

AFI FRA Risk Assessment Workshop
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Management of change basics

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Overview



- Importance of applying Change Management processes.
- Essential component of the SMS.
- Critical issues related to change.
- Managing the Change.

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ICAO Annex 11:

Any significant safety-related change to the ATS system, including the implementation of a reduced separation minimum or a new procedure, shall only be effected after a safety risk assessment has demonstrated that an acceptable level of safety will be met and users have been consulted. When appropriate, the responsible authority shall ensure that adequate provision is made for post-implementation monitoring to verify that the defined level of safety continues to be met.

*Note.— Annex 19 includes the safety management provisions applicable to ATS providers. Further guidance is contained in the **Safety Management Manual (SMM) (Doc 9859)** and associated procedures are contained in the **PANS-ATM (Doc 4444)**.*



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Definition:

Change management (CM). ICAO defines CM as a formal process to manage changes within an organization in a **systematic manner**, so that **changes** which may impact identified hazards and risk mitigation strategies **are accounted** for, before the implementation of such changes.

Source: Safety Management Manual (SMM) (Doc 9859)

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Understanding CM

- Change Management is an **essential component of the Safety Management System** and Aviation Stakeholders.
- A **well-planned Change cycle** allows a continuous improvement and **facilitate the implementation of a sustainable Change**.
- **Aviation industry is also challenged by new threats**, such as security issues and new challenges as environmental issues calling for a tighter regulation framework.

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Understanding CM

Aviation is a highly challenging industry for all its stakeholders either...

- Airport operators;
- CAA's;
- Aircraft operators;
- ANSP's;
- Ground handlers;
- etc.

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Critical issues related to change

To meet the **challenge of increasing safety and performance**, while anticipating the inertia of the long-term cycles governing our industry, most **CAA's are involved in large and ambitious modernization projects** both at national and regional level such as:

- Airspace modernization (PBN, PBCS, ATFM...);
- Airport new concepts/technologies (A-SMGCS, A-CDM...)
- New entrants (RPAS, UAM...)
- ... and Route Network: FRA!

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Critical issues related to change

Modernization projects are essential, but critical to the organization, as they stand to rupture the established balance and thus may jeopardize the current level of safety and performance in two main aspects :

- **Pace of Change:** the change process may occur over a period of time which may be too short for the organization to assimilate the change; and
- **Magnitude of Change:** the change process might deeply modify the characteristics of the organization, which, as a result, has to reconfigure itself and defines new references and processes.

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Critical issues related to change

- Changing at a large scale might be a vital necessity, but compatible with safety and performance providing relevant mitigation actions to facilitate the change implementation;
- For ensuring a safe and efficient implementation of a sustainable change in the frame of modernization projects whatever the type or scale, Aviation Stakeholders and their managers **should not underestimate the key role of change management!**

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Managing a sustainable change

Now, we know that a...

- ... change is a **transition process modifying one or several characteristics of a system** (e.g., an organization, an individual, a procedure, a process...) from one state to another. The Change process can be triggered either by **internal factors**, such as a new top management vision, a seek for a greater economic competitiveness... or by **external factors** (e.g. new ICAO standards, an accident urging for a change of process...).

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Managing a sustainable change

- Changes that are likely to trigger formal change management include:
 - a) introduction of new technology or equipment;
 - b) changes in the operating environment;
 - c) changes in key personnel;
 - d) significant changes in staffing levels;
 - e) changes in safety regulatory requirements;
 - f) significant restructuring of the organization; and
 - g) physical changes (new facility or base, aerodrome layout changes etc.).

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Managing a sustainable change

- The change management process should include the following activities:
 - a) understand and define the change;
 - b) understand and define who and what it will affect;
 - c) identify hazards related to the change and carry out a safety risk assessment;
 - d) develop an action plan;
 - e) sign off on the change plan; and
 - f) assurance plan (follow-up).

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Managing a sustainable change

A natural resistance to change

- A fast-changing industry like Aviation, where **safety and performance are so critical**, is an exciting, but **stressful working environment which constantly may upset the references**, questions the habits and crumbles the certainties. Therefore, **employees tend to be resistant to change** due to insecurities.

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Change enablers

- As **Change implementation** is sometimes a very **challenging task**, some factors can largely facilitate the accepting of change, implementation and sustainability especially when the organization is involved in a fast or large-scale change process:
 - *Involve all the Stakeholders.*
 - *Communicate openly.*
 - *Invest in training.*

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Collective development X natural resistance to change

- The **comfort zone is a psychological state** in which people are at ease and in control of their environment and experience low levels of anxiety and stress. In this zone, **people feel comfortable because they do what they can do** and what they are used to doing, but **there is no learning in the comfort zone** and the performance remains steady.

