

SMS in Airbus Cabin Operations

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A low-angle, upward-looking shot of an Airbus aircraft wing against a bright blue sky filled with fluffy white clouds. The wing is dark and sleek, with several small, dark, rectangular markings or sensors visible along its upper surface. The perspective creates a sense of height and upward motion.

Safety Management System (SMS) in Airbus cabin operation

IATA cabin safety seminar –Istanbul 11-13 June 2019

AIRBUS

How many events are reported to Airbus each year?

1 Between 500 and 1000

2 Between 1000 and 4000

3 More than 4000

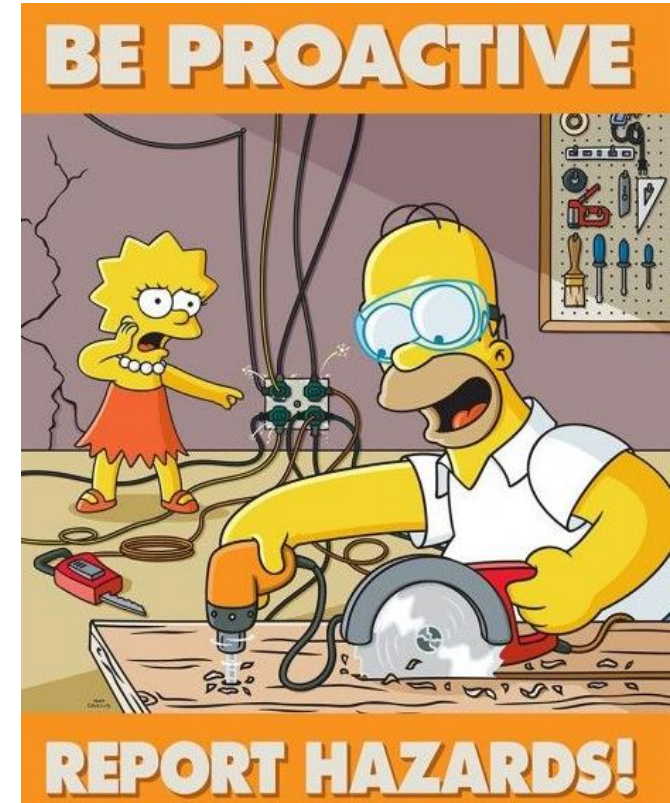
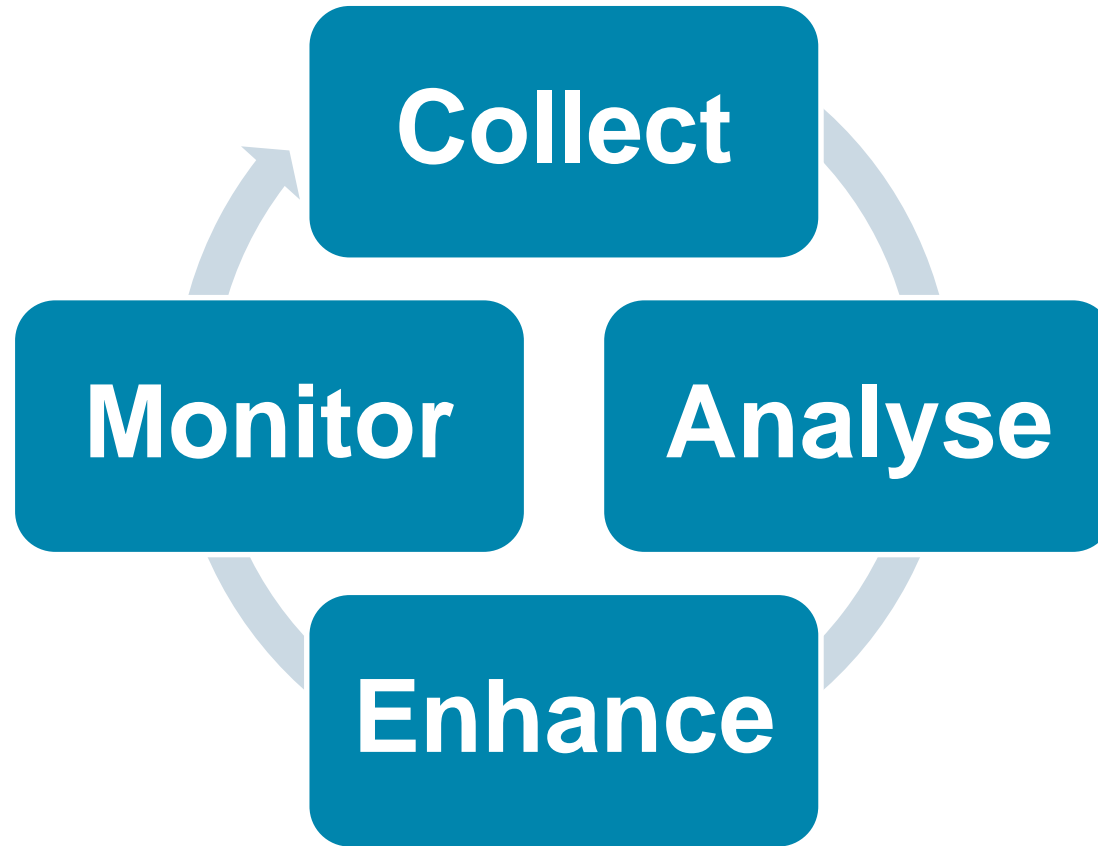


