SAFETY MANAGEMENT Q&A

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1. What is the most significant change facing your organisation at the moment that has relevance to aviation safety?

In continuation of our Integrated Safety Strategy, DSNA is deploying a new Safety Risk Assessment methodology for evaluating all kinds of changes and their impact on the safety of our operations. Changes in our functional system range from unit level local issues such as relocating an approach control room or a local airspace change, up to the multiple deployment of future tower controller working position (SYSAT programme) with new functionalities. This is one of the foundation pillars of our SMS, together with investigation of incidents, so this is a major evolution in the way we manage safety.

2. Why is this change necessary? What is the opportunity or need?

It is both an opportunity and a need. The new European ATM/ANS regulation (EU 373/2017) comprises a fairly innovative and systemic approach for dealing with changes impacting safety. The regulatory team that helped EASA develop this requirement was composed of several experts from ANSPs, including DSNA. So we had the chance to influence the way the requirements were phrased. However, we then had to convince the regulator we were doing the right thing and that was a major challenge.

Thanks to our long-standing innovation work in safety, we were able to capitalise on several past initiatives. We integrated real-life scenarios into the safety analysis (e.g., OJT, stormy weather situations, shift handovers) for ERATO Electronic Environment (EEE) deployment in Brest and Bordeaux ACC. We also trained ATCOs to perform observation in the control room or tower to capture safety relevant issues to feed into a local change process (also called normal operations monitoring). The new method also relies on the concept of barrier models (an extension of the famous 'Swiss cheese') thanks to the work with EUROCONTROL Brétigny and several ANSPs in SESAR, and with a view towards deploying this tool in the field (via the IRiS User Group). The barrier models allow us to account for improvements in safety (success case) that the change will bring, so not only a negative view of safety.

All in all, the fundamentals are not different from the previous well-known Safety Assessment Methodology, but it incorporates new additions that make more sense from an operational point of view and also bridge the gap with safety investigation.

3. Briefly, how is safety assured for the change?

This method has been developed thanks to an incredible effort of various teams from many services, ops and tech, within DSNA converging towards the same interpretation of the requirements, of our needs and bringing all the pieces together. It also

incorporates more of the new view of safety such as 'success case', normal operations perspective, and technical performance supporting ops, while at the same time building on DSNA practices and people's expertise.

4. What are the main obstacles facing this change?

Training and promoting a new method in a time of crisis such as the one we are experiencing is a challenge. After the first sessions of training, we had to convert into virtual training sessions which is, of course, very different both for the trainers and the trainees. We are hoping to be able to organise local hands-on sessions with the persons in charge of organising the safety risk assessments at the units, so that we can go through their topics and provide first-hand advice and guidance on how to use the method.

5. What is the role of front-line practitioners? How is their expertise incorporated into change management?

In the past, DSNA has trained an important number of people on our safety risk assessment methods, actually more than 1000 people since the early days of EUROCONTROL ESARRs. This proved very useful to support our safety culture: even if people were not actually carrying out the safety risk assessment, they knew what this was all about when they were called to participate in workshops to evaluate the risks linked to a specific change.

Based on this experience, we tailored the method so that it is an improvement over the previous one, focused more on operations and changes to operations. Then we can properly evaluate the effects of the change through structured interactions with practitioners. This is also meant to avoid the 'risk matrix number game' when people's ingenuity was focused on finding the right arguments to end up in the green box rather than the red one! In that sense, using a barrier model to describe the different ATCO activities (strategic, tactical, emergency) makes a lot more sense and is readily understandable.

Additionally, the barrier model is also a good way to take into account what really works (robustness of the barrier, 'people make safety') and also to liaise with the findings of specific investigations where we uncover the finer details of work-as-done and discuss those in a just culture environment.

6. What do they think about the change?

As we are in the process of training those who will use the method, this is still work in progress. A lot of support is needed for making this change a useful tool for the kind of changes we have to deal with, whether they are operational procedures, technical functionalities or runway works.

We hope everyone will benefit from this more operationally oriented view of the evaluation of the change, rather than the previous more reliability-oriented process. Our ATM environment will go through various changes, with more digitalisation, greener flight profiles, and new entrants. The change will contribute to maintaining collective confidence and trust in our system.

7. How can front-line practitioners get involved in safety management to best support operational safety?

As is usual since we introduced safety risk assessment a long time ago, operations are involved in the brainstorming for changes that may impact their activity. The real novelty is that we are also trying to capture their perspective prior to the change so that we can better evaluate the impact. The same approach – observation of normal operations – can be used after the change to validate our assumptions, capture new emerging issues.

This requires buy-in from all stakeholders, but we think this is a major opportunity to learn from adaptations to the various operational constraints. It is also an opportunity to support this adaptation in a constant dialogue between front-line practitioners and all staff and managers involved in safely running our complex operations for the benefit of airspace users.