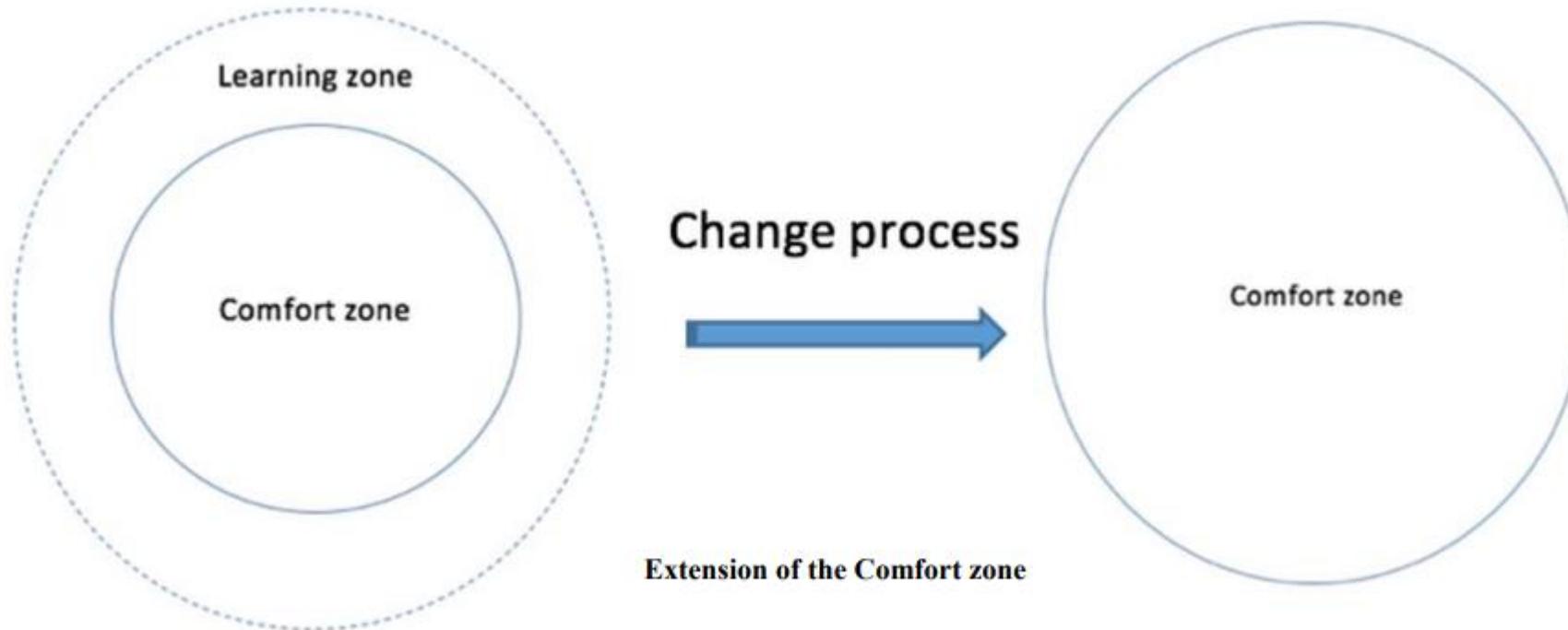
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Collective development

- **The Change process forces the organization's staff to step out of the comfort zone and to be involved in continuous learning to master new procedures, new technologies, new concepts.**
- **Thus, Change can be regarded as a very positive opportunity for personal and collective development as long as the appropriate support is applied throughout the Change process to ease the feelings of insecurity, during the learning process.**

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Comfort zone



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Conclusion

- **Change Management is a key component in the success of project's implementations** and should call for the highest attention of the Aviation Stakeholders to ensure a safe and efficient implementation of a sustainable Change.
- The possible criticality related to change recommends to **define and apply appropriate and specific actions throughout the project** to facilitate the Change process and encourage the involvement of all the organization including managers and front-line operators.
- Moreover, **a large communication and sufficient resources allocated to training have also to be secured** in order to facilitate the acceptability of the Change process.

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References:

- **ICAO Annex 11**, Air Traffic Services, Fifteenth Edition, July 2018;
- **ICAO Doc 9859**, Safety Management Manual, Fourth Edition, 2018;
- **RAAC/15-WP/27**, Fifteenth Meeting of the Civil Aviation Authorities of the SAM Region (RAAC/15) (Asuncion, Paraguay, 4 – 6 December 2017)

Thank you