4825 Events are
scrutinized by all the
safety panels

13 per day

Safety is a global aviation business





SMS is a continuous process to improve safety



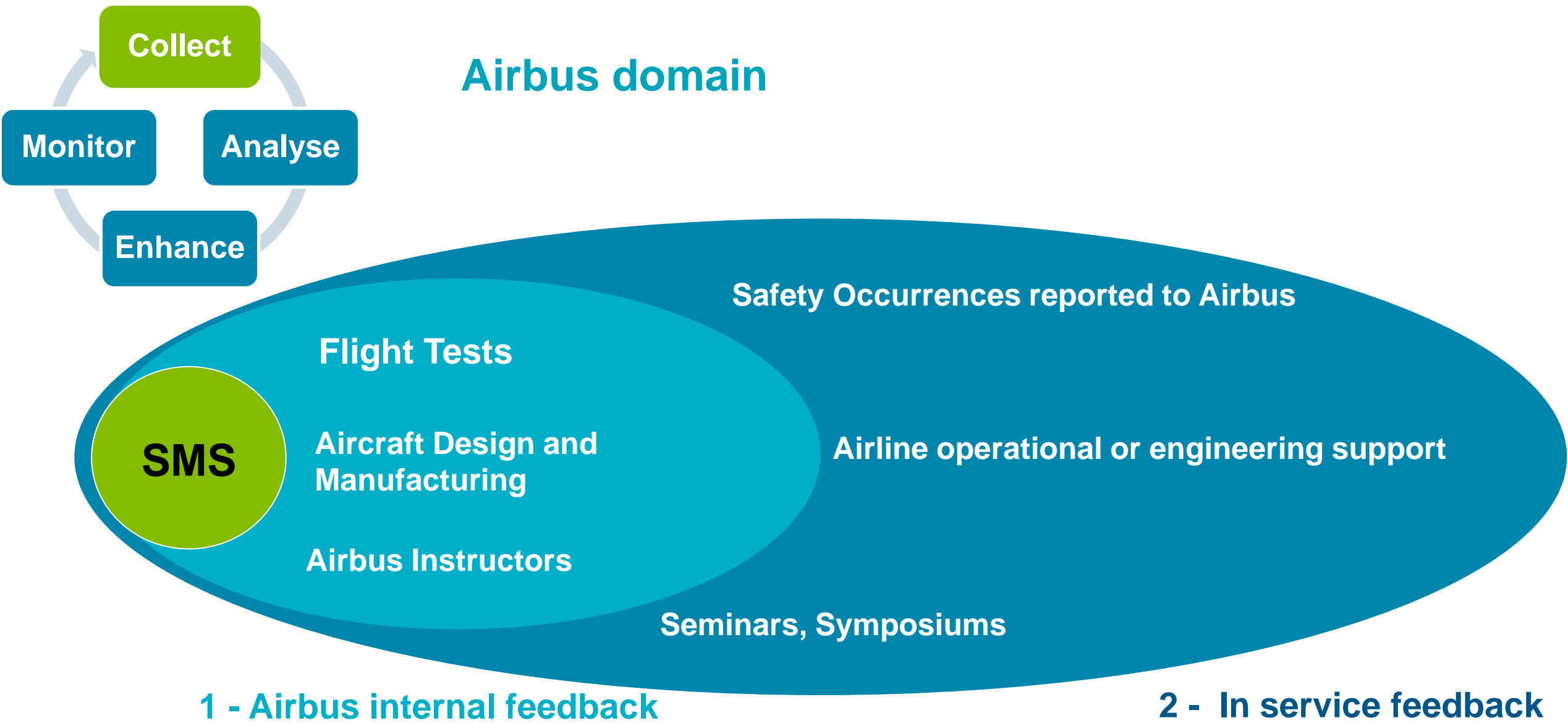
**SMS data
collection**

Analyse data

