

MARIA once again recognised

For the 4th consecutive year, CANSO recognised NAV Portugal for its best practices in the area of safety management, namely the implementation of the MARIA model.

According to CANSO, a Good Practice represents "a technique or methodology that, through application and research, has been shown to contribute to achieving the desired result reliably and more effectively than any other technique, technology, method, etc."

Maria's distinction was revealed in the 2021 edition of the Standard of Excellence in Safety Management Systems (SoE in SMS Maturity Survey) survey by CANSO and EUROCONTROL, an initiative that seeks to recognise the best contributions to the development of a proactive safety culture within the air navigation industry.

The NAV Portugal project was distinguished in four distinct areas: Documentation of Security Management Systems - SMS (Documentation, SMS with requirements and applicable regulation); Compliance with International Obligations (Ensuring that there are no inconsistencies between regional and international safety standards); Risk Management (Ensuring that these are reported, assessed, mitigated or monitored for effectiveness and corrective measures are taken if controls are not working effectively) and Change Management (Documentation and information that ensures that stakeholders understand how security risks introduced during and/or after implementation of the change are managed and mitigated).

Developed by NAV Portugal, the Model ATM Reality In Action (MARIA) allows the requirements of the EU 2017/373 European Regulation to be met with regard to the assessment of the safety of changes to the functional system.

It is a database that describes the entire ATM system and the interdependencies between its functions. Based on this information, work processes have been developed that support security analysis activities.

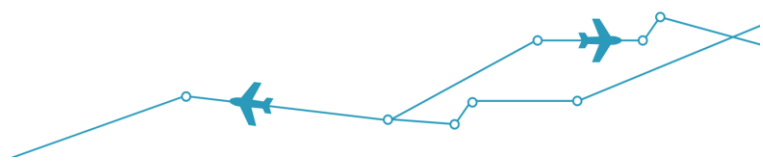
NAV Portugal uses this model in several internal processes, namely: change management, security assessments, declarations of conformity and systems verification. Training for the use of the model has already involved internally operational and technical personnel, ANAC, participants of other ANSPs and Eurocontrol.

MARIA was picked up through interviews and observations and describes:

- day-to-day operations,
- what is required for each function (inputs),
- who/what can perform it (responsibilities),
- applicable regulatory requirements (ICAO, EC, ...),
- and what outputs are produced.

When analysing a change, using a system model has the following advantages:

1. The change must be modelled. This modelling will raise questions and thus allow for early clarification of the scope and impact of the change and the identification of stakeholders, both internal and external.



2. Makes assessments systematic as it provides clear guidance on what should be analysed.
3. Ensures completeness.
4. Participants may use MARIA as a starting point and complete the analysis and model by identifying or clarifying the pre-existing information.
5. Reduces the effort required to evaluate changes.
6. The resulting documentation is clear, visual (graphic) and supports better communication with the National Supervisory Authority (ANAC).
7. The results are reproducible.

MARIA allows a clear description of the scope of change, through the identification of the modified elements, the associated functions and, following the information flows, determining the direct and indirect impacts. Covering the interaction between domains, it provides a clearer picture of the ATM system as a whole, thus allowing the parties affected by a change to be identified and involved earlier in the process, which significantly reduces the risk associated with its implementation.

Recent developments include:

- The method to produce a change safety argument is applied to all projects, both technical and operational. With MARIA, notification of changes can be carried out earlier in the life cycle of a project and includes the initial safety argument with all the elements required by EU Regulation 2017/373.

