

Risk based oversight implementation at DSAC

ICAO Risk based surveillance workshop.
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MINISTÈRE
DE LA TRANSITION
ÉCOLOGIQUE
ET SOLIDAIRE



DSAC



Risk based oversight implementation at DSAC

DSAC :

- one of the three sector directorate of the French DGAC
- one of the 32 national supervisory authority within the EASA system
- Headquarters in Paris, 9 regional offices
- Staff : 1150 (+150 OSAC) ; 500 supervisory inspectors (+100 OSAC)



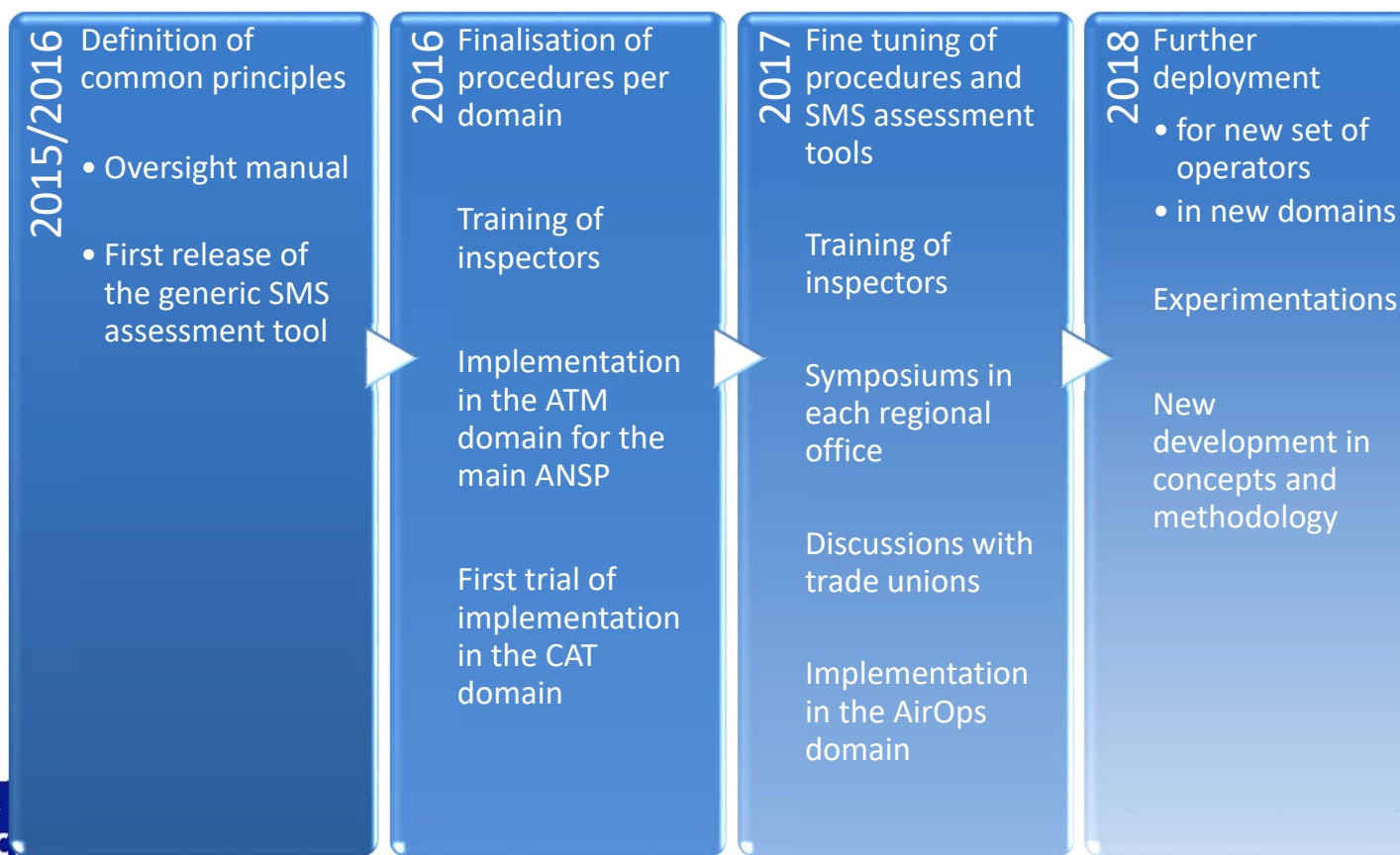
Risk based oversight implementation at DSAC