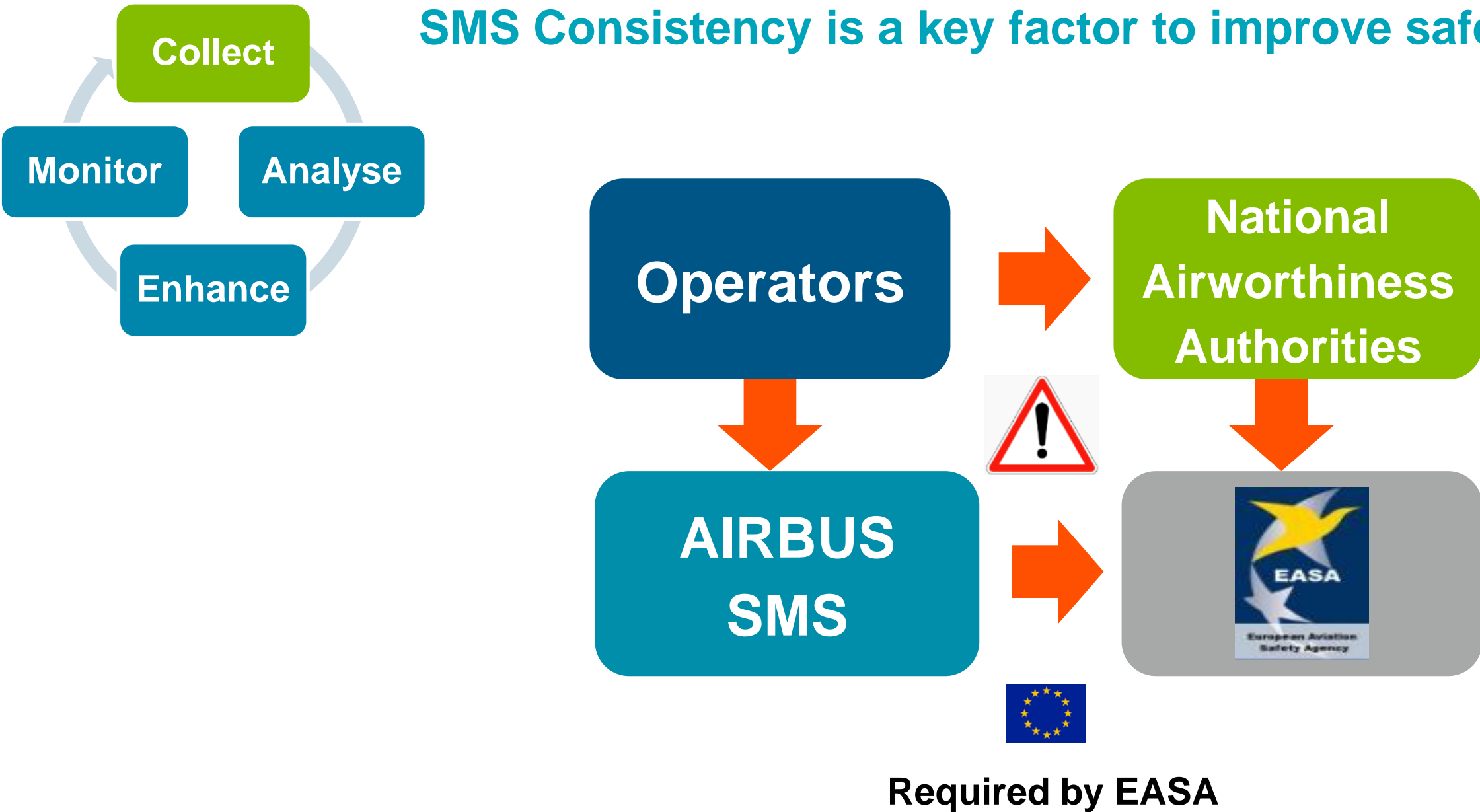
Enhance

Monitor

Examples



SMS Consistency is a key factor to improve safety!





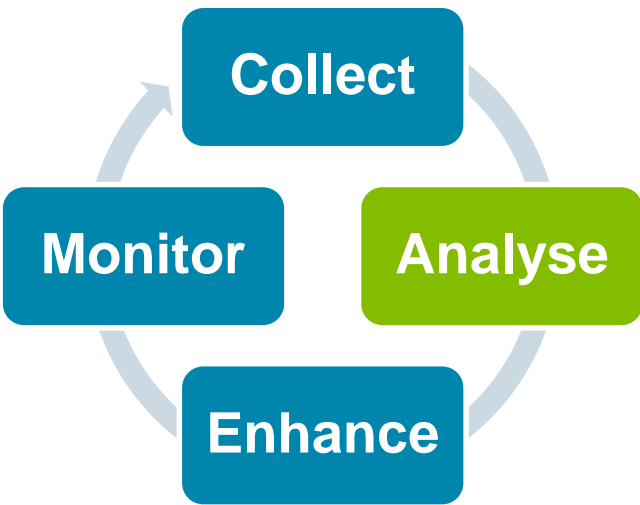
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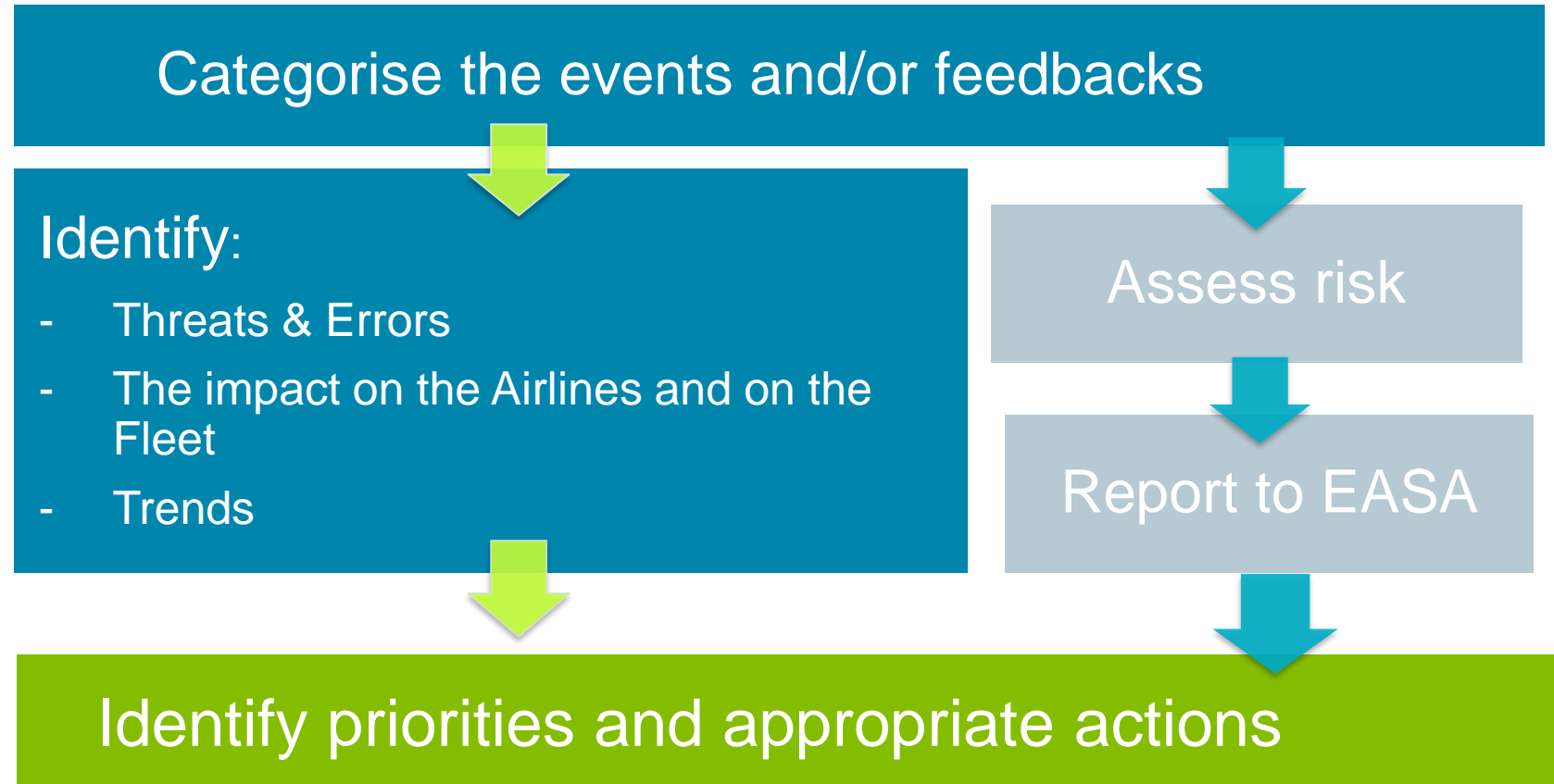
Examples



