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RP3 Emerging Challenges and KPIs – Panel

Building on RP2 outcomes

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CEO Safety Conference

Frankfurt

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Intro for the Panel

- KPIs for RP2
- Emerging work for RP3 KPIs
- How to use Safety Intelligence and Safety Wisdom
- Themes for discussions:
  - Theme 1 - How have the KPIs in RP2 affected your organisations safety performance?
  - Theme 2 – Setting targets on lagging indicators – for instance, the number of losses of separation – will this help improve safety performance?
  - Theme 3 – Setting targets on leading indicators – does it help improve safety and how can we achieve it?
  - Theme 4 – Does automated recording of safety data help to improve performance – and if so how do we make it happen?
  - Theme 5 – Discussion on the interdependencies between safety, environment, cost and capacity – do we need a safety target or use safety as a control measure?

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Reminder of RP1/RP2 (K)PIs

Table 1 presents the Key Performance Areas (KPAs) and Performance Indicators (PIs) applicable for RP2 (2015-2019) as set out in Regulation (EU) No 390/2013. The PIs with Union-wide and/or local targets in RP2 are referred to as the Key Performance Indicators (KPIs).

		RP1		RP2		
		Level		Level		
		Union-wide	Local	Union-wide	FAB	National
KPIs	**Effectiveness of Safety Management (EoSM)**	🔍	🔍	🎯	🎯	🔍
KPIs	**Application of severity classification scheme (RAT methodology)**	🔍	🔍	🎯	🎯	🔍
KPIs	**Just Culture (JC)**		🔍		🎯	🔍
PIs	Application of automatic data recording				🔍	🔍
PIs	Level of occurrence reporting				🔍	🔍
PIs	Separation Minima Infringements (SMI)	🔍	🔍		🔍	🔍
PIs	Runway Incursions (RI)	🔍	🔍		🔍	🔍
PIs	ATM-Specific Occurrences (ATM-S)	🔍	🔍		🔍	🔍
PIs	Airspace Infringements (AI)				🔍	🔍
KPIs	**Average horizontal en-route flight efficiency (actual trajectory)**	🎯		🎯	🎯	
KPIs	**Average horizontal en-route flight efficiency (last filed flight plan trajectory)**			🎯		
PIs	Effectiveness of booking procedures for FUA			🔍		🔍
PIs	Rate of planning of conditional routes (CDRs)			🔍		🔍
PIs	Effective use of conditional routes (CDRs)	🔍		🔍		🔍
PIs	The additional time in taxi-out phase – *previously under Capacity KPA*					🔍
PIs	The additional time in terminal airspace (ASMA) – *previously under Capacity KPA*					🔍
KPIs	**Average minutes of en-route ATFM delay attributable to ANS**	🎯	🎯	🎯	🎯	
KPIs	**Average minutes of arrival ATFM delay attributable to terminal ANS**	🔍	🔍	🔍		🎯
PIs	The adherence to ATFM slots					🔍
PIs	The average minutes of ATC pre-departure delay.					🔍
PIs	The additional time in taxi-out phase – *now under Environment KPA*	🔍	🔍			
PIs	The additional time in terminal airspace (ASMA) – *now under Environment KPA*	🔍	🔍			
KPIs	**Average Union-wide Determined Unit Cost (DUC) for en-route ANS**	🎯	🎯	🎯		🎯
KPIs	**Average Union-wide Determined Unit Cost (DUC) for terminal ANS**	🔍				🎯
PIs	Costs of EUROCONTROL			🔍		

Table 1: RP2 Performance indicators

(🎯 = Target 🔍 = Reporting)

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Overview of RP1/RP2 Safety (K)PIs

	RP1			RP2		
	State	FAB	EU-wide	State	FAB	EU-wide
Effectiveness of safety ANSPs management (EoSM)	🔔	🔔	🔔	🔔	◎	◎
Application of severity classification scheme (RAT methodology)	🔔		🔔	🔔	◎	◎
Application of Just Culture (JC)	🔔	🔔		🔔	◎	
Separation infringements (SMI)	🔔		🔔	🔔	🔔	🔔
Runway incursions (RI)	🔔		🔔	🔔	🔔	🔔
ATM-specific occurrences at ATS units	🔔		🔔	🔔	🔔	🔔
Airspace infringements				🔔	🔔	🔔
Level of occurrence reporting				🔔	🔔*	🔔*
Application of automatic data recording for SMI monitoring				🔔	🔔*	🔔*
Application of automatic data recording for RI monitoring				🔔	🔔*	🔔*

