


SMS Best Practice Submission			
ANSP	FerroNATS	Date of submission	24/08/22
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SoE Study Area	SA 6.1		
OP/GP title	Safety Risk Management		
In use since	2014		
ANSPs using this practice	FerroNATS		

1. Description of the SMS Optimised Practice


This Optimised Practice is formally included in FerroNATS' SMS, in the *Procedure for the identification, analysis and mitigation of safety risks* (SNAE-SGS-MAN-DAM). This procedure is aimed at **identifying and managing latent safety risks**, as opposed to those deriving from changes to the functional system, which have a dedicated process formalised in the SMS:


The procedure has two facets, a corporate one which focuses on the identification and mitigation of safety risks that affect the whole organisation, and a local one which identifies safety risks and mitigation actions in each of the units managed by FerroNATS.


The procedure is as follows:

 **Annually front line personnel** (ATCOs and ATSEP) of each unit get together for a brainstorming session to **identify latent safety risks** that can affect their unit. The meeting is facilitated by the Unit Manager and the Unit Safety Manager.

At a corporate level, the Steering Committee hold a similar session to identify latent safety risks affecting the whole organization.

 The Unit Manager and Unit Safety Manager prioritize the identified risks and **define a proposal for the mitigation plan**. At a corporate level, this is agreed between the members of the Steering

 The Unit Manager and Unit Safety Manager present the proposal for the risks and mitigation strategy to top management, who hold **safety accountability** for risk identification (Operations and Technical Directors in their respective areas) and mitigation (Safety Director). The **Unit Safety Plan is formally approved** in the meeting. At a corporate level, the Safety Plan is formally approved by the Director General.

 **Quarterly**, the unit and HQ need to provide evidence for the mitigation actions defined in the Unit Safety Plan and the Corporate Safety Plan. This **evidence is reviewed and approved** by the Safety Director, who determines which is the completion status of each plan.

2. Justification

The reasons why this is believed to be an Optimised Practice are manifold. On the one hand, this process truly ensures that the front line view is taken into account in the identification of risks: all staff in the units contribute to the identification of latent safety risks. Thus, the process ensure that work-as-done and not work-as-imagined is considered when identifying safety risks. Besides, local knowledge is also taken into account in the definition of the mitigation actions, since the mitigation strategy is defined by the Unit Manager and the Unit Safety Manager. Moreover, this procedure ensure that safety accountability (as defined in the SMS) is adequately discharged, since top management are included in the approval of the identified risks (Director General at a corporate level and Operations and Technical Directors at a unit level) and in the approval of the mitigation strategy and evidence that support the claimed progress (Safety Director).

The frequency of the identification of risks (annually) and the close monitoring of the Safety Plans implementation (evidence is formally reviewed quarterly) are believed to be essential for the successful application of the procedure.

3. Required resources

To effectively implement this SMS procedures the required resources are:

- Human resources:
 - Time availability of front line personnel to participate in the brainstorming session to identify safety risks.
 - Time availability of top management to meet with the Unit Manager and the Unit Safety Manager to review and approve each local Safety Plan.
 - Time availability of the Safety Director to review the evidence provided at a corporate level and at local level to prove completion of mitigation actions.
- Training: safety training related to risk identification and mitigation strategies for top management, Unit Managers and Unit Safety Managers
- Technical resources: a dedicated SharePoint space was created to allow evidence to be uploaded by the mitigation action owner and reviewed by the Safety Director.

4. Reasons why it was developed

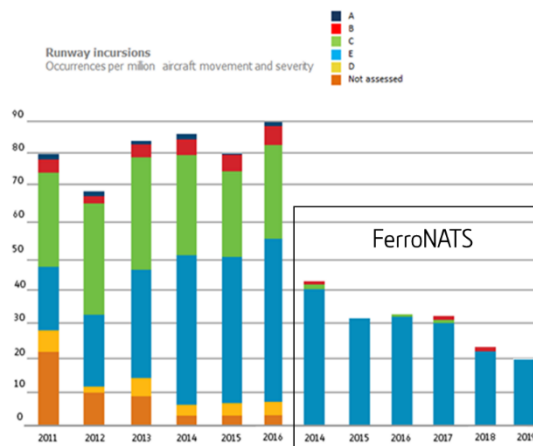
The procedure was created to ensure that latent risks were properly identified and mitigated. Without this procedure, risk identification came primarily from safety occurrence investigation or changes to the functional system, but the existence of latent safety risks were not taken into consideration before the development of this procedure.