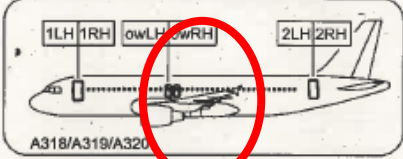
Analyse

- Investigate actual and potential consequences
- Decide action plan
- Track recurrent items

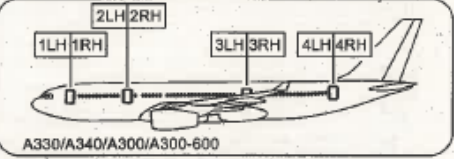
Airbus activities




What has been reported...



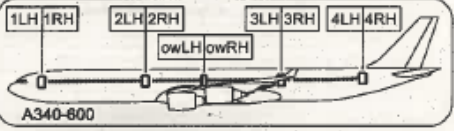
A318/A319/A320



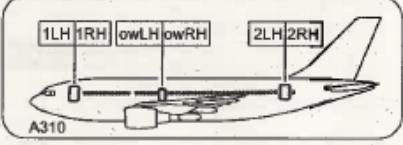
A330/A340/A300/A300-600



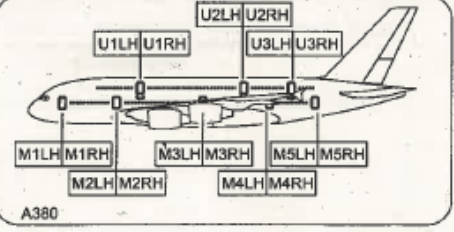
A321



A340-600



A310



A380

Was the deployment:

Scheduled: ☒
 Inadvertent: ☐
 Emergency: ☐

When did the deployment happen? DAY: ☒ NIGHT: ☐

In case of an inadvertent deployment, please precise the origin:

Maintenance: ☐
 Cabin/Cockpit Crew: ☒
 Ground Staff: ☐
 Passenger: ☐
 Other: ☐

Precise: CABIN CREW

What we need...

Detailed cabin crew/pilot report with the exact circumstances

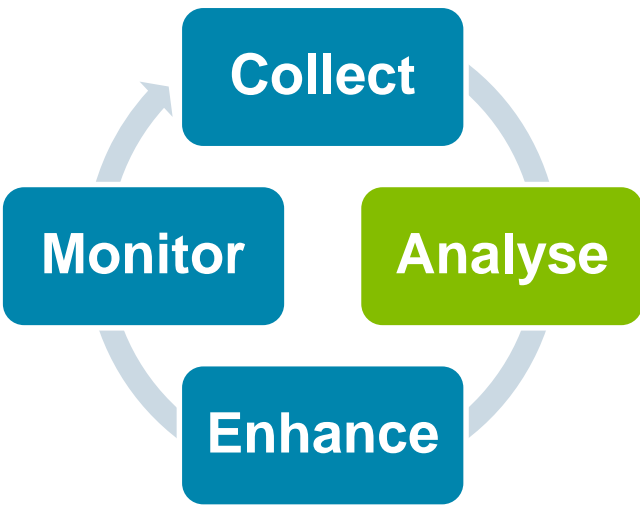
And when applicable:

Current airline SOP

Number of sectors flown before

Crew qualification

Pictures, videos...etc

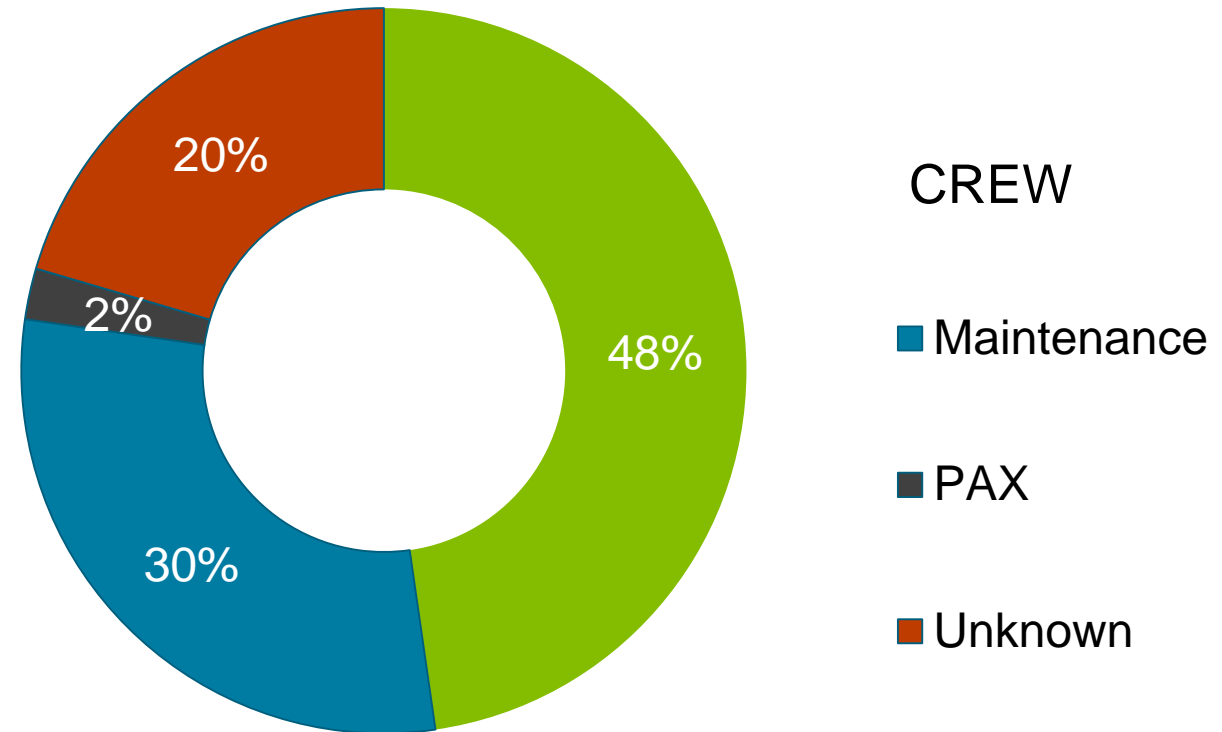


ANALYSE

Analyze all the available data and information to elaborate an action plan

Analysis example

Inadvertent Slide Deployments (ISD) by Origin



Source:
ISD reported to Airbus on A320 family



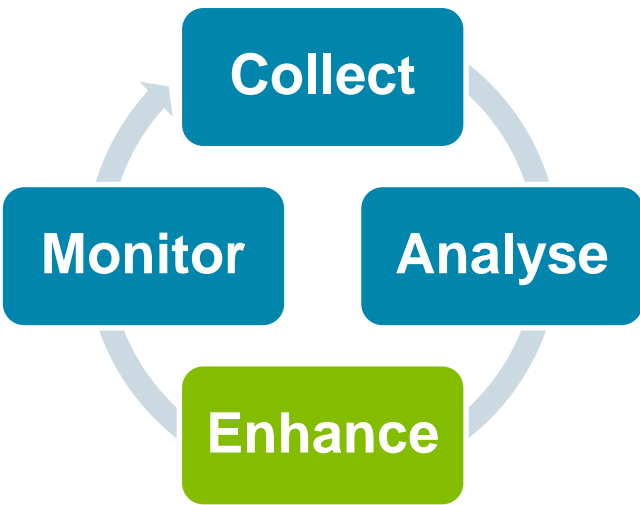
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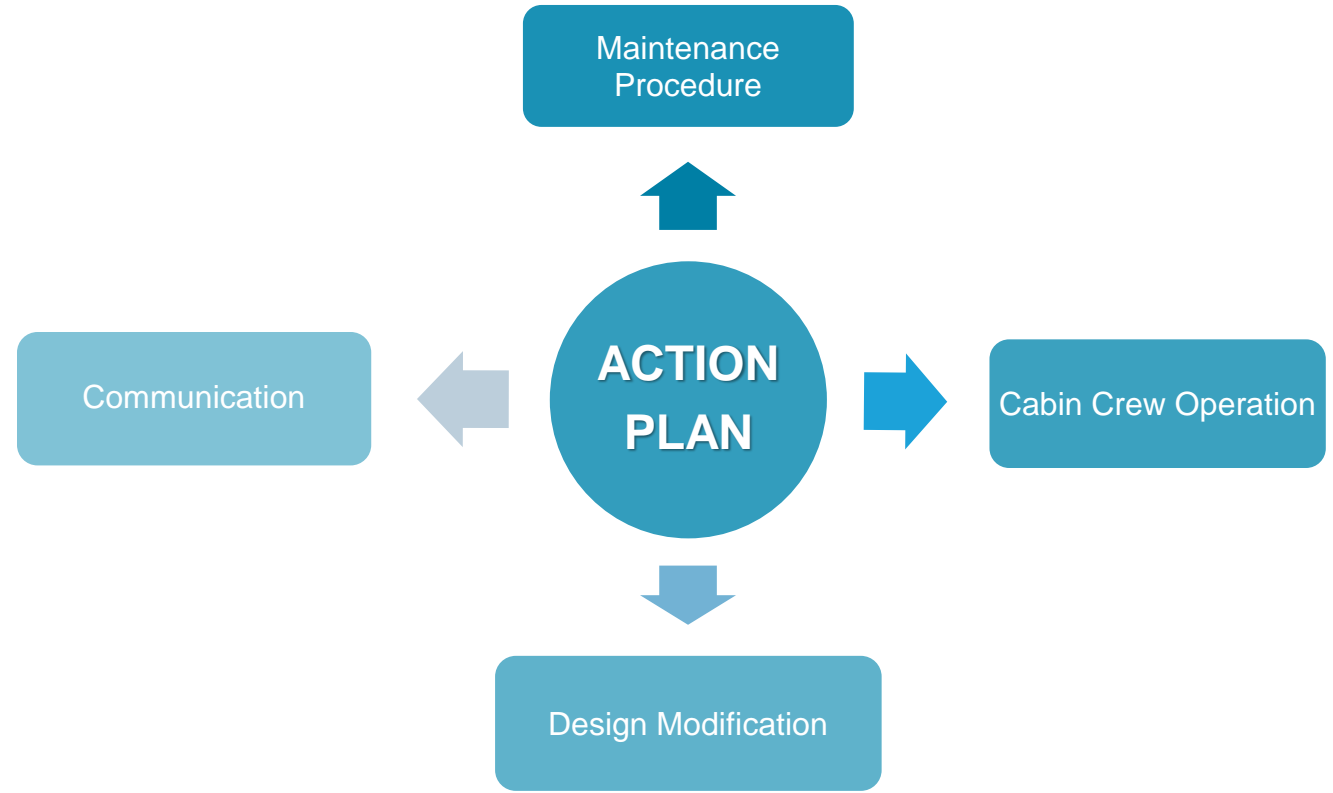
Enhance