- Process and planning
- Concept and principles
- Implementation for commercial air transport operators
- Dialog with the operators
- Future steps





RBO at DSAC. Process and planning





Inspector Training

- Inform and involve every inspector :
 - Tour de France 🚲 of the regional offices
 - to create interest, build involvement and teach basics
- SMS & SMS audit training
 - 2,5 days on SMS principles and requirements (theoretical training)
 - 2,5 days on SMS auditing techniques (practical training)
 - 2 SMS audits under supervision (on-the-job training)





RBO at DSAC. Concepts

A way of performing oversight, where

- planning is driven by the combination of risk profile and safety performance; and
- execution focuses on the management of risks, besides ensuring compliance.

EASA : Practices for risk based oversight

RBO essential purpose is to mobilize resources in a way that optimize the impact of the oversight function on the improvement of civil aviation safety, taking into account that all operators are not subject to the same risks in quality and extent and do not have the same level of safety performance and taking into account that compliance is paramount but not sufficient to ensure efficient risk management.

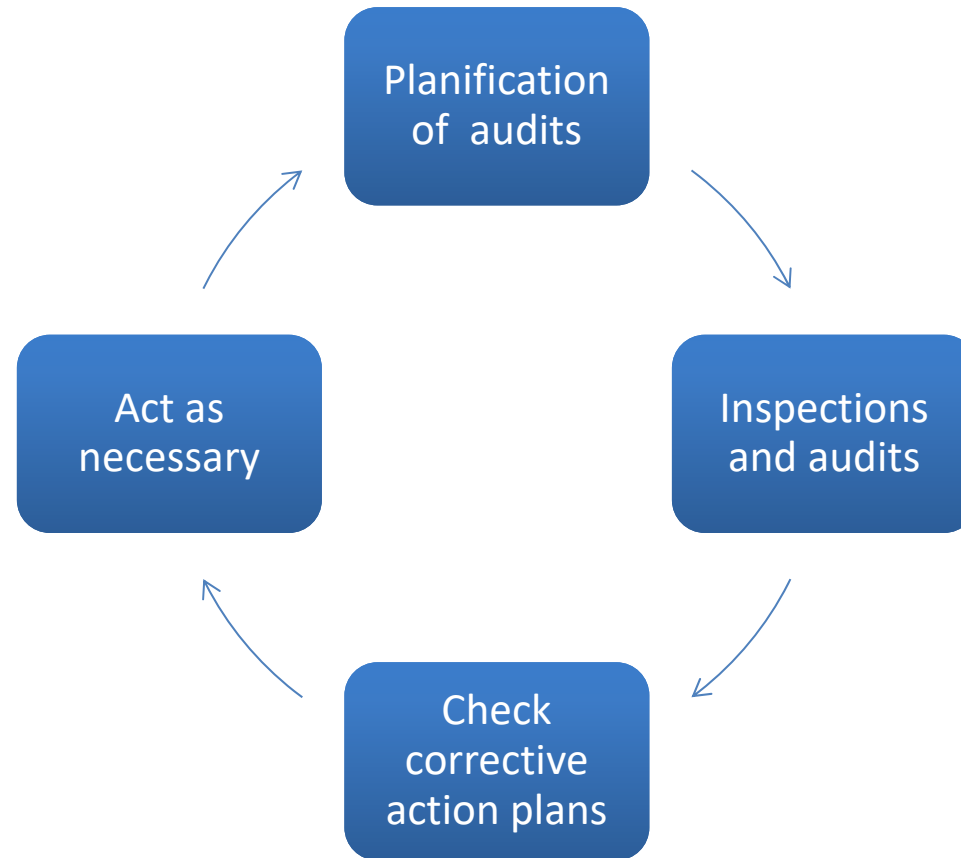
DSAC oversight manual





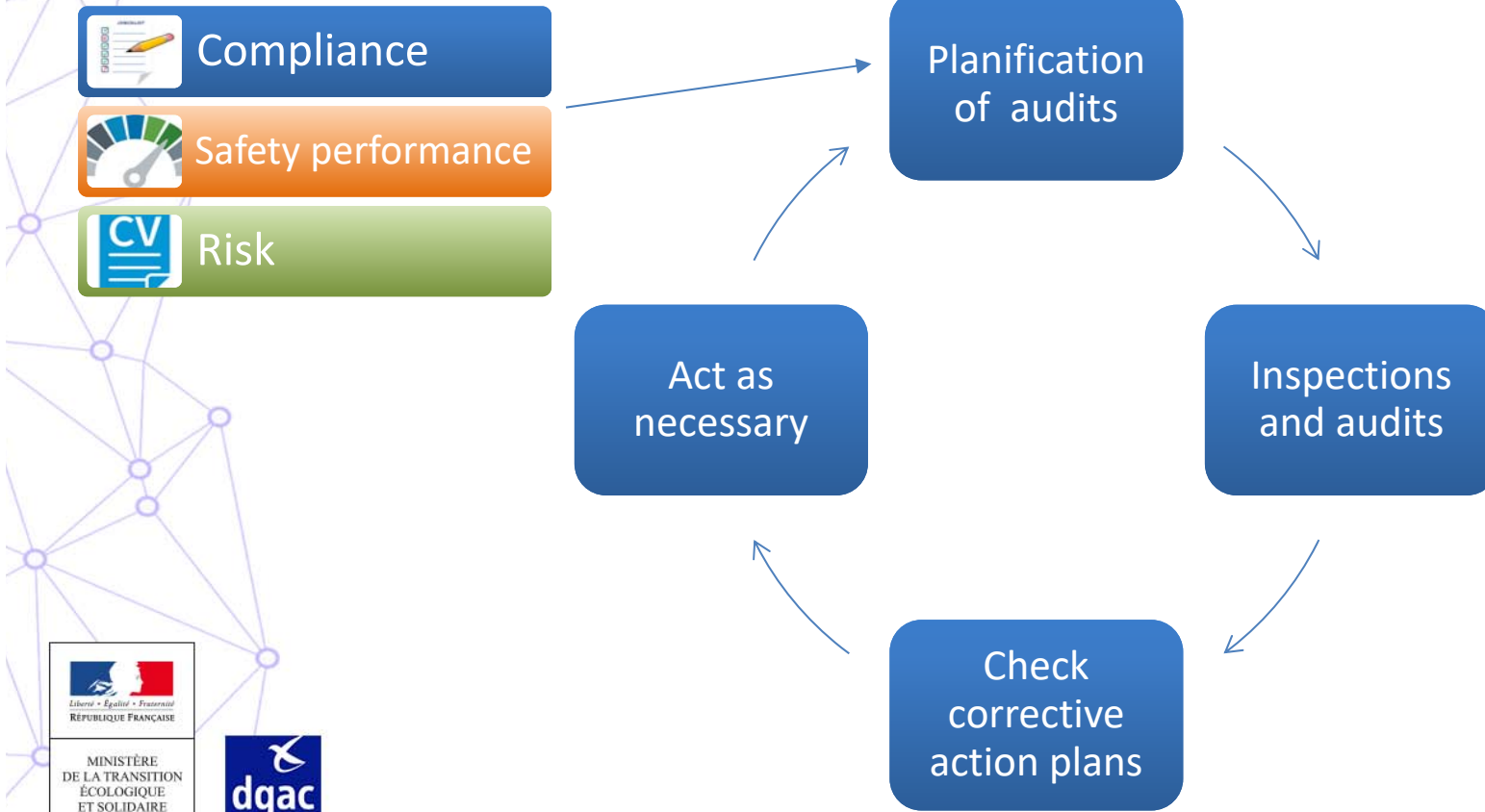
Compliance

RBO at DSAC. Principles



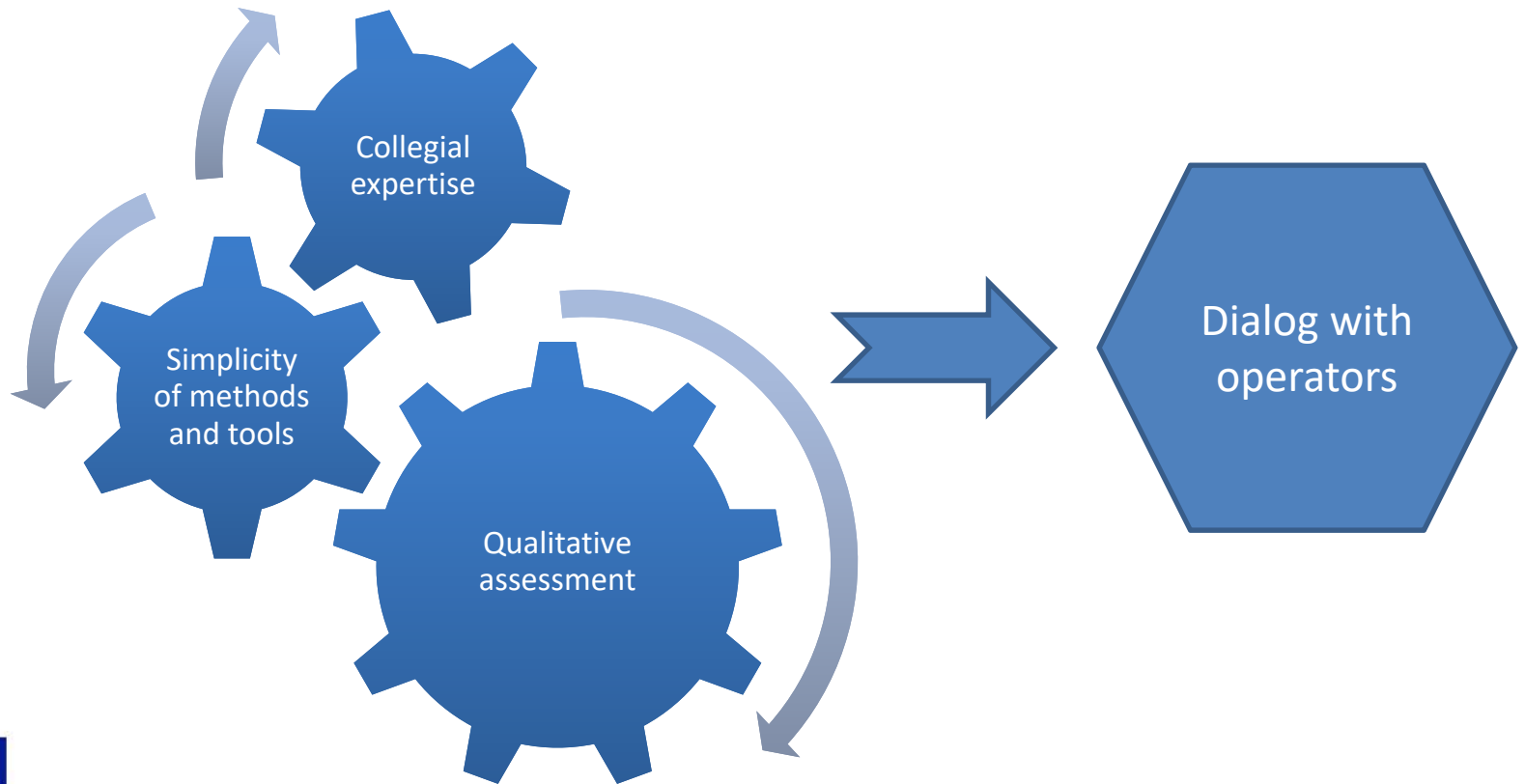


RBO at DSAC. Principles





RBO at DSAC. Principles



Implementation for Commercial Air Transport operators

Aircraft

A5 = Air France

A4 = International transport and/or significant fleet

A3 = Complex business aviation

A2 = Small business aviation

A1 = Very small operators

Helicopter

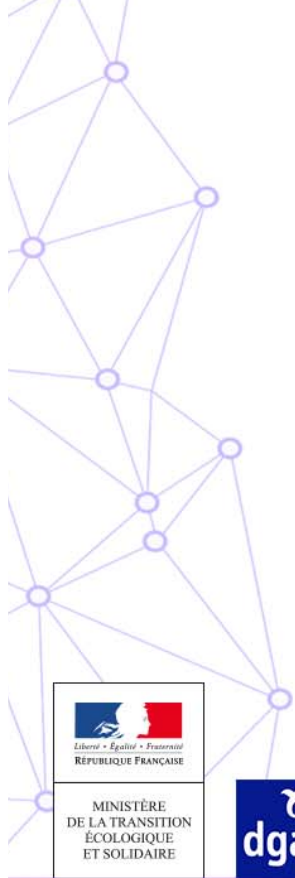
H4

H3

H2

H1





The Performance Assessment tool

Safety culture				
The accountable manager and nominated persons are involved in flight safety	Examples: - availability for discharging their responsibilities - involvement in safety promotion	Not assessed	Rather yes	Not really
Just culture principles are applied to all personnel	Examples: - uniform application to all personnel - limit between acceptable and unacceptable defined and adequate	Not assessed	Rather yes	Not really
