



areas and would also help arranging traffic flows.

And the second one is related to the design characteristics of the Emergency Locator Transmitters, both in terms of durability of the batteries and jettisoning capabilities when certain parameters are exceeded. Uploading the latest data collected by the aircraft systems that are normally fed into the Flight Data Recorder in an emergency situation via satellite communication and deploying at the same time the Emergency Locator Transmitter would also help the investigators in their quest for the factors that led to the accident.



**Ravenhill, Helios** MