

Dear Readers,

Ascribing the cause of an accident or incident to 'a loss of situational awareness' is rather like a saying that someone died from 'a heart attack'. This provides some information but opens up a whole series of questions. Why did the heart attack happen? Poor diet, smoking, heart disease or was it a more immediate factor such as an electric shock? In the same way, why was there a loss of situational awareness?

The articles in this issue provide a fascinating insight into what situational awareness is and how we can all improve our understanding of "what is going on around us". They look at the subject from the point of view of both controllers and pilots and they look at how the concept has developed and changed over time.

In the past, pilots had few sources of information so, as Captain Johan Glantz describes so succinctly in his article, "In a DC9 knowing 'what's going on around you' often meant 'Where are we?'". Now we have so much information available to us, we now need to be able to filter this so that we can focus on the things that really matter. This is also true for air traffic controllers, who now have much more information on the screen than was the case in my day. For air traffic controllers, of course, establishing and maintaining a good mental picture of what is happening – not just now but also in the future – is absolutely vital. It is at the heart of their role.

At the same time, we also have to understand the tools that are helping us fly/control the aircraft and the tools that are supplying us with the information. So we have to know if the Weather Radar is set up correctly to show CBs, or whether the control screen is providing all the information we need. If you do not understand the tool, then you cannot rely on it.

And as we move forward to managing 4D trajectories operated by aircraft with precision navigation in free route airspace with full air-ground data connectivity, we need to think about the human at the heart of this. Does he or she have the information required to prove good situational awareness? Is he or she able to maintain this situational awareness? Because if there is a problem beyond the programming of the system, then that is when the human will be suddenly required to make critical decisions.

As we develop and implement new systems, we need to think about how the pilots and controllers will interact with the systems and about whether they are getting the right information at the right time, whether it is through a handover from the previous controller or via a sign by the side of a taxiway. There are some very interesting and thought-provoking articles in this edition and I would like to thank all the authors for their hard work and their insights.

The Director General



## FRANK BRENNER

has worked in Air Traffic Management for his entire career. He has been Director General of EUROCONTROL since 1 January 2013.

Since taking up his functions at EUROCONTROL, he has initiated the development of a Vision and Strategy, including the development of Centralised Services as part of the SESAR deployment concentrating on how to support controllers with new technology which increases safety.

Before joining EUROCONTROL, Frank Brenner was General Manager Operations for FABEC, Vice Chairman of EUROCONTROL's Performance Review Commission and a member of the Performance Review Body. Trained as an air traffic controller, he has held a number of posts at DFS including Head of ATM Operations, Director of Operations at the Business Unit for Aeronautical Data Management and Director of DFS's Control Centre Business Unit. operational posts.