Monitor

Examples



ENHANCE





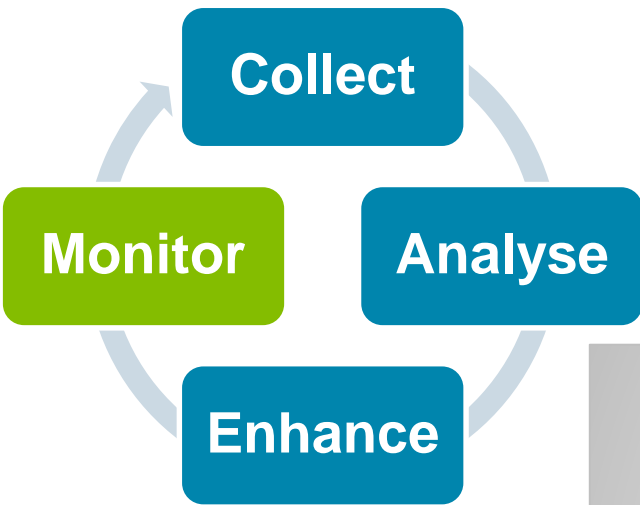
**SMS data
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Analyse data

Enhance

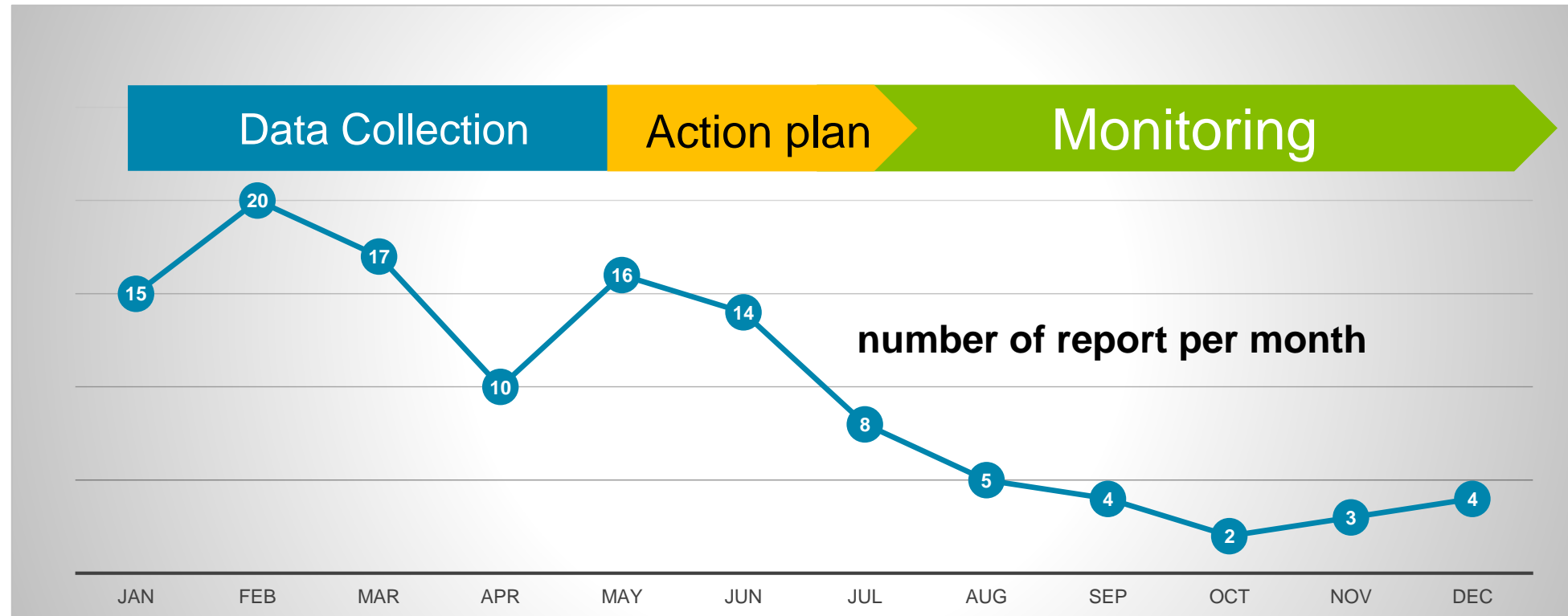
Monitor

Examples



MONITOR

Monitor the effectiveness of the different actions





**SMS data
collection**

Analyse data

Enhance

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Examples

EXAMPLE 1: Operational Procedure and Design modification

REPORT

On A321, Slide at door 3R was reported deployed while the arming lever was in disarmed position with the safety pin installed.

