

SMS for airports – the Copenhagen approach

13 November 18

**Industry day
Cologne, Germany**

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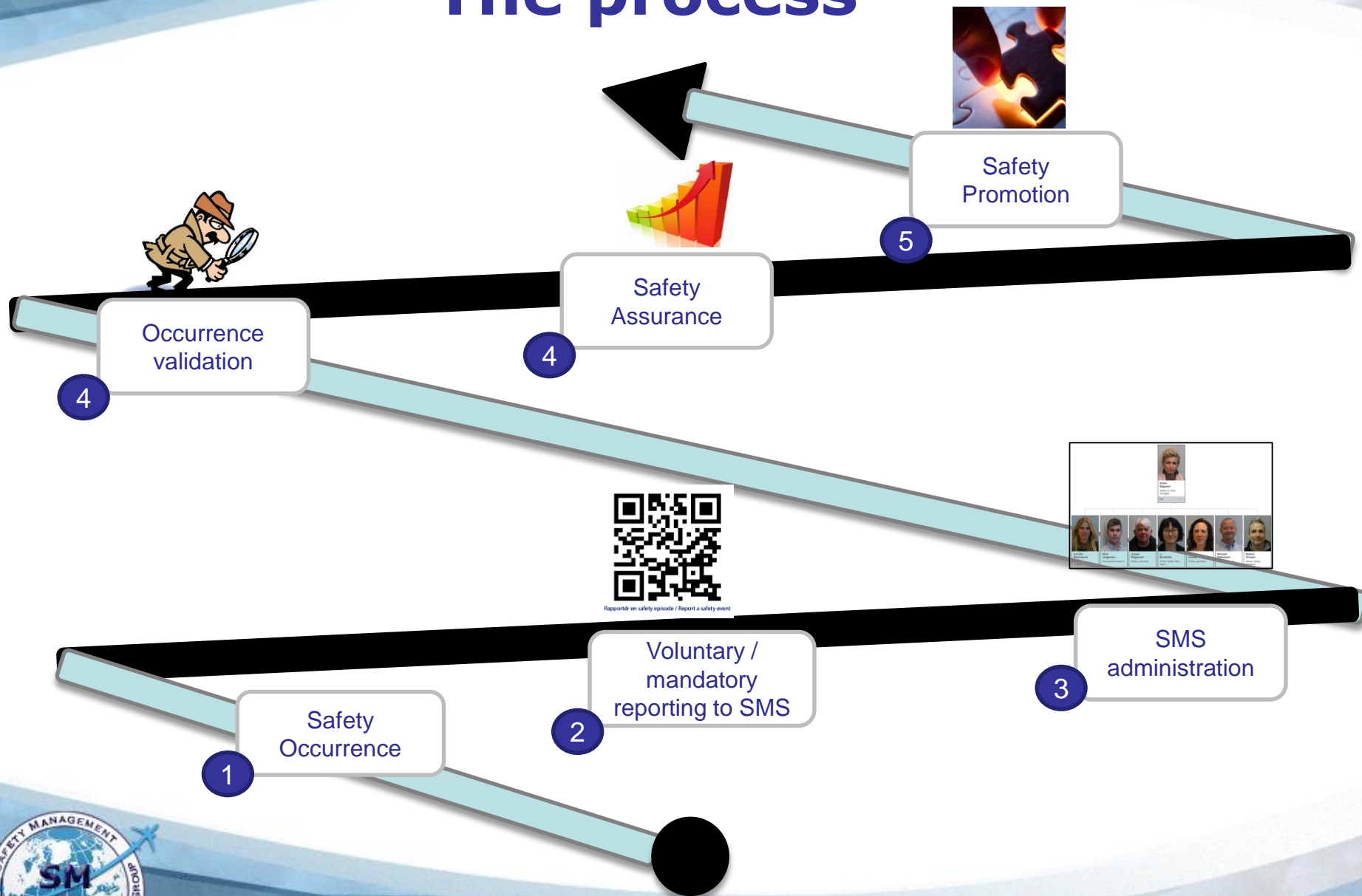


