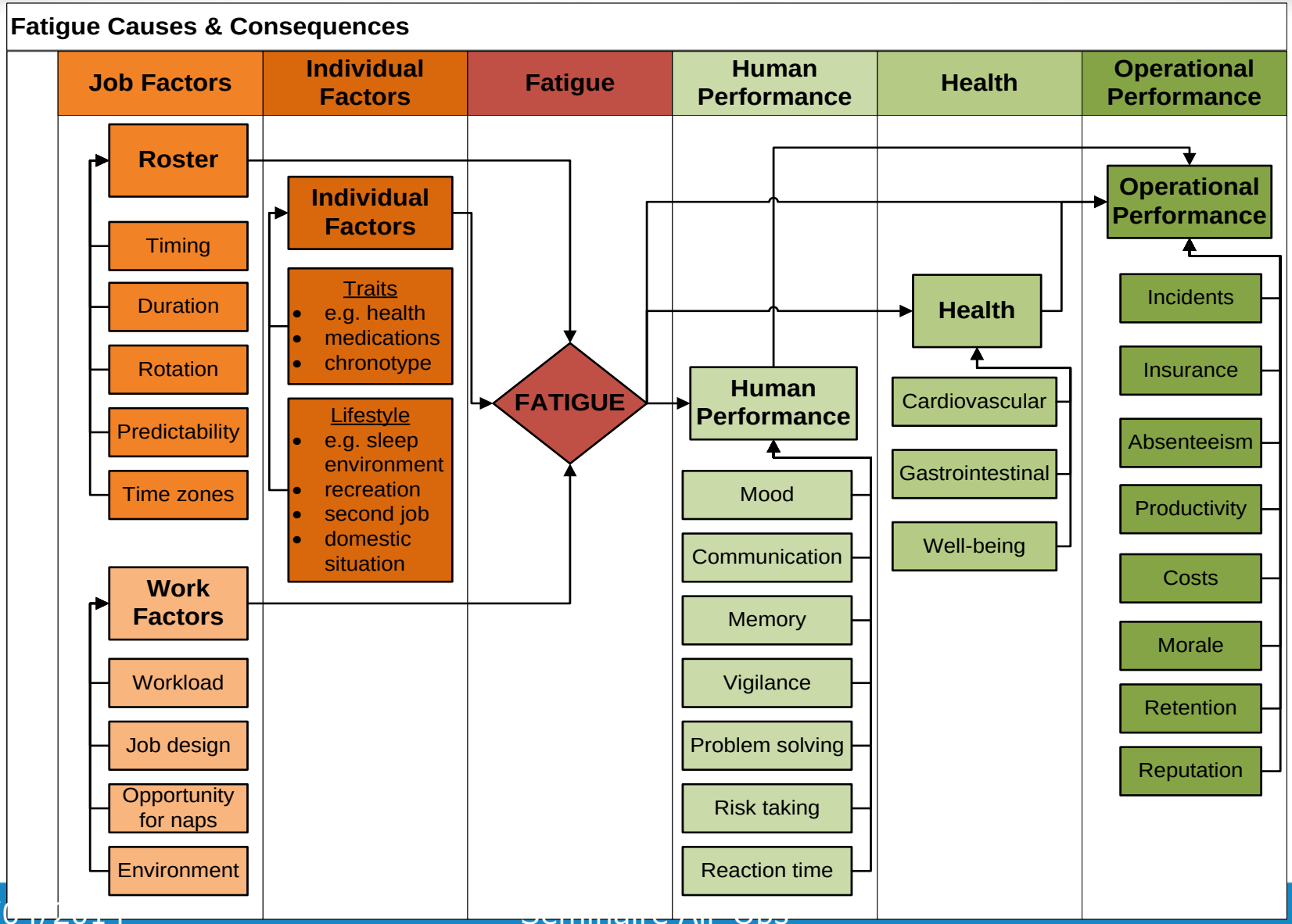
Fatigue: a hazard in aviation



•Reduced Performance Capability

•Accident

Causes and consequences of fatigue



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Fatigue

reduces the safety margin;

has multiple causes;

and the true cost may be hidden.

Effective fatigue control needs more than just ‘numbers’.

Strengths and weaknesses of FTL schemes

Strengths	Weaknesses
Clear boundaries	Limits not based on science and do not adequately consider the circadian rhythms in sleep and alertness
Offer a simple level of protection to employees	Only address one cause of fatigue (hours of work) and not fatigue caused by the nature of work, lifestyle factors, health difficulties, commuting or the environment
	Maximum limits perceived as safe and often used as “targets”.
	We assume that if “it’s legal, it’s safe”
	“One size fits all” and static: don’t reflect differences between operators or changes over
	Responsibility remains with the regulatory authority/State

Scientific principles 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…

The new EU fatigue management framework

When ?	Reg. 83/2014 Art. 2 – **18 February 2016**
To whom?	CAT operations by aeroplane **except** Air Taxi, Single Pilot & EMS
Opt out	In-flight rest until **17 February 2017**

Cover Regulation

- **Recitals**
  - **FTL without prejudice to more protective social legislation**
- **Continuous review of effectiveness**
  - **Impact of new rules on aircrew alertness**