Safety Performance indicators within the SES PS

(🔔=monitoring, ◎=target)

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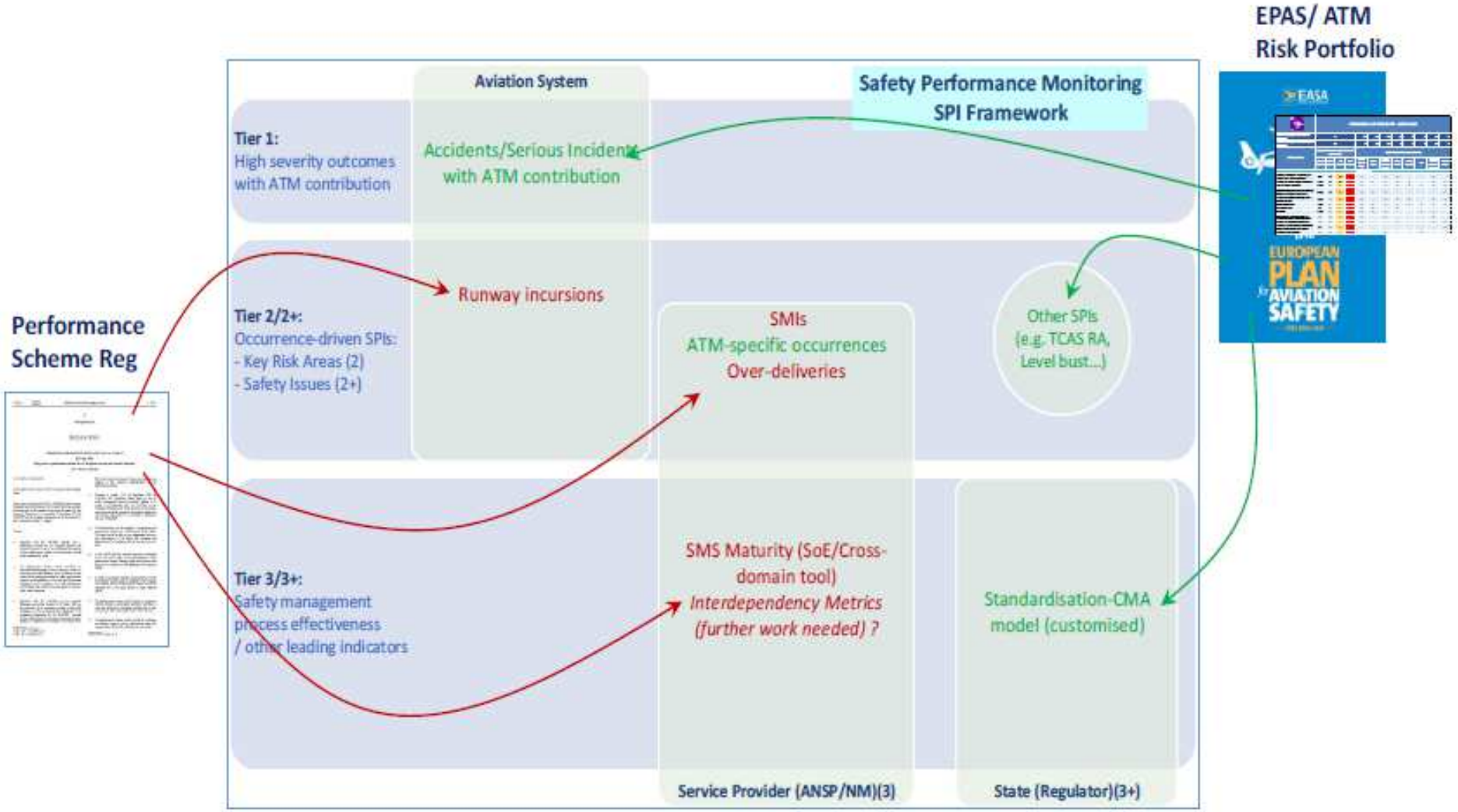
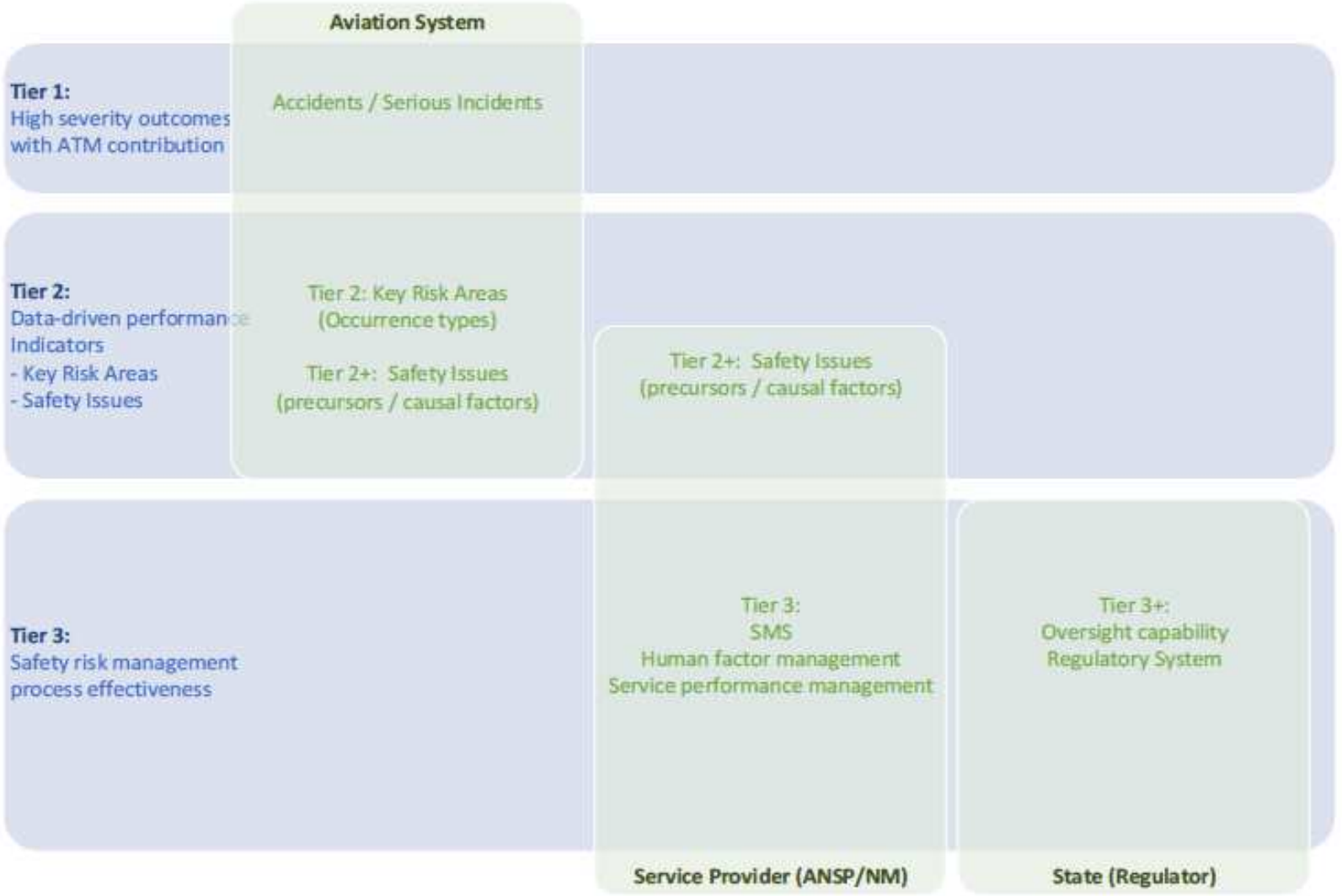
Emerging views on S(K)PIs for RP3 (EASA)