Agenda

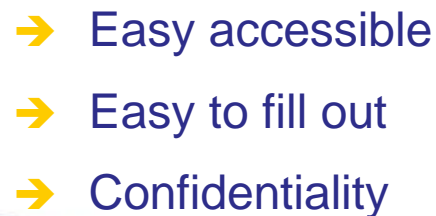
- The CPH approach to SMS
 - Based on a practical example
- Safety Maturity
 - A method to improve safety amongst administrative staff



The process



[title]
[date]



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- Stickers on laptops, in cars, on cell phones etc.

- Posters in offices, meeting rooms and break rooms

Occurrence reporting – two options:

[Request](#)[Report an Incident](#)[Rules and guides](#)[News](#)[Report Safety Event](#)[GRC](#)[SRM](#)[English ▾](#)[Dorte Nygaard ▾](#)

CPH NOW



[title]
[date]

SMS administration

CPH
SMS



Act: Flight safety promotion

- Monitoring of safety requirements & actions
- Knowledge sharing of Safety
- Active understanding of flight safety

Check: Flight safety assurance

- Safety audit
- Trend monitoring
- Documentation of effectiveness of SMS

Flight Safety Policy

We are committed to prioritise flight safety and continuously improve flight safety level with a risk-based approach, through compliance with all applicable flight safety regulatory requirements, active involvement of and respect for all parties, and a formalized, systematic, explicit and proactive safety management.

CPH employees

CPH management

CPH partners

Plan: Safety Policy & Objectives

- Accountability & Responsibility
- Safety Objectives and Target setting
- Competence & Qualification
- External services

Do: Flight safety risk management

- Safety Risk Assessment & reduction (incl. change management & CNS/ATM changes)
- Safety occurrence reporting & analysis

Occurrence Validation / collaborative problem solving



- Validation of reported sequence of event(s)
- Initial investigation
- Learning points
- Improvements needed?
- Action plan(s)

Safety Assurance

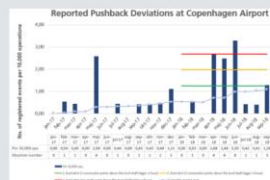


Management of safety data:

- ➔ Trend monitoring
- ➔ Data charts for:
- ➔ Safety reporting
- ➔ Safety promotion purposes
- ➔ Initiation of safety survey
- ➔ Improvement of Risk Assessment process

Deviation from pushback

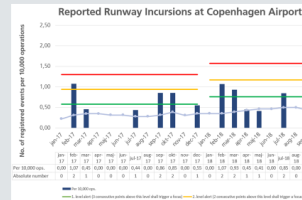
3 reports on this topic in September



*The alert levels are calculated according to ICAO's recommended method of trend monitoring. It should be noted that alert values serve to trigger alerts; an evaluation, decision, adjustment or remedial action related to the particular indicator. An alert being triggered is not necessarily an indication of a deviation of risk. It merely is a sign that the activity has moved beyond the predetermined limit. The alert aims to attract the attention of decision makers to take remedial action to risk, depending on the circumstances.

Runway incursions

Acceptable annual performance level: 0.27 per 10,000 ops
No runway incursions reported in September



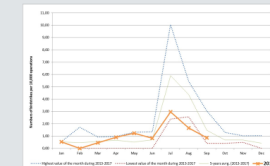
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➔ Safety dept. will continuously monitor for a few months in order to determine whether the decrease is likely to be of a more permanent nature.

High Risk Birdstrikes per 10,000ops

2 out of 7 birdstrikes reported for September involved high risk bird species.

"High risk species" are defined as species located on orange or red risk level of the Wildlife Risk Assessment Matrix. A species risk level is based on the severity of a strike and frequency of strikes.