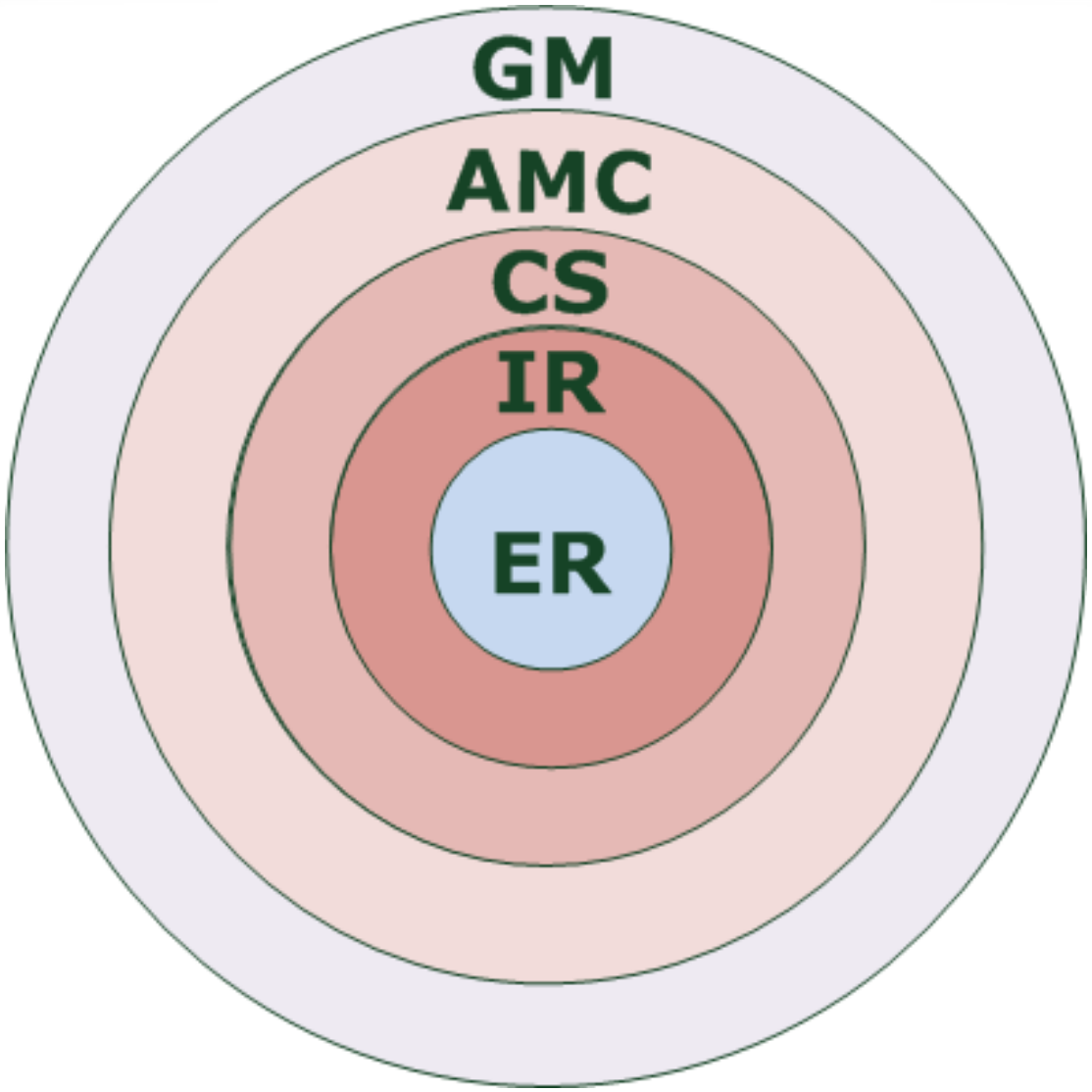
Implementation

ARO.OPS.230
Determination of disruptive schedules

ARO.OPS.235
Approval of individual flight time specification schemes

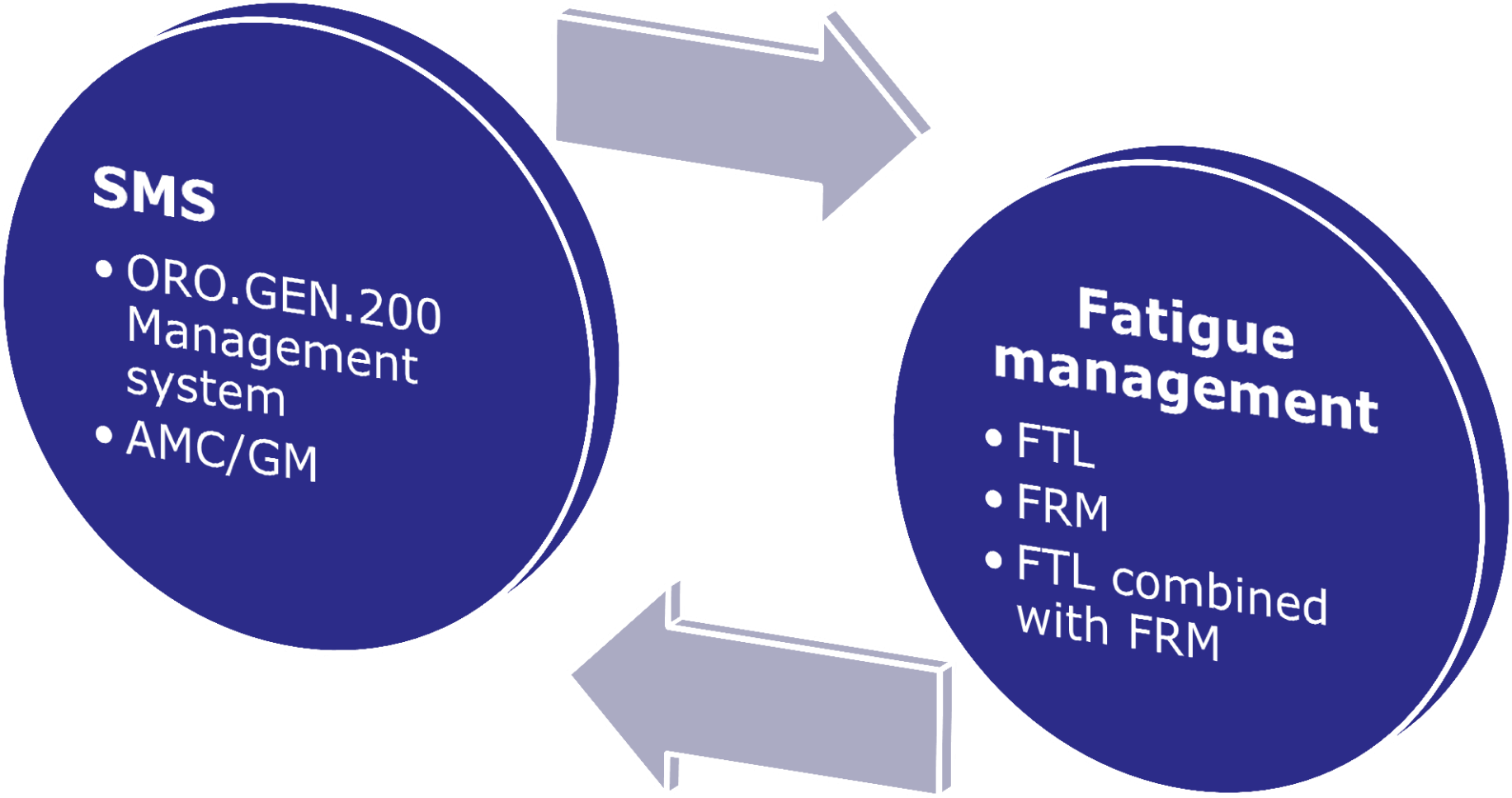
Flight time specification schemes

.ARO.OPS.235

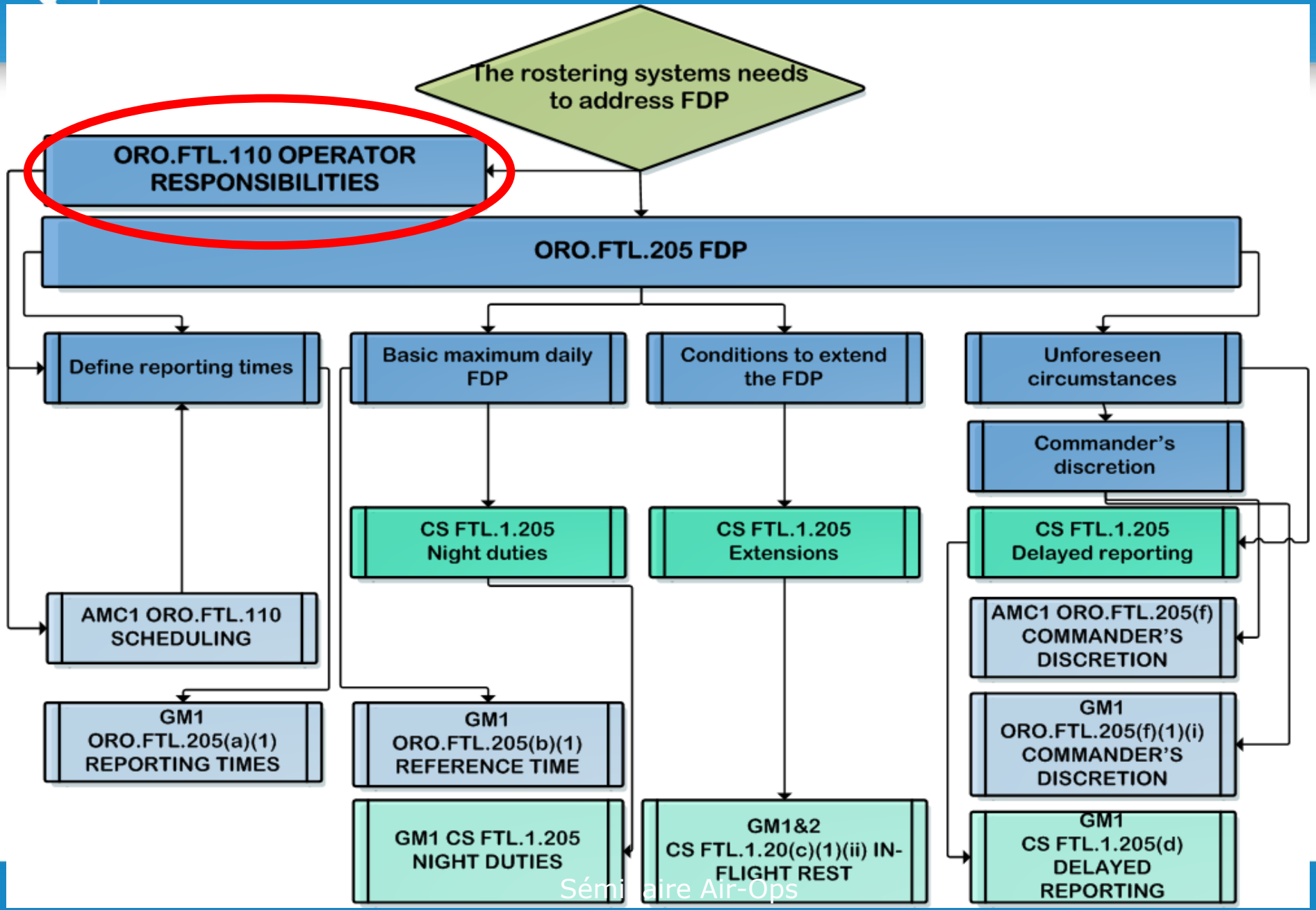


.ORO.FTL.125

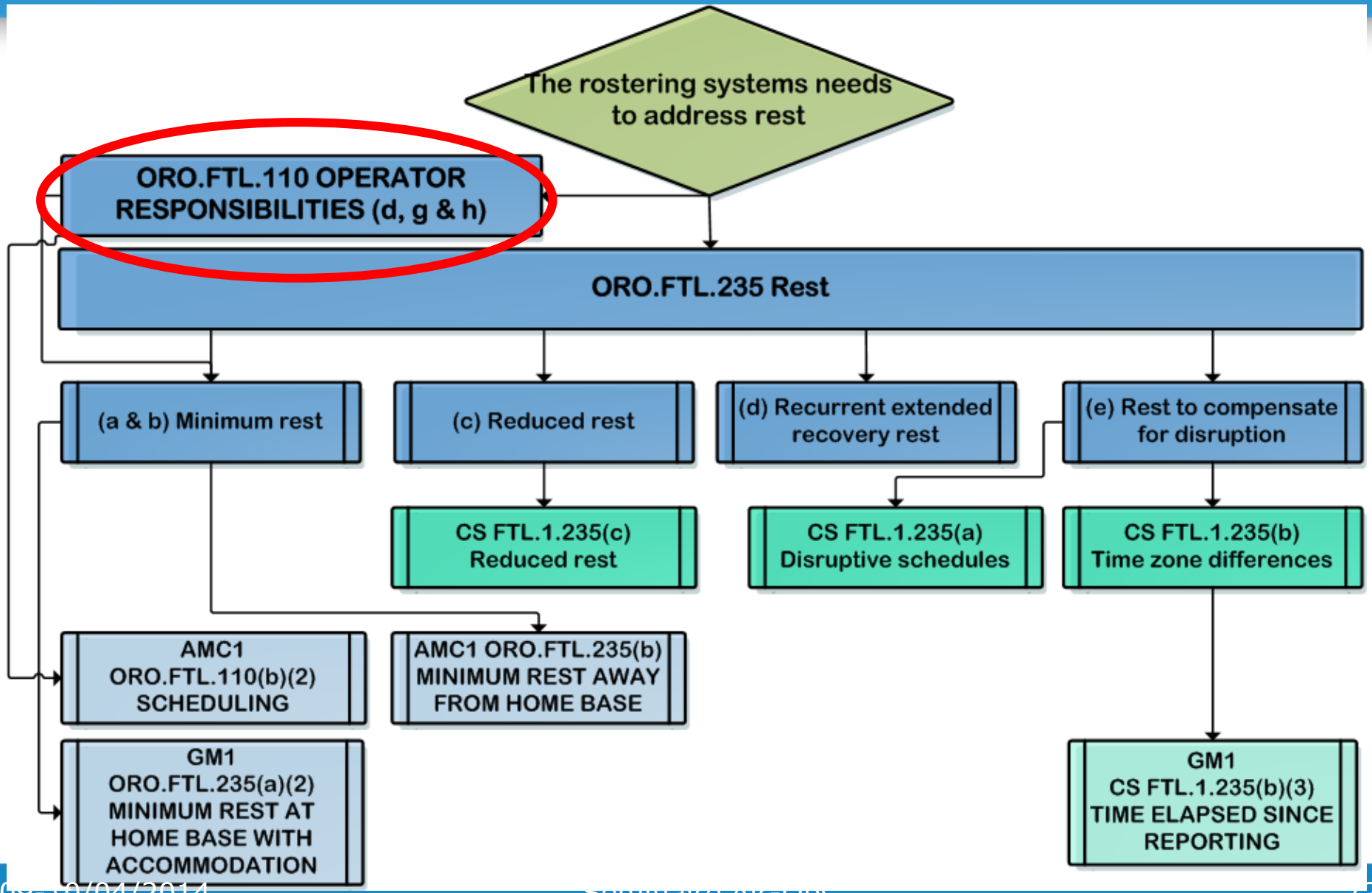
Fatigue management & SMS



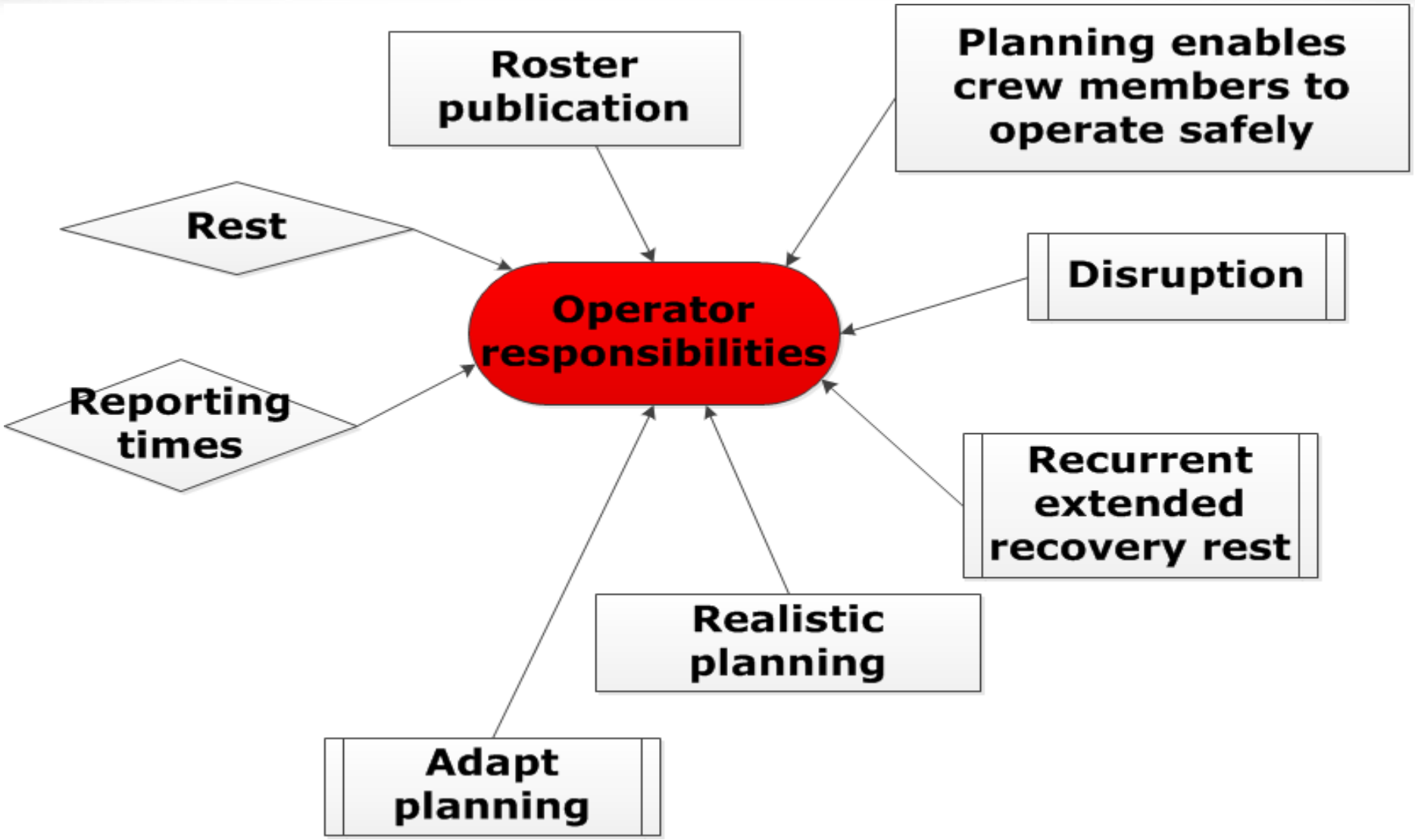
Example: FDP


The rostering systems needs to address FDP
ORO.FTL.110 OPERATOR RESPONSIBILITIES
ORO.FTL.205 FDP
Define reporting times
Basic maximum daily FDP
Conditions to extend the FDP
Unforeseen circumstances
Commander's discretion
CS FTL.1.205 Night duties
CS FTL.1.205 Extensions
CS FTL.1.205 Delayed reporting
AMC1 ORO.FTL.110 SCHEDULING
AMC1 ORO.FTL.205(f) COMMANDER'S DISCRETION
GM1 ORO.FTL.205(a)(1) REPORTING TIMES
GM1 ORO.FTL.205(b)(1) REFERENCE TIME
GM1 ORO.FTL.205(f)(1)(i) COMMANDER'S DISCRETION
GM1 CS FTL.1.205 NIGHT DUTIES
GM1&2 CS FTL.1.20(c)(1)(ii) IN-FLIGHT REST
GM1 CS FTL.1.205(d) DELAYED REPORTING

