**Augmented Approaches to Land – Enabling low visibility landing**

By: NetJets Europe, Honeywell, Dassault, Airbus, ANS CR, DFS, DLR, DSNA, EBAA, Elbit Systems, Fraport, Lufthansa, skyguide, SWISS and Zurich Airport

Enhanced Vision Systems (EVS) and Synthetic Vision Systems (SVS) is the first initiative worldwide to analyse and describe the minimum airport requirements to enable low visibility landings. They use several advanced approach procedures compatible with any type of airports. They also use full flight simulator and trial flights to demonstrate that low visibility landing operations are safe and feasible at affordable airport costs. This project will play an important role in future commercial air transport operations and it's a good example of cooperation between different ATM stakeholders.

**RNP Implementation Synchronized in Europe (RISE) – improving access to airports in adverse weather conditions**

By: NAVEBLUE, DCAC, NAV Portugal, Hellenic CAA, Air France, Novair, TAP, Emirates, Aegean Airlines, Air Corsica and easyJet

RISE shows that by using performance-based navigation (PBN) it's possible to improve access to airports with challenging physical environments and in adverse weather conditions. PBN reduces the number of missed approaches thereby reducing fuel burn and CO2 emissions. The results from the 500 flight trials conducted by RISE partner airlines and Air Navigation Service Providers in France, Greece, Cyprus and Portugal are paving the way to wider implementation of Required Navigation Performance (RNP) in Europe. RISE also brought together a number of airlines who share common interests thereby demonstrating the benefits of deploying operational techniques in cooperation and helping to spread their uptake.

**Multiple Remote Tower Operations – making remote air traffic control possible for more than one airport by a single controller**

By the Irish Aviation Authority

Multiple remote tower operations clearly shows that it is possible for a single air traffic controller to safely provide air traffic control services remotely to more than one low-volume airport. The initiative is a very good example of SESAR solutions, and has the potential to be replicated beyond the EU boundaries. Remotely operated towers offer significant potential to assist air navigation service providers (ANSPs) to reduce and control their costs while maintaining safety and service delivery. This potential is greatest at smaller, less busy regional airports where the volume of traffic is likely to be insufficient to cover the costs of service provision at a user charge that is sustainable from the customers’ perspective.

**South-East Axis Free Route Airspace (SEAFRA) – making possible extra-**EU **cooperation on airspace**

By: Croatia Control, Serbia and Montenegro Air Traffic Services and Bosnia and Herzegovina Air Navigation Services Agency

SEAFRA is the first cross-border application of 24-hour free route airspace in Europe. The project brings together four countries: Croatia and Bosnia and Herzegovina, which are part of a Functional Airspace Block (FAB), with Serbia and Montenegro, which are not a part of any FAB initiative. By doing so SEAFRA provides a concrete example of how this type of cooperation is possible and can benefit all stakeholders. The idea of such large-scale free route airspace was [initiated to improve safety and efficiency,](http://www.airtrafficmanagement.net/2016/04/seafra-scenarios-undergo-testing/)as well as environmental protection by reducing fuel consumption.

**Transition to a Service Oriented Architecture – generating new business models for the ATM**

By Skyguide

This initiative helped generating new business models with a major impact on the Air Navigations Service Providers costs, and therefore for the airspace users. By reducing the internal dependencies on Skyguide's own air traffic management systems, it contributes to reducing their complexity and their number. It is a critical first step towards a system-wide information management (SWIM), a major driver of change in the whole ATM system. The project is an excellent example of cooperation that combines technical efficiency built on cooperative systems and paves the way for wider collaboration in the future, having the potential to be replicated over the ATM network.