

Expert TALKS



Volatility in air traffic – a growing challenge for the aviation sector

Viewpoints from:



Alexander Hanslik
AustroControl Director Corporate
Strategy and International Affairs



Matej Eljon
FAB CE Aviation Services Director



Jozsef Bakos
HungaroControl Head of Air Traffic
Services



Moderated by **Markus Pohanka** Austro Control Director
Communications and Public Affairs.

Unexpected geopolitical events, extreme weather and shifting passenger preferences make traffic forecasting difficult. The increase in these events presents resource challenges for Air Navigation Service Providers (ANSPs) who rely on demand forecasts to plan infrastructure investment, typically over five to seven year' cycles. In the fifth InterFAB Expert Talk on 24 June 2021, hosted by FAB CE, industry experts came together to discuss volatility in air traffic and the delivery of cost-effective services in the aftermath of COVID-19. Unaided by government subsidies ANSPs reduced costs wherever possible during COVID-19, for example through the introduction of new rosters, multi-sector ratings and adapting shift patterns to maintain critical air traffic services. Downtime was used to boost skills training and technological research continued in anticipation of returning traffic. However, predicting the volume of traffic, when and where it will grow fastest remains a challenge.



Just in the last six months the STATFOR forecast has changed three times,

said Jozsef Bakos HungaroControl Head of Air Traffic Services.

"The most recent indicates demand could reach 90% of 2019 levels for the south-east axis compared with 60% three months' ago, which makes it very difficult to plan." Additional demand over and above 2019 volume would be hard to accommodate with existing resources.



It is good the ramp-up is happening gradually,

said Alexander Hanslik, Austro Control Director Corporate Strategy and International Affairs.

He said SESAR and Single European Sky (SES) should focus on an infrastructural renewal programme that enhances system capacity as a whole. "If we do that in an efficient manner, the question of whether or not traffic forecasts are accurate to the last decimal point becomes less important. "There is a lot of flexibility in our systems to respond to volatility as long as the demand does not hit system capacity limits. Five-year plans are not wrong, but they are only part of the story. There has to be flexibility to respond to changes in demand."

Measures such as improved trajectory planning, better slot management and crucially big data analysis are part of the solution. "The statistics we get now do not really tell the truth." He added that efforts to manage demand and supply need to be developed in partnership with the airlines as part of a wider discussion where problem solving takes place at Network Management level, regional or even local level.



The more objective data we have, the better,

said Alexander Hanslik.



Expert TALKS



Technological improvement is going to play a major role as a result of the digital transformation taking place in ATM, according to Matej Eljon, FAB CE Aviation Services Director.

“ ANSPs have a much more elastic cost structure as a consequence of COVID, for example directing capacity where needed in response to the short-term forecast. Digital transformation will enable more data to be exchanged across borders, more static and dynamic sector changes, cross border optimisations and expanded free route airspace. All this will have a significant impact on ANSP flexibility. Now is exactly the time to start working with these concepts.”

said Matej Eljon.

SESAR is developing data sharing systems to support tactical planning by ANSPs and airspace users to help expand access to real-time data across national borders. This integrated approach is also reflected in the Network Manager's new data centric system architecture which is due to be operational by the end of the decade.

Enhanced network performance also supports implementation of free route airspace currently underway in Europe. Free route increases flight planning freedom for airspace users, however it also raises volatility at a local level as “routes between city pairs change multiple times a day” said Jozsef Bakos. “There is a bigger role for the Network Manager here.”

In response to questions to the panel, the experts discussed the interdependencies that exist between key performance indicators such as airspace capacity and environmental performance. “There is a trade-off,” said Alexander Hanslik. “You cannot design a system that is only ready for one scenario: Protecting the environment comes with a cost. You need a buffer and this means that interdependencies between indicators need to play a bigger role in the target setting process.”

The STATFOR forecast predicts a return to 2019 traffic volume by 2024. This leaves ANSPs three years to develop a performance measurement scheme which is able to respond to demand changes in the short term and meet the industry's longer-term objectives. Incentivizing greater flexibility in the delivery of air traffic services would be a good place to start.

InterFAB Expert Talks provide a platform where experiences can be shared and views exchanged on the key issues which relate to data and performance in ATM. www.fabec.eu/ExpertTalks

For more information please contact:

Roland Beran, FABEC: +49 171 2139896