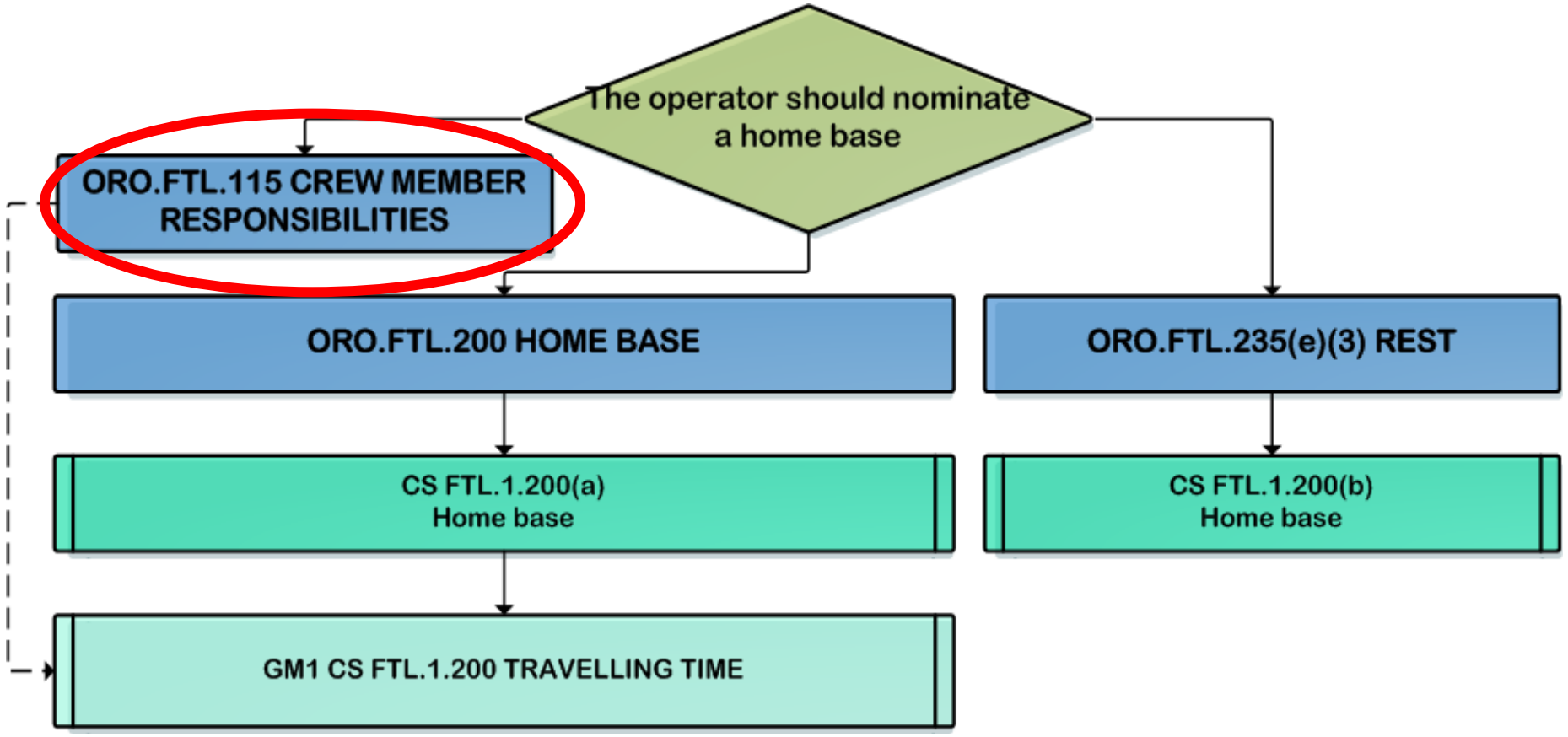
Rest


The rostering systems needs to address rest
ORO.FTL.110 OPERATOR RESPONSIBILITIES (d, g & h)
ORO.FTL.235 Rest
(a & b) Minimum rest
(c) Reduced rest
(d) Recurrent extended recovery rest
(e) Rest to compensate for disruption
CS FTL.1.235(c) Reduced rest
CS FTL.1.235(a) Disruptive schedules
CS FTL.1.235(b) Time zone differences
AMC1 ORO.FTL.110(b)(2) SCHEDULING
AMC1 ORO.FTL.235(b) MINIMUM REST AWAY FROM HOME BASE
GM1 ORO.FTL.235(a)(2) MINIMUM REST AT HOME BASE WITH ACCOMMODATION
GM1 CS FTL.1.235(b)(3) TIME ELAPSED SINCE REPORTING

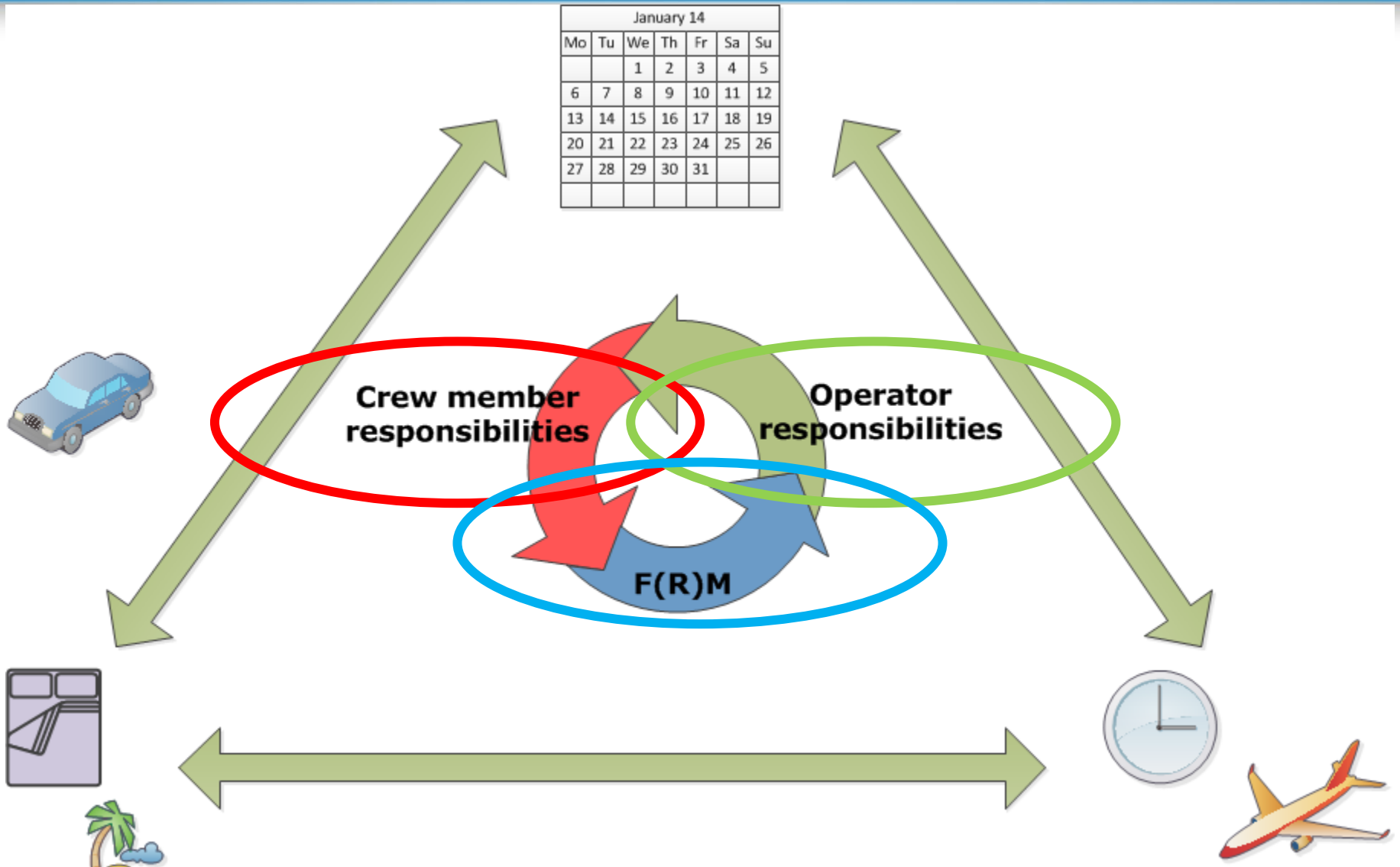
ORO.FTL.110 & AMC/GM



Home Base


The operator should nominate a home base
ORO.FTL.115 CREW MEMBER RESPONSIBILITIES
ORO.FTL.200 HOME BASE
ORO.FTL.235(e)(3) REST
CS FTL.1.200(a) Home base
CS FTL.1.200(b) Home base
GM1 CS FTL.1.200 TRAVELLING TIME