All personnel know their safety responsibilities	Examples: - good reporting - good knowledge of safety risks associated with their activities	Not assessed	Rather yes	Not really
Senior managers are outward looking	Examples: - knowledge of the work done outside (including safety recommendations) - transparent exchange with the authority	Not assessed	Rather yes	Not really
Managers and personnel apply best practices	Examples: - knowledge and implementation of EASA SIBs - promotion of best practices	Not assessed	Rather yes	Not really

8 performance criteria

- Safety culture
- Risk management
- SMS governance
- Corrective actions
- Management of change
- Interfaces
- Documentation
- Safety promotion

Assessed by a group of people

- Inspector in charge of the airline
- Inspectors having participated to audits
- Flight Ops inspectors
- Managers



The Performance Assessment tool

Methodology

- ✓ These 8 criteria are assessed after each SMS audit
- ✓ Each inspector performs its assessment independently
- ✓ The SMS performance is computed as an average of these assessments

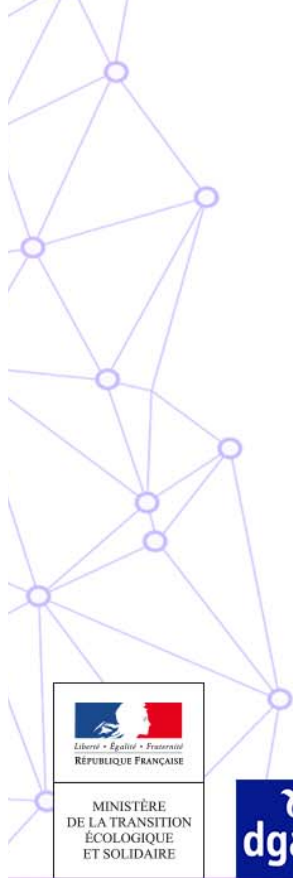
Risk management				
The occurrence reports are precise and diverse	Examples: - voluntary reports in addition to the mandatory one - reports and human error and human factors	Not assessed	Rather yes	Not really
The analysts apply a robust risk assessment procedure	Examples: - analysis of contributory factors, including human factors - proactive analysis of systemic aspects	Not assessed	Rather yes	Not really
The operator provides the authority with a consolidated analysis within a reasonable timeframe	Examples: - deadlines of EU n°376/2014 are fulfilled - analysis process is under control	Not assessed	Rather yes	Not really
Diverse data sources are used for hazard identification	Examples: - use of internal compliance monitoring data - use of external data (other safety occurrences, recommendations,...)	Not assessed	Rather yes	Not really
The risk register exists and is up-to-date	Examples: - internal occurrences are taken into account - external occurrences are taken into account	Not assessed	Rather yes	Not really

→ [Web-based survey](#)





