Dear readers,

This is my first Foreword for HindSight and I am proud to be associated with a publication that does so much for safety. It does this not by taking a political position but by providing a platform for openly and honestly sharing information about things that have gone right (and wrong) and about the challenges that we in aviation face – all at a very practical, down-to-earth level.

In that spirit, I’ll start by declaring that Air Traffic Management in Europe needs to change. We are not meeting the needs of our customers – principally the airlines – because we do not have the capacity in place to meet today’s demand, let alone the demand forecast in the decades to come.

Our latest forecast (in our Challenges of Growth study) is for an increase of 53% in traffic by 2040. However, there are significant risks associated with this forecast and it may well be that the increase in traffic is as high as 84%.

Airport infrastructure is expected to be a significant constraint on this growth but there are other challenges as well. ATM will not be able to handle these traffic levels safely unless we change the way we do things. Indeed, we will need to make some quite radical changes if we are to avoid the kind of delays we saw twenty years ago. Some of those changes will be technological – coming out of SESAR – but there may also be others, such as financial regulation of air navigation service providers in order to provide the incentives required.
Welcome to Issue 27 of HindSight magazine. The theme of this issue is ‘Competency and Expertise’. It is a topic that links to all previous Issues of HindSight.

Our ability to work effectively depends on the competency and expertise of front-line practitioners and all involved in the operational, technical, support, and management functions. Safety isn’t something that is just ‘there’ in the aviation system. People actively create safety. But how do we create safety? And what do we need to do to help ensure that we can continue to do so? Competency and expertise are an important part of the answer.

In this issue, we have articles from operational, safety, human factors and psychology specialists. This is part of what makes HindSight unique – it brings together those who do the operational work, those who support operational work in a variety of ways, and those who study operational work to help better understand it. We are proud to give a voice to some of the world’s leading academic thinkers, and to operational and support specialists who have stories, experience and practical insights to convey. The key is that the articles are interesting and useful to the primary readers of HindSight: air traffic controllers and professional pilots, and hopefully to others who support operational work. Do we succeed? Let us know!

In this Issue we explore the nature of competency and fundamental applications and implications for operational training, selection, and procedures, including non-technical skills and contingency. We then zoom out to regulatory and future issues. The regular feature on ‘Views from Elsewhere’ continues with articles from surgery and rail. These articles raise questions for us in aviation and provide some practical ideas. And in this issue we have articles drawing from the world of sport. HindSight continues online over at SKYbrary with further articles in the online supplement, from aviation and other industries, on the theme of competency and expertise.

We also have ‘What we do’ good practice snippets. We’d particularly like to hear from more readers for this section. And this brings me to the next Issue, which will feature articles on ‘Change’. All readers have been affected by changes, in procedures, regulations, technology, people, incentives, organisation, etc. The pace of change will only increase. How do we change to adapt to the dynamic world of air traffic management? And how do we as individuals, teams, and organisations adapt to these changes? Let us know, in a few words or more for your magazine on the safety or air traffic management – HindSight.

At the same time, we will have to respond to other developments, such as cyber threats or the integration of unmanned aircraft into the same airspace as manned aircraft. The rapid growth in the capabilities of drones and their potential uses is set to continue and we need to make sure that this can be handled safely.

So the pressure on the people in the industry to cope and to adapt will be greater than ever before, with challenges for staff, for training departments and also for managers. Competence and expertise will be crucial if the aviation industry is to respond and to meet the demands of the travelling public.

This issue of HindSight provides some fascinating insights into how we as an industry can make sure that our people have the competency and expertise to cope with the challenges we face and the changing nature of ATM. As one article notes, we will have more automation, more use of data, better systems for human-machine interaction and entirely new ways of working with aircraft. We will need all this in order to meet the needs of the decades to come.

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