Flight time specification scheme



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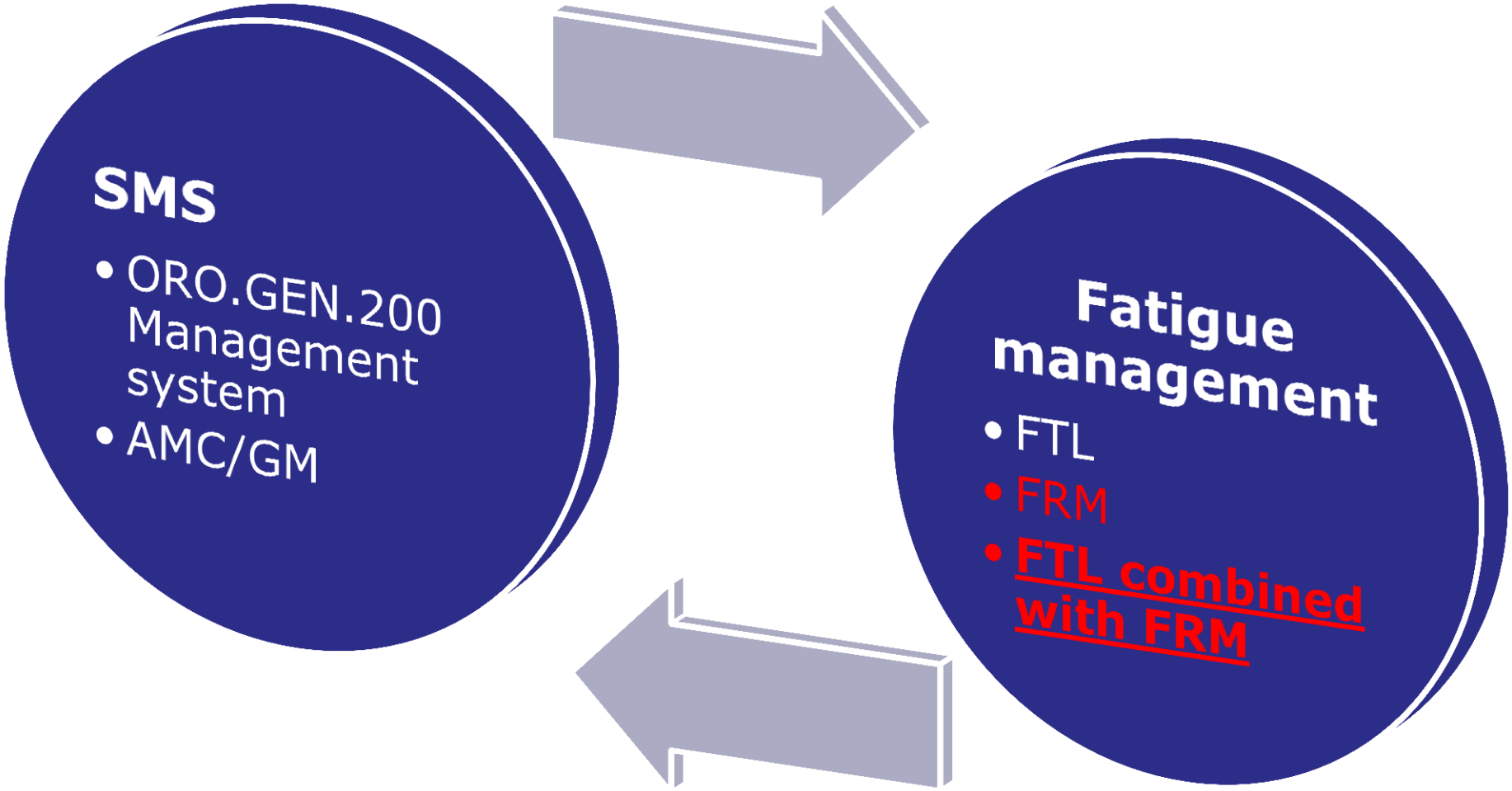
KEY POINTS

- IR, CS, AMC and GM are a system, they complement each other
- Don’t look at rules or numbers in isolation
- Fatigue management is a shared responsibility

What is new?


SMS
• ORO.GEN.200 Management system
• AMC/GM
Fatigue management
• FTL
• FRM
• FTL combined with FRM

What is fatigue risk management?

Fatigue Risk Management

A data-driven, business risk management approach to fatigue

Processes for measuring, mitigating and managing fatigue risk

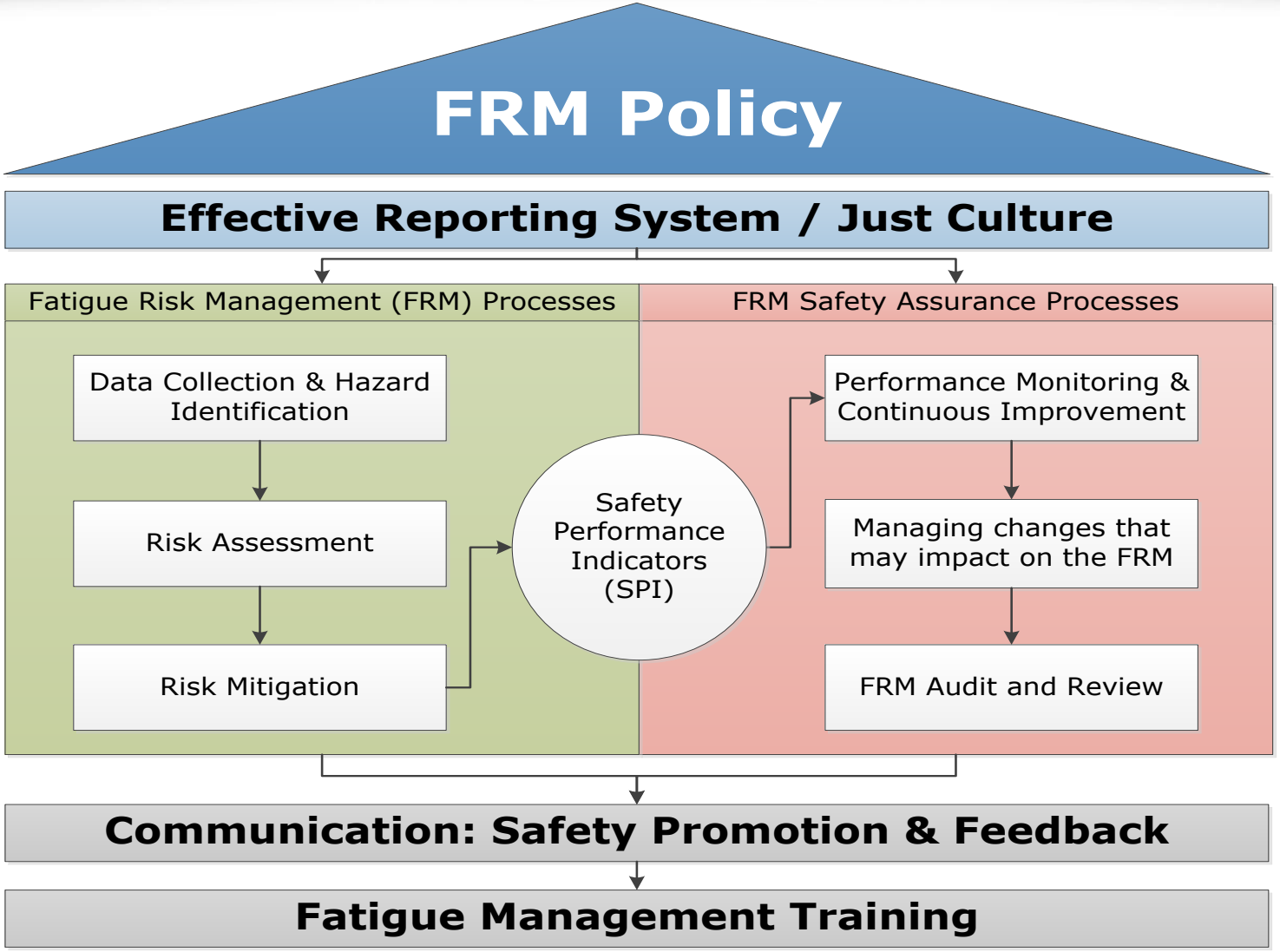
More effective than FTL alone

Based on scientific principles and knowledge, data collection and analysis, and so enables to maintain an equivalent level of safety whilst allowing greater operational flexibility.

FRM is an integral part of SMS

SMS	FRM
Safety policy & objectives	FRM policy & documentation
Safety risk management	Fatigue risk management process • Identification of hazards • Risk assessment • Risk mitigation • Implementation
Safety assurance	Fatigue safety assurance • Monitor effectiveness of FRM • Management of change • Continuous improvement of FRM
Safety promotion	FRM promotion process • Training programmes • FRM communication plan