The Performance Assessment tool



Airline 1	A (98%)	A (86%)	A (98%)	A (95%)	A (94%)	C (86%)	A (98%)	A (97%)	A (0.21)	A (100%)
Airline 2	A (100%)	A (97%)	A (100%)	A (100%)	A (91%)	A (100%)	A (98%)	B (94%)	D (1.1)	A (94%)
Airline 3	A (100%)	A (92%)	A (97%)	A (97%)	A (96%)	B (88%)	B (93%)	A (96%)	A (0.38)	E (35%)
Airline 4	A (100%)	B (85%)	B (88%)	A (89%)	B (82%)	B (95%)	A (96%)	A (100%)	C (0.89)	E (43%)
Airline 5	B (95%)	A (95%)	A (94%)	B (76%)	A (85%)	B (95%)	D (83%)	B (92%)	A (0.46)	E (72%)
Airline 6	B (94%)	B (76%)	B (90%)	C (75%)	A (85%)	C (86%)	B (94%)	A (97%)	B (0.66)	D (76%)
Airline 7	A (100%)	C (66%)	C (80%)	B (80%)	E (33%)	A (100%)	A (100%)	C (90%)	C (0.77)	B (90%)
Airline 8	B (97%)	B (77%)	C (82%)	B (81%)	B (83%)	A (96%)	A (100%)	D (84%)	D (1.13)	D (80%)
Airline 9	C (91%)	B (75%)	A (94%)	A (89%)	C (78%)	C (85%)	C (85%)	B (95%)	B (0.68)	E (72%)
Airline 10	C (86%)	B (75%)	D (68%)	A (90%)	C (70%)	A (100%)	E (65%)	E (73%)	B (0.71)	C (85%)
Airline 11	C (93%)	B (79%)	B (86%)	C (70%)	B (82%)	B (90%)	D (75%)	B (92%)	C (0.78)	E (58%)
Airline 12	B (97%)	C (70%)	B (85%)	B (88%)	B (82%)	E (60%)	B (92%)	C (91%)	C (0.76)	E (62%)
Airline 13	D (82%)	C (66%)	C (70%)	C (70%)	B (79%)	C (86%)	C (85%)	A (96%)	C (0.93)	E (62%)
Airline 14	B (95%)	E (52%)	C (81%)	D (50%)	C (76%)	B (92%)	B (90%)	B (92%)	C (0.8)	E (71%)
Airline 15	E (71%)	C (67%)	E (46%)	D (53%)	D (46%)	A (100%)	C (85%)	C (86%)	B (0.54)	E (68%)
Airline 16	C (93%)	A (88%)	D (53%)	C (68%)	C (71%)	D (73%)	D (80%)	D (77%)	D (1.29)	E (60%)
Airline 17	C (93%)	D (50%)	B (84%)	C (67%)	C (70%)	D (66%)	C (86%)	D (85%)	D (1.19)	D (78%)
Airline 18	D (77%)	C (73%)	D (62%)	D (62%)	D (59%)	C (82%)	B (95%)	C (91%)	D (1.28)	E (75%)
Airline 19	D (82%)	D (60%)	C (81%)	C (67%)	D (60%)	C (82%)	C (86%)	D (84%)	C (0.91)	E (47%)
Airline 20	C (86%)	C (66%)	D (55%)	E (12%)	D (45%)	D (75%)	D (76%)	B (92%)	D (1.1)	E (50%)
Airline 21	E (70%)	E (21%)	E (41%)	E (14%)	E (14%)	E (56%)	E (70%)	E (52%)	D (1.17)	C (81%)
Airline 22	E (40%)	E (23%)	E (10%)	E (3%)	E (10%)	E (32%)	E (21%)	E (34%)	E (2.05)	E (38%)



The Performance Assessment tool



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As a result, in 2018, three airlines will have a surveillance cycle extended to three years and two airlines will have a surveillance cycle reduced to one year.



Dialog with operators



When?

- ✓ Once a year
- ✓ Before communicating the oversight planning for the next year

Who?

- ✓ Meeting between the CAA senior management and the accountable manager
- ✓ With the inspector in-charge

How?

- ✓ According to the communication guide

What?

- ✓ Assessment resulting from SMS evaluation tool
- ✓ Assessment resulting from oversight data
- ✓ In comparison with other similar service providers

Criterion	Rating	Trend
Safety culture	A	→
Risk analysis	C	↘
SMS steering	B	↘
Corrective actions	E	↗
Change management	D	↘
Interfaces management	D	↘
Documentation	A	↗
Safety promotion	B	→
Compliance rate	A	↗
Reactivity index	E	↗

Compliance results are communicated at the end of the audit whereas performance results are communicated only once a year. It enables taking into account the results of other audits of the service provider as part of its performance assessment.





Dialog with operators

- With the airline association :
 - support the principles and the objectives
 - expectations for an inclusion in the calculation of surveillance fees
- With the airlines ;
 - good understanding of the principles and the method
 - overall, the method has not been questioned
 - in one case, extension of the cycle was perceived positively, but was not highly desired
 - some airline felt that the profile fits their own analysis
 - “bad rates” for the Safety culture criteria are difficult to accept



