

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?

Austro Control is presently working on a concept to introduce remote tower operations. Remote or digital towers have become highly relevant for most ANSPs in the past years, and some ANSPs have already gained a lot of experience in their operation. This is good for us, because it gives us opportunities to learn from our European neighbours and it also means our ATCOs will have the chance to gain knowledge from their peers. What makes the change so significant from a safety perspective is the implications for technology, procedures and operations, and human factors generally. The concept of remote towers, with a view of the airport through technology rather than a controller being on site looking out the window, is a whole new way of working. Therefore, it requires careful planning, safety and change assessment and – very importantly – strong support and contribution by operational staff.

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

As a starting point, we are working on a concept to introduce a virtual centre for some of our approach units, which are presently located on site at the conventional towers. We are making this change to increase the efficiency of our operations and to enable an increase in capacity in other units. Once introduced, this will allow to gain experience with implementing this technology, operating remotely, and help us understand what the change means for front line operators. Based on the outcome and lessons learned, we can then make more educated decisions as to how we could utilise this technology for other use cases.

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

A safety expert was appointed to the remote tower team from the very beginning of the conception phase, and a safety assessment will be planned and carried out according to our methodology. Our safety case is also based on available safety assessment guidance material, which has been developed by EUROCONTROL, CANSO

and EASA. As part of the safety case, we are carrying out a human factors assessment to thoroughly address all aspects of the change, including team resource management, workload, human-machine interfaces, and ergonomics more generally. As a starting point, we intend to produce a thorough job analysis of work as it is done today.

4. What are the main obstacles facing this change?

Apart from the technical enablers, I think more than anything else it's the challenge of ensuring that ATCOs feel competent to carry out their jobs the same way as if they were on site, and giving them a good sense of situational awareness. We need to look carefully at human performance scenarios, where we get an understanding of what the controllers need to see and how well they need to see it. This is where we will aim to get information from other ANSPs, where remote operations have successfully been implemented.

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

Front-line practitioners have been involved from the very beginning and are actually leading some of the work packages. We have a very participative approach to our safety work, where everyone in the safety assessment team is encouraged to bring in their expertise and where we strive to reach a consensus.

6. What do they think about the change?

Of course, there are some insecurities. It's a change in the way they work, and in the technology deployed. But I think the approach we are taking, to start with the centralisation of approach services is one where they can gradually familiarise themselves with the look and feel. I think that it is natural for controllers to want to see an exact replica of what they would experience on site, but we need to differentiate between needs

and wants for our implementation to be a success, and this takes time.

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

Whenever we carry out a safety risk assessment in ATS, we always make sure front-line operators are part of the assessment team. In fact, we have trained many of them to become safety peers, which means they can lead and moderate the risk assessments. While it's not ever going to be possible to get every front-line person involved in safety decision-making, we do always make sure they're adequately represented. We also always encourage front-line practitioners to take on safety roles, such as operational safety functions, becoming members of the local safety committees or acting as safety assessment peers. To be honest, we couldn't do our safety work without the contribution of the front-line operators. 