FRM Structure

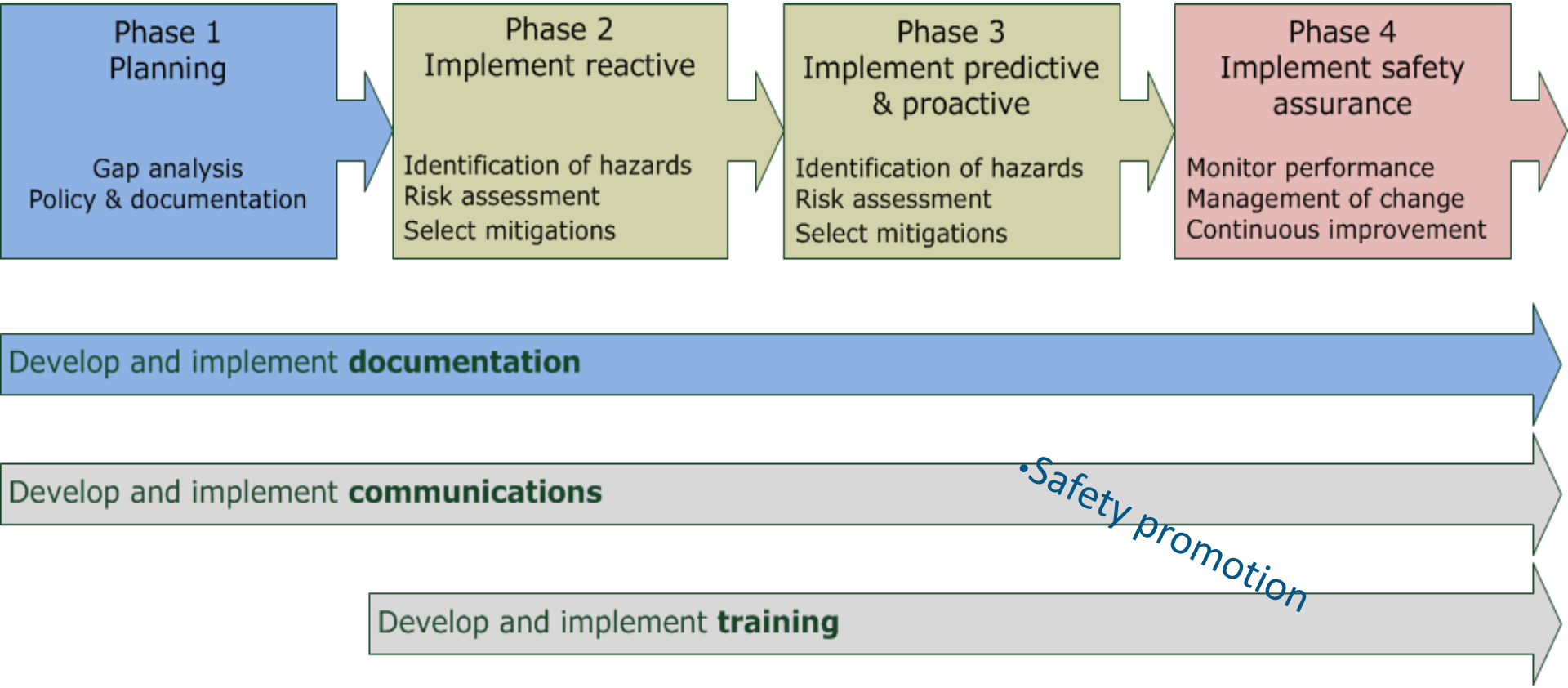


Example sources of data on fatigue

- Roster metrics e.g. stability, standby usage, number of sectors
- Statistics: absenteeism, sickness, turn-over, commute
- Fatigue reports and incident investigations
- Ergonomic assessment of work and sleep environment
- Fatigue model analysis of rosters
- Crew surveys and focus groups
- Scientific studies e.g. sleep diaries, actigraphy

•Approval & Oversight (1)

•Phased Implementation



•Approval & Oversight (2)

Substance

•Aesthetics versus Substance

Balanced communication

Clear reporting process

Appropriate reporting forms

Manual relevant to the operator

Assurance finding

Access to all

Eye candy

Flashy power points

Overly detailed reporting forms

"Familiar" Manual

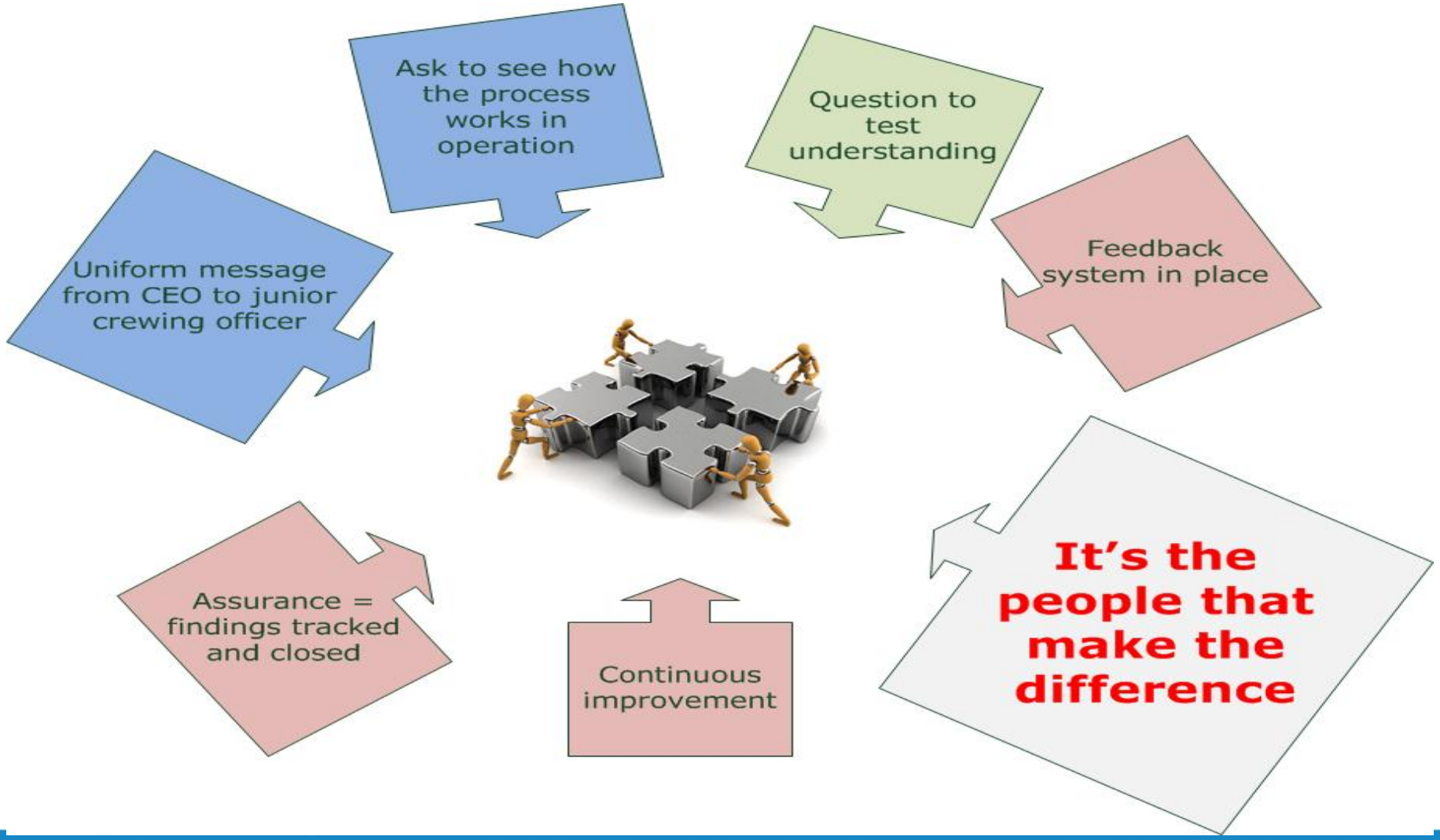
"Perfect" paperwork

Waffle

Aesthetics

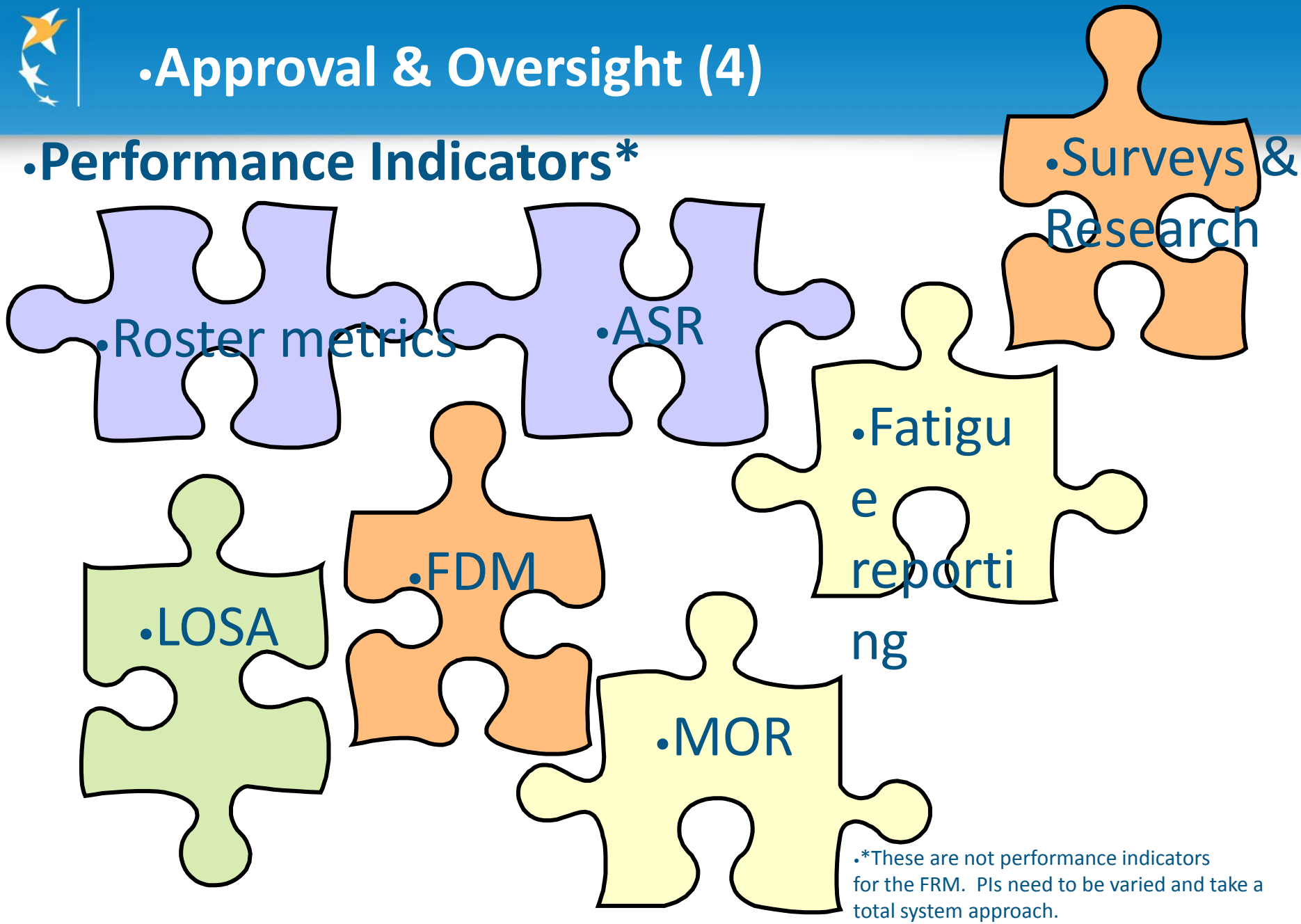
Approval & Oversight (3)

- How to tell the difference?