ANALYSIS

The safety pin was inserted while the arming lever was not in the fully disarmed position

ACTION PLAN

CCOM SOPs MODIFICATION

DOORS DISARMING PROCEDURE

SAFETY PIN (with red flag hanging)..... REMOVE FROM STOWAGE
ARMING LEVER..... LIFT FULLY TO THE DISARMED POSITION

DESIGN MODIFICATION

Handle assembly was modified via a Recommended SB



EXAMPLE 2: Operational Procedure modification

REPORT

On A320, during a scheduled slide deployment, slide inflated between the door and the door frame.

ANALYSIS

The manual inflation handle was pulled while the door was not fully open and the slide did not deploy outside the aircraft.



ACTION PLAN

CCOM SOPs MODIFICATION

● If the slide is not inflated:

Note: *The Cabin Crew must only pull the red manual inflation handle if the slide is not inflated but is fully deployed.*

EXAMPLE 3: Operational Procedure modification and training enhancement

REPORT

Further to a smoke event, the co-pilot performed an EMER call to the cabin to brief the cabin crew that they were diverting.
When the EMER call was performed, the purser was not able to hear the conversation.

ANALYSIS

The purser hooked on the handset (which resets the call from his side) but the call was still active.



ACTION PLAN

CCOM MODIFICATION

Note: *if a Cabin Crew resets an EMER call from another station or from the cockpit , he/she must select the EMER key on the handset to re-enter the conversation.*



EXAMPLE 4: Design Modification

REPORT

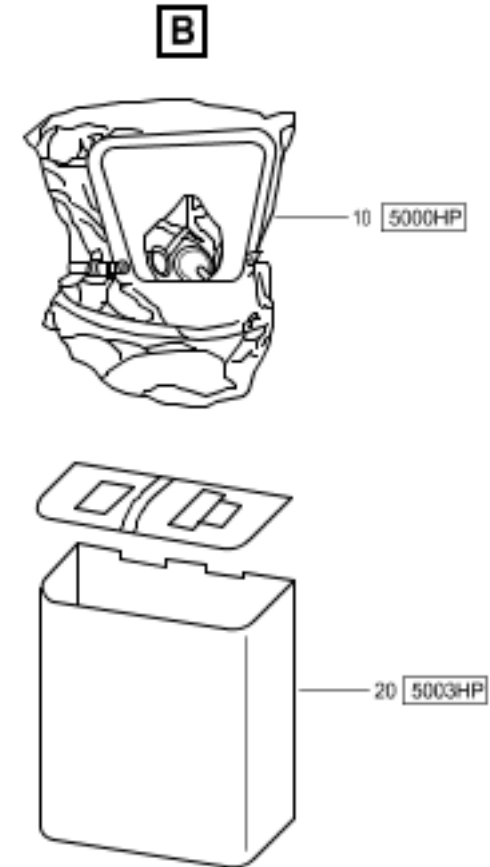
Fire involving Protective Breathing Equipment PBE PN 119003-11 upon activation

ANALYSIS

The oxygen generator starter may produce energetic materials.
Hot particles may enter the PBE hood and possibly lead to spark production or PBE catching fire

ACTION PLAN

- Authorities issued an Airworthiness Directive
- Design was modified via a vendor SB
- Airbus communication was done via an Airbus OIT



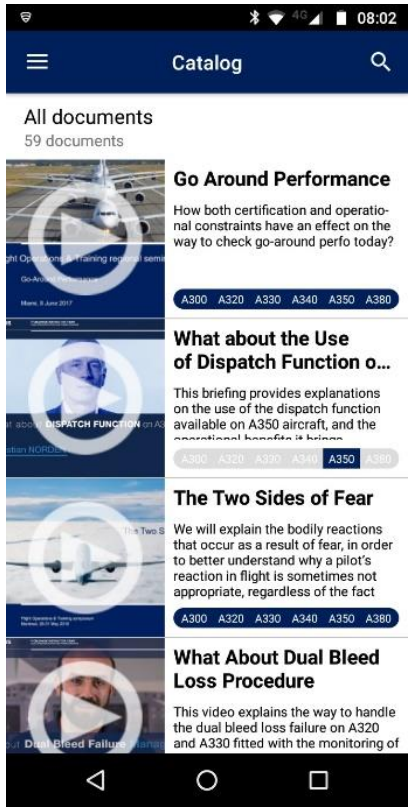
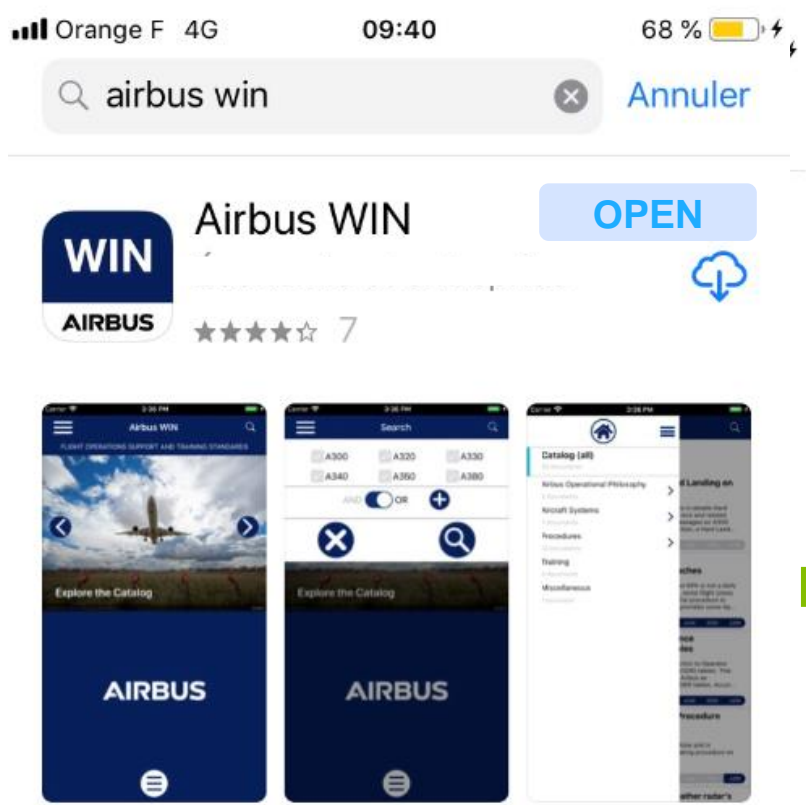
CONCLUSION