Emerging views on S(K)PIs for RP3 (EASA) cont'd



Safety Energy (new concept)

- Safety energy seeks to understand the trade-offs occurring within an organisation in the context of organisational resource allocation (and what effect it has on safety)
  - Goals, investment, sustain operations, increased efficiency, maintenance/sustenance of safety performance
- Distribution Vs Decision Making (trade-offs) = Safe Productive Output
- Use of annual reports as a data source
- Further work needs to be done during RP3 in order to monitor and understand this better

Performance Review Body Objectives for RP3 S(KPI)s

The PRB's objectives are:

- Measures that relate to key risks, such as SMIs and Runway Incursions
- Automated reporting – Not in the White Paper, but a key feature of the PRB report for 2015
- A single indicator for each Key Performance Area
- The PRB have also produced an options paper which was discussed with the Commission and EASA on the 13th October (although we have yet to see it!)

From the PRB White Paper for S(K)PIs cont'd

- Performance Objective One: Reduction of loss of separation incidents both horizontally and vertically by focusing on system risk. Application level: EU system wide.
- Performance Objective Two: Elimination of Runway Incursions. Application level: Local airport level
- Performance Objective Three: Improved management of ATM system security and business continuity. Application level: EU system wide.

From the PRB White Paper [2]

For the Safety KPA primary interdependencies exist in the following ways:

- Safety adds cost to the system to address identified threats.
- Safety restricts capacity development beyond minima thresholds.
- Regulation due to overload restricts capacity and causes delays.
- Safety KPA and Environmental KPA issues interact in terminal areas particularly on noise issues.

Safety Intelligence & Safety Wisdom

1. Safety first – but not at any cost.

Safety stated as non-negotiable.

The challenge for the top executive is how to manage any potential trade-offs between cost and safety.

Safe Enough
Fast forward to the new world *"People don't want the Rolls Royce anymore. People probably want a Ford Focus which is a reliable performer without the knobs and bells but is going to get you there. And that's the way the market is shifting and that's how we are responding now in moving working practices, in moving employment models, in moving the whole way we set ourselves up to get rid of the trappings of Bentleys and Rolls Royce's and become that Ford or that Kia or anything which makes the Euro NCAP safety standards and gets you there reliably" - APT Operator*

Safety Intelligence & Safety Wisdom

2. Maintaining safety under pressure.

Media pressure, newspapers inflating aviation incidents and accidents, or passengers using smart phones to broadcast to the world an accident just happen

Safety and Media
The Daily Mail test *"Think about the Daily Mail test, i.e. if it goes wrong, are you getting in the papers ? And that's common sense test you apply. Because if you're in the Daily Mail, you've done it wrong" - Airline*

Safety Intelligence & Safety Wisdom

3. Accountability and responsibility at the top.

Where our responsibilities begin and end – in a complex industry where many organisations are linked there may be overlaps and possibly gaps in responsibilities

Safety Leadership
"Taking responsibility for safety is also about demonstrating everyday leadership in building a strong safety culture. Dealing with risks is to lead by example: admit your own errors, do not get angry if people report issues, otherwise they won't do it next time." - Airline

Safety Intelligence & Safety Wisdom

4. Searching for evidence.

To manage a 'safe' organisation requires access to data and information that will help determine where, when and what action should be taken. Quantitative data is not enough.

Need a culture of trust - feeding safety information right to the top.

Safety Wisdom
"It's about being as porous as you can, more about being open to hearing information from any sources than having a reasonably disciplined reporting system" - ANSP

Safety Intelligence & Safety Wisdom

5. Seeing around the corner.

Predicting where the next threats are coming from is not about collecting data from current situations. It is about being able to look forward.

Waiting for the regulator to tell you what needs to be done is too late.

Safety Predictability
"We look to someone to have a model to look around the corners. We are good at Reactions, but we are not very good at looking around the corners. What's going to happen in the next couple of years " – *"The board is interested in safety today, yesterday and tomorrow, we want to know what's happened, what are the current issues and we want to know how fit we are for the future, what are the emerging issues.. So we've moved much more from a yesterday to today and to future, as opposed of what went wrong." - ANSPs*

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Thank you