•Approval & Oversight (4)

•Performance Indicators*

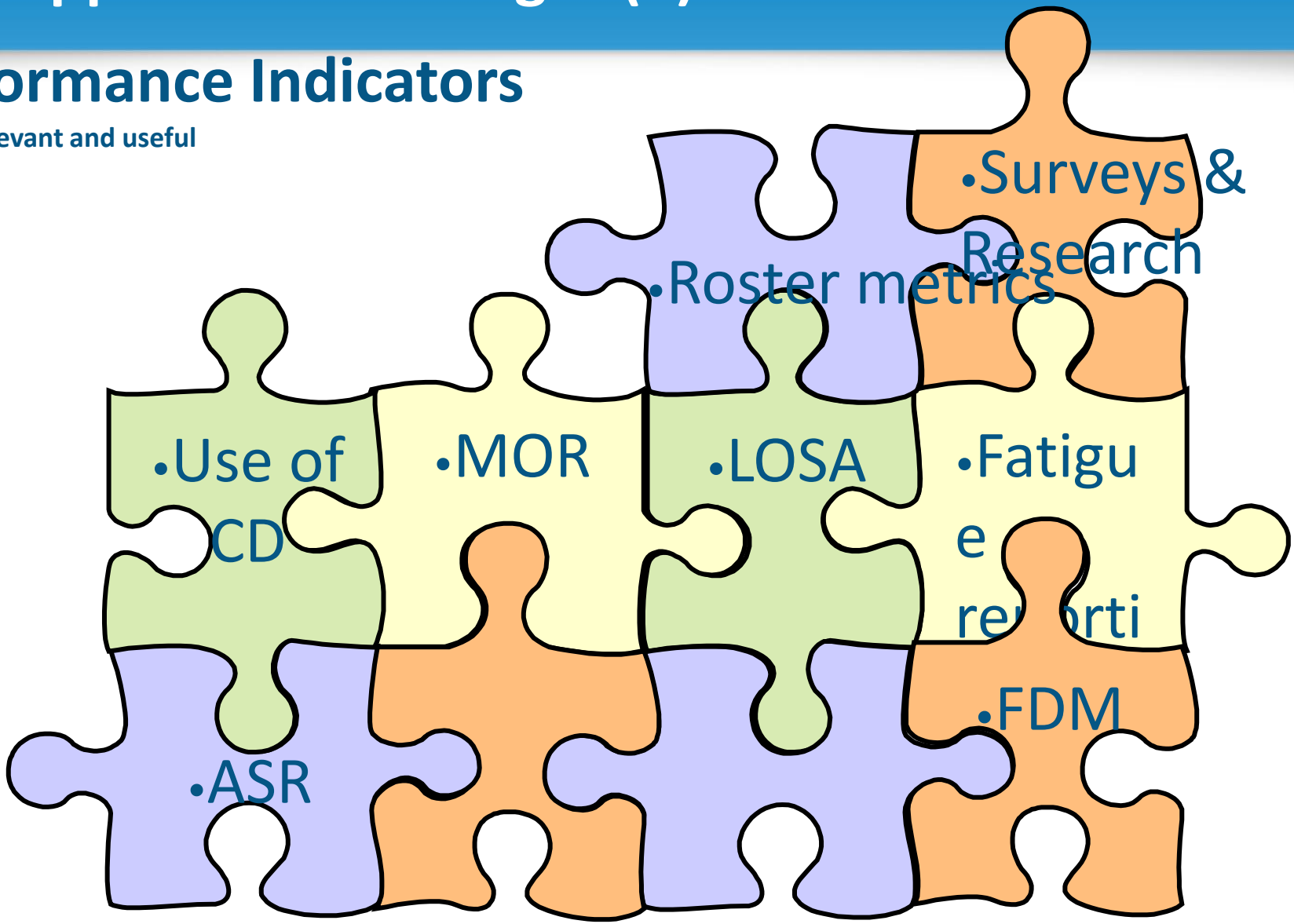


•*These are not performance indicators for the FRM. PIs need to be varied and take a total system approach.

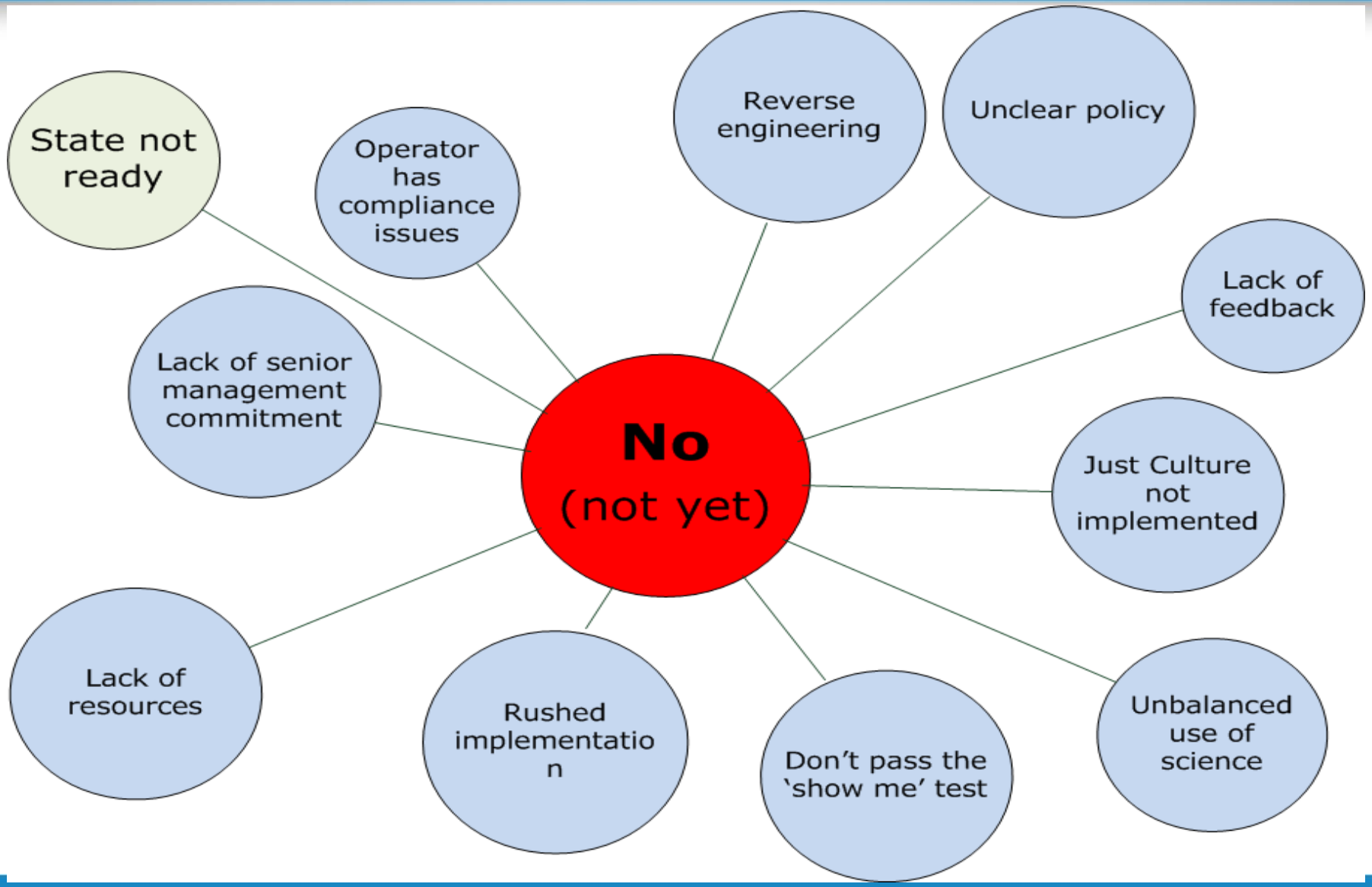
•Approval & Oversight (5)

•Performance Indicators

Must be relevant and useful



•Approval & Oversight (6)



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State needs to be ready

Operator demonstrates compliance with FTL through fatigue management

- Relevant PIs, reporting system etc.