Species / Presence	Very high	High	Moderate	Low	Very low
Very high	Red	Red	Red	Red	Red
High	Red	Red	Yellow	Yellow	Yellow
Moderate	Yellow	Yellow	Yellow	Green	Green
Low	Yellow	Yellow	Green	Green	Green
Very low	Yellow	Green	Green	Green	Green

* "SP" indicates actual occurrences per 10,000 ops
Obs. Comprehensive description of how to interpret the graph is found in the Safety Plan 2018

➔ Stable trend and no consecutive exceeding of monthly alert levels* for more than two months.

Safety Promotion



- Highly prioritised
- 70+ safety promotion visits during 2018

Purpose

- To learn and prevent occurrences from happening again
- Not to apportion blame or liability

How

- Dissemination of safety knowledge
- Dialogue meetings
- Transfer knowledge into changed behavior
- Use relatable examples
- Easy to digest, easy to learn from

To consider

- Who are you targeting?
- The difference between **reporting** safety data and **communicating** safety data / knowledge

Safety Maturity

What about safety awareness amongst your safety critical staff?

How to obtain a common understanding about the existing "safety maturity" level?

And how to improve from there?

- Retaining our "licence to operate" requires robustness and continuous improvements
- We expect our managers with safety responsibilities to actively demonstrate WHY and HOW we comply with ADR
- ... And to continuously improve our robustness and performance
- Ownership and anchoring of safety responsibilities calls for a winning team knowing **what** to improve and **how** to translate rules into demonstrated practices.

Hence, we developed an **assessment model**

- Output: A thorough baseline indication of safety maturity level(s) within the organisation



The model

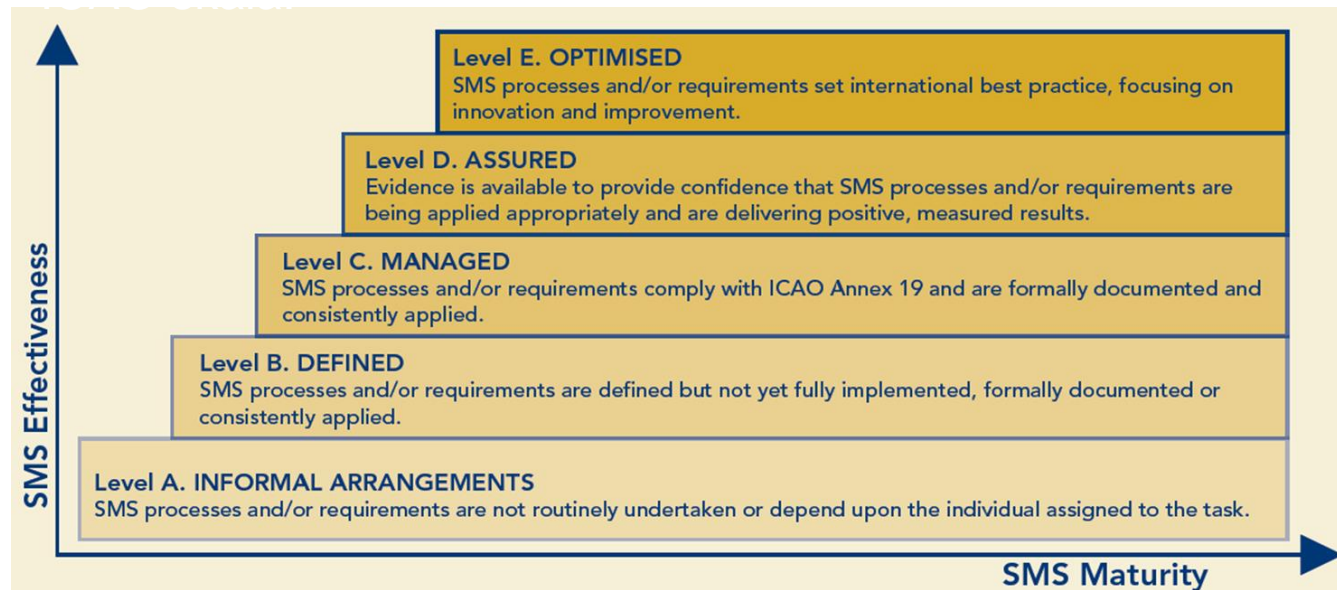


6 parameters:

- Responsibilities
- Process ownership (ADR)
- Operational status monitoring
- Structure and documentation
- Process verification
- Continuous improvements

- 20+ qualitative interviews
- 100+ questionnaire surveys

5 maturity levels



Source: CANSO Standard of Excellence (SoE) in SMS

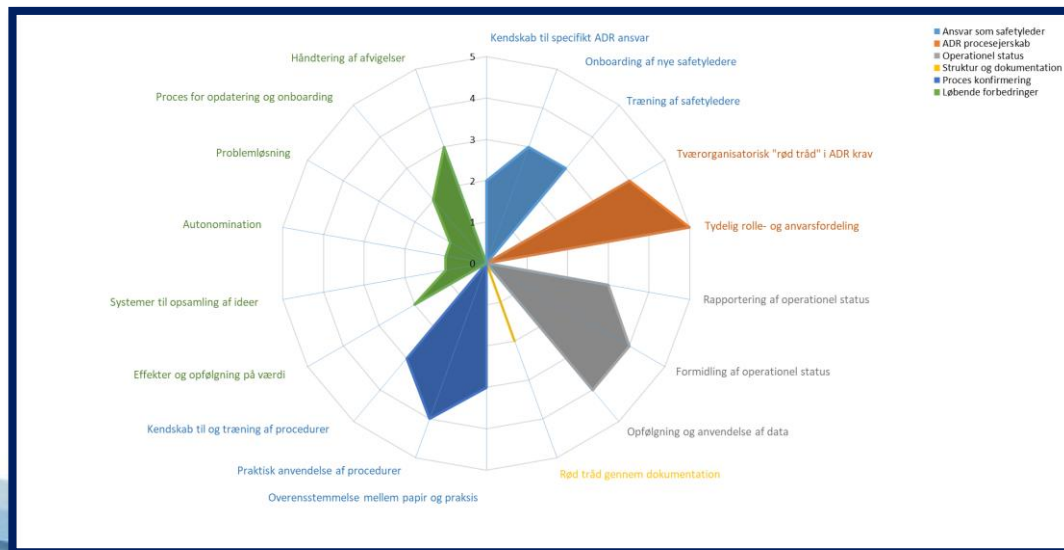
Example of question asked

→ 40 questions in total

CANSO SCALE:						
	Objective:	Informal Arrangements (1)	Defined (2)	Managed (3)	Assured (4)	Optimised (5)
2. ADR process ownership						
2.1 Cross-organisational ownership of ADR requirements						
2.1.1	Are you aware of the specific legislative requirements within your area of responsibility?	Safety critical staff has no or very limited knowledge of relevant legislative requirements / standards within area of responsibility	Safety critical staff is able to point out relevant legislative requirements / standards within area of responsibility	Safety critical staff is aware of, and fully understand all relevant legislative requirements / standards within area of responsibility	Safety critical staff is aware of, and fully understand all relevant legislative requirements / standards within area of responsibility Safety critical staff seeks sparring to confirm proper understanding of legislative requirements / standards (when appropriate)	Safety critical staff is aware of, and fully understand all relevant legislative requirements / standards within area of responsibility Safety critical staff seeks sparring to confirm proper understanding of legislative requirements / standards (when appropriate) Safety critical staff ensures – in a systematic manner - to be updated on changes to legislative requirements / standards and how they may influence areas of responsibility

Output

- Indication of the actual safety maturity level for:
 - The organisation as a whole
 - Specific departments
 - Individual safety maturity level (available for safety dept. And the individual only)
- Ability to mature the organisation based on databased knowledge
- Starting point for focused initiatives based on the actual maturity level
- Common language and common understanding of the baseline



Thanks for listening !

Any questions?



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