Next steps

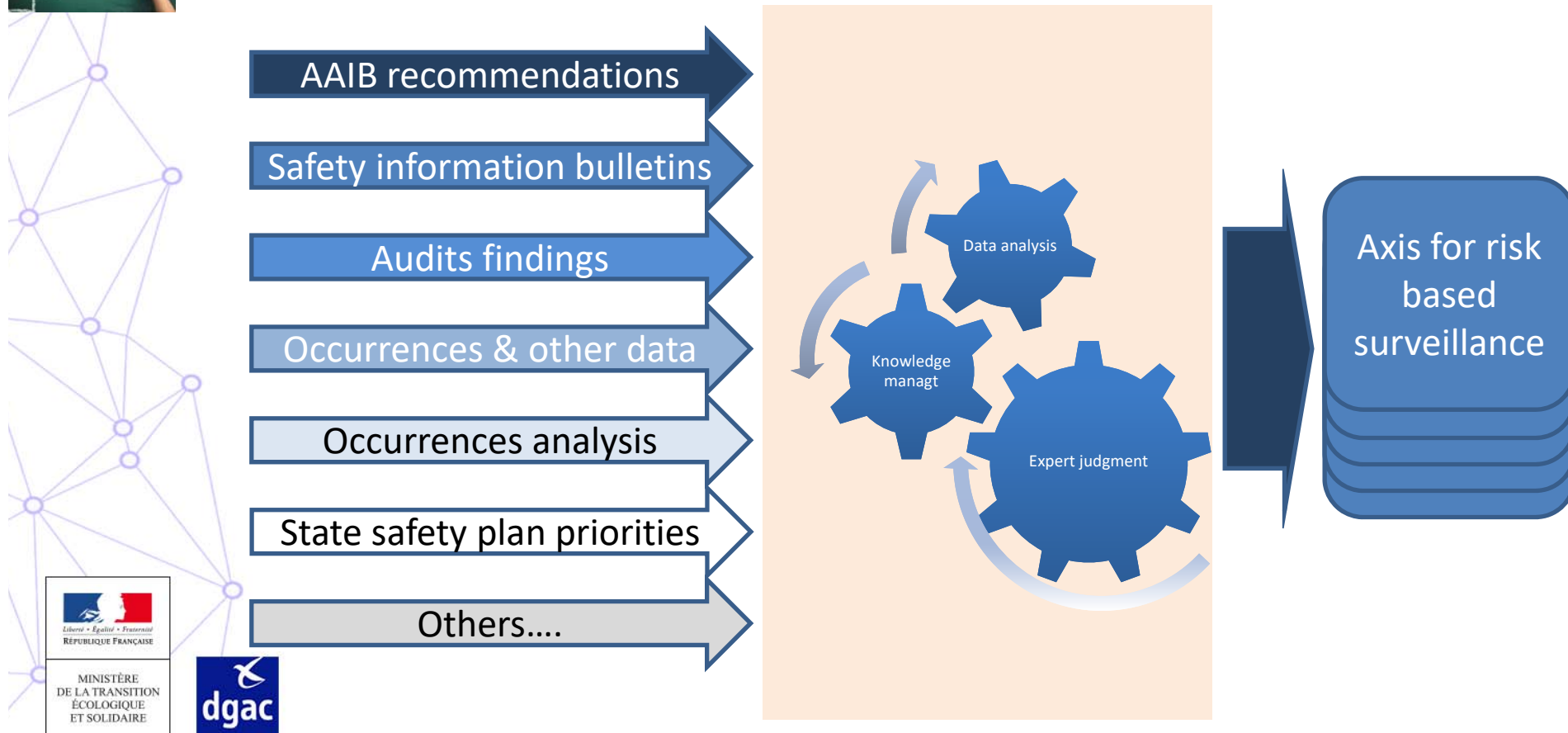
- Broaden the scope (2018) :
 - new domains : ATO
 - so called “very small operators” : an experimentation for FIS providers
- From PBO towards R&PBO
 - surveillance shall feed the state safety plan
 - state safety risk management shall feed the surveillance programs

It is a matter of development and formalisation in processes of existing practices





From PBO towards R&PBO





Lessons learnt

- Keep it simple
 - Make it step by step
 - Bring on board your inspectors
 - Dialog with your operators
- This will not be a revolution
 - This may not save you money
- But it may bring on the long term cultural changes
 - And foster cross domain cooperation



Merci de votre attention



Direction générale de l'Aviation civile
Ministère de la Transition écologique et solidaire



RBO at DSAC. Concepts and principles

Risk based oversight

Establish
risk
profiles

Assessing
safety
performan
ce

Design the oversight
program

Conduct
audits

Dialog
with
operators

Assessing
the SMS
efficiency

Tailor the
duration of
the cycle

Adjust the
content of
the audits

Include
data
driven risk
audits

Critical
outlook of
the safety
performan
ce