Demonstrable commitment to FRM

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.Benefits of FRM

Rather than complying with prescriptive limits, FRM relies on actually measuring and managing the fatigue-related risks.

Increased risk knowledge enables enhanced management of safety.

Benefits include reduced safety events, informed strategic decisions, increased operational flexibility, reduced insurance premiums, more effective regulatory oversight and improved relations with the unions.

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06. Questions diverses

Séminaire Air OPS

09-10 April 2014
Paris

Your safety is our mission.
easa.europa.eu

Documentation

ORO.MLR.100 Manuel d'exploitation

Le manuel d'exploitation peut être publié en plusieurs parties séparées.

AMC1 ORO.MLR.100 Operations manual – general

(a) The operations manual (OM) may vary in detail according to the complexity of the operation and of the type and number of aircraft operated.

(c) The OM should be such that:

(1) all parts of the manual are consistent and compatible in form and content;[..]

Aucune exigence pour le développement de manuels séparés ou uniques.

L'IR et l'AMC fournissent de la flexibilité.

Il revient à l'autorité compétente d'évaluer le système documentaire de l'exploitant.

Vol local / exploitation locale d'hélicoptère / zone locale

AMC2 CAT.IDE.A.125 Operations under VFR by day – flight and navigational instruments and associated equipment

LOCAL FLIGHTS

For flights that do not exceed 60 minutes' duration, that take off and land at the same aerodrome and that remain within 50 NM of that aerodrome, an equivalent means of complying with CAT.IDE.A.125 (a)(1)(vi) may be:

(a) a turn and slip indicator;

(b) a turn coordinator; or

(c) both an attitude indicator and a slip indicator.

"Vol local" n'est utilisé que dans le contexte de cet AMC et ne concerne que l'exploitation d'avions.

Il fournit un moyen assurant la conformité avec le point (a)(1)(vi) de l'IR

Vol local / exploitation locale d'hélicoptère / zone locale

Annexe I Définitions

70) une «exploitation locale d'hélicoptère» désigne une exploitation à des fins de transport aérien commercial d'hélicoptères ayant une masse maximale certifiée au décollage (MCTOM) supérieure à 3 175 kg et une configuration opérationnelle maximale en sièges passagers (MOPSC) permettant d'accueillir un maximum de 9 personnes, effectuée de jour, sur des routes navigables par repérage visuel au sol, dans une zone géographique locale définie, spécifiée dans le manuel d'exploitation;

« Exploitation locale d'hélicoptères » utilisé dans:

- CAT.OP.MPA.100 Utilisation des services de la circulation aérienne
- CAT.OP.MPA.151 Politique de carburant - assouplissements
- AMC1 CAT.OP.MPA.281 Gestion en vol du carburant – hélicoptères

La définition d'Exploitation locale d'hélicoptères s'applique uniquement à ces paragraphes.

Vol local / exploitation locale d'hélicoptère / zone locale

Zone locale

ARO.OPS.210: L'autorité compétente peut déterminer une telle zone.

Dans ce contexte, «zone locale » est utilisé dans:

- AMC1 ORO.MLR.110
- CAT.GEN.MPA.180
- CAT.OP.MPA.175

ARO.OPS.210 est applicable à tous ces paragraphes. L'autorité peut déterminer une zone locale. Si ce n'est pas le cas, l'exploitant peut le faire et doit le mentionner dans l'OM.

MOPSC

Annexe 1 Definitions:

'Maximum operational passenger seating configuration (MOPSC)' means the maximum passenger seating capacity of an individual aircraft, excluding crew seats, established for operational purposes and specified in the operations manual.

La «configuration maximale approuvée en sièges passagers (MOPSC)» désigne la capacité maximale en sièges passagers d'un aéronef particulier, à l'exclusion des sièges des membres d'équipage, établie à des fins d'exploitation et spécifiée dans le manuel d'exploitation.

Traduction erronée du texte initial en Français

La Commission se charge d'effectuer les modifications.

Extincteurs halon

CAT.IDE.A/H.250

(d) La nature et la quantité d'agent extincteur doivent être adaptées aux types d'incendies susceptibles de se déclarer dans le compartiment où l'extincteur est destiné à être utilisé, et réduire au minimum les risques de concentration de gaz toxiques dans les compartiments occupés par des personnes.

AMC1 CAT.IDE.A/H.250

(b) There should be at least one hand fire extinguisher installed in the flight crew compartment and this should be suitable for fighting both flammable fluid and electrical equipment fires. Dry chemical fire extinguishers should not be used in the flight crew compartment

Exigence extincteur halon supprimée sur la base du Règlement No 1005/2009 (modifié par 744/2010)

Extincteurs halon

Règlement 1005/2009 (amendé par 744/2010)

Article 6(2): Except for uses referred to in Article 13(1), fire protection systems and fire extinguishers containing halons shall be prohibited and shall be decommissioned.

Ce règlement interdit l'utilisation de halon, à l'exception de certaines utilisations critiques (incluant cockpit).

La production est stoppée, mais l'utilisation des extincteurs existants et recyclés est toujours possible.

A partir du 31/12/2014, interdit pour les nouveaux aéronefs.

A Partir de 2025, halon interdits.

Alternatives proposées dans les règlements de certification (CS23-CS25).

Une dérogation peut être envisagée pour les appareils nouveaux (principalement compartiments moteur/APU).

Données de performance

CAT.POL.A.105(b): Les données approuvées de l'AFM sont utilisées. En cas d'utilisation d'autres données, l'exploitant doit les indiquer dans son manuel d'exploitation.

Exigences similaires à l'EU-OPS (données acceptables pour l'autorité)

L'exploitant doit spécifier ces données dans le manuel d'exploitation, afin que l'autorité puisse le vérifier durant le processus de certification de l'opérateur.

Conservation des NOTAMs au sol

CAT.GEN.MPA.185: L'exploitant doit conserver au sol les NOTAM s'il sont spécifiquement édités par l'exploitant.

Exigences identiques à celles de l'EU-OPS.

L'objectif est de pouvoir à postériori en cas d'accident les documents utilisés/établis par l'équipage pour la préparation du vol.

Si l'opérateur n'édite pas les NOTAMs, il n'est pas explicitement requis d'en conserver une copie au sol.

Minima VFR

EU-OPS Appendice I de l'OPS 1.465: Minima VFR.

=> Pas de paragraphe équivalent dans le règlement No 965/2012.

<u>Règle générale</u>:

Éviter les duplications de texte dans les différents règlements.

Les minima VFR sont maintenant contenus dans le paragraphe SERA.5001 du règlement SERA (Règlement (EU) No 923/2012).

Applicable à tout opérateur volant dans l'espace aérien européen.

Informations a conserver au sol

CAT.GEN.MPA.185 Informations à conserver au sol

a) L'exploitant s'assure, au moins pour la durée de chaque vol ou série de vols:

1) que les informations relatives au vol, compte tenu du type d'exploitation, sont conservées au sol;

2) que celles-ci sont conservées jusqu'à ce qu'elles aient été copiées là où elles vont être archivées; ou, si cela n'est pas faisable,

3) que ces mêmes informations sont transportées dans un conteneur à l'épreuve du feu à bord de l'aéronef.

Les documents dans le conteneur constituent un double.

Uniquement si l'information n'est pas conservée au sol.

<u>But:</u> s'assurer de la disponibilité de ces documents en cas d'enquête suite à une accident.

Exploitation à des fins non commerciales d'aéronefs figurant dans les spécifications techniques par le titulaire d'un CTA

ORO.AOC.125: Le titulaire d'un CTA peut exploiter à des fins non commerciales un aéronef habituellement utilisé à des fins commerciales et qui figure dans les spécifications techniques de son CTA:

- Identification des exigences
- Identification différences de procédures
- Personnel familier avec les procédures
- Approbation de l'autorité

Ce paragraphe n'est pas applicable au travail aérien commercial (Part-SPO applicable)

Il est considéré qu'au minimum les exigences NCC doivent être respectées.

L'Agence a initié une nouvelle RMT (RMT.352/353) qui va fournir plus de détails quant aux différents types d'exploitations concernées et pourrait définir des exigences minimales associées.

LVTO

EU-OPS 1.435: LVTO = RVR inférieure à 400m

EU-OPS 1.440: Approbation de l'autorité pour LVTO avec RVR inférieure à 150/200 m

EU-OPS 1.450: programme de formation spécifique approuvé par l'autorité pour toute opération LVTO

Par souci de cohérence, approbation LVTO étendue pour toute RVR inférieure à 400 m

Pas d'exigences additionnelles en matière de formation/entrainement équipage dans le règlement 965/2012.

SPA.LVO.120 + AMCs