In-service event detailed reporting..... is a key point for safety improvement



**Safety in air starts
from the ground**

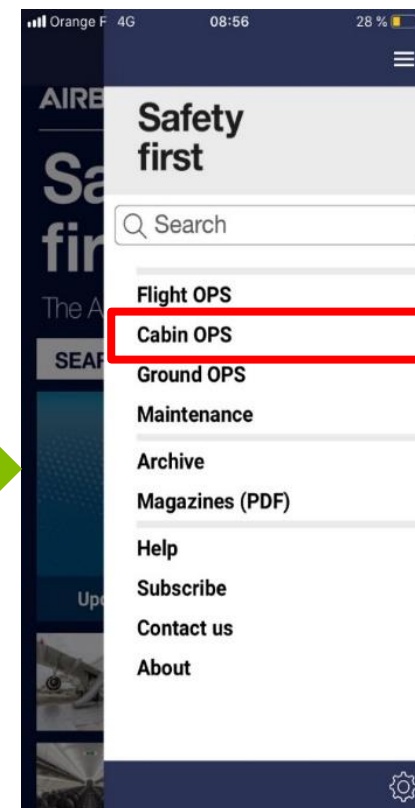
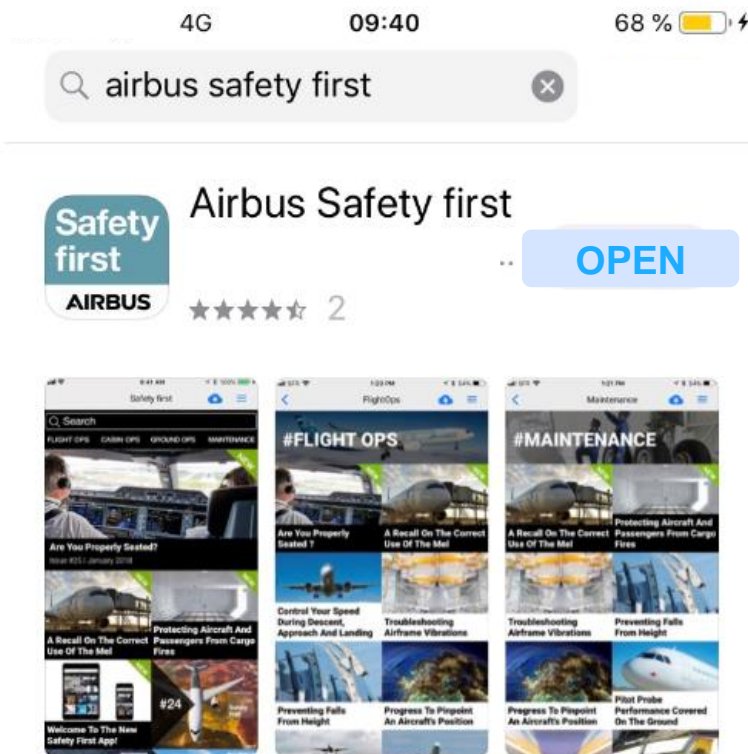
Communication



Open platform for instructors

Cabin subjects are coming soon...

Communication



Safety First APP

Copyright mention

Glossary

- Engineering & Maintenance:

- SB: Service Bulletin
- VSB: Vendor Service Bulletin
- TSM: Troubleshooting Manual
- AMM: Aircraft Maintenance Manual
- IPC: Illustrated Part Catalogue
- MPD: Maintenance Planning Document
- TFU: Technical Follow-Up
- ISI: In-Service Information
- OIT: Operators Information Transmission
- AOT: Alert Operators Transmission
- IOS: Initial Operating Support
- PN: Part Number
- ACU: Air Cooling Unit

Flight and Cabin Operations:

- CCB: Cabin Crew Bulletin
- FOT: Flight Operations Transmissions
- CCOM: Cabin Crew Operating Manual
- OSD (EU): Operational Suitability Data (European Union)
- OLV: Operational Liaison Visit
- IOE: Initial Operating Experience

Common:

- EASA: European Aviation Safety Agency
- FAA: Federal Aviation Administration
- ICAO: International Civil Aviation Organization
- PBE: Protective Breathing Equipment

The OCC Classification



No airworthiness issue. Do not have to be analyzed, nor reported to EASA.



Lead to a reduction in functional capabilities or safety margins. Not reported to EASA.



Lead to a large or total reduction in functional capabilities or safety margins. Reported to EASA during Airworthiness Review Meetings.

The TOP Panel Outcomes



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AIRBUS