5. Improvement of safety performance

Since 2014, more than 65 Safety Plan have been defined, with more than 400 mitigation actions implemented. Examples of latent safety risks included in the local Safety Plans are runway incursions, coordination procedures with collateral units, opposite runway use or flight school traffic; at corporate level, examples of identified risks are traffic variability related to the COVID-19 pandemic, ATCO turnover or complacency.

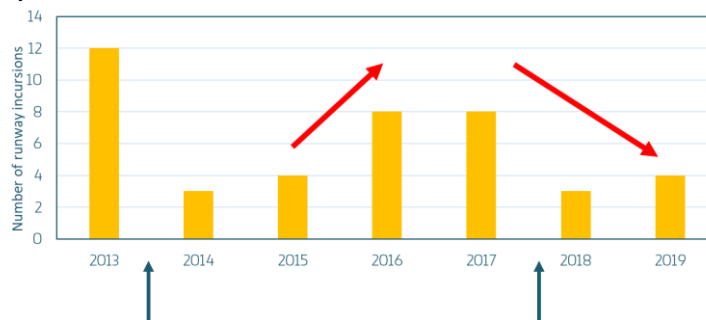
Since the inclusion of this procedure in the SMS safety performance has improved in several indicators. The most significant one being runway incursions. Note that FerroNATS provides TWR service only and thus runway incursions are the most safety relevant indicator.

Since 2014 runway **the number of normalised runway incursion has been reduced by 50%** in FerroNATS units. Also, comparing the severity of runway incursion occurrences with the European sample (Eurocontrol SRC Annual Safety Report) the severity of the events in FerroNATS units is significantly lower, with only 2% of runway incursions having significant severity (class A, B or C).



Runway incursion and runway safety are often risks identified in the local Safety Plans, given the nature of the operation. Based on the specific risks and local procedures, each unit has used the Unit Safety Plan as a vehicle to define effective mitigation actions. Examples of the successful implementation of such actions are Jerez and Valencia:

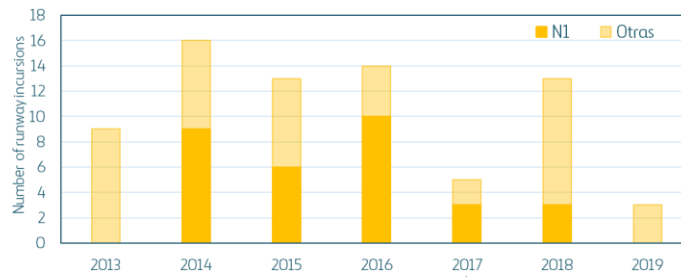
Evolution of the number of runway incursions in Jerez Airport and examples of the actions defined in the Unit Safety Plan



- Stop bars to be operated H24
- Familiarization sessions provided to the airport personnel who operates in the maneuvering area

- Familiarization session provided to all training pilots in the main flight school operating in the airport
- Coordination with the flight school of specific mitigations: inclusion in the take off checklist of training pilots the item "stopbars off" or stricter criteria to pass the phraseology test for training pilots

Evolution of the number of runway incursions in Valencia Airport and examples of the actions defined in the Unit Safety Plan.



- Stopbars H24
- Hot spot AIP N1

- Improvement of the AIP (colours and information)
- Change from N1 to TIRIO
- Change in signals
- Leaflet to be shared with ground personnel

- Inclusion of the distance between N1 and the runway in the AIP
- Stopbar in N1 to be operated at the highest intensity
- ATIS message to warn on the fact that N1 is a parallel holding point

By submitting this document, your organisation is willing for the proposed Best Practice to be shared with other ANSPs.

This document should be sent to: soe_2022@eurocontrol.int **by 31st July 2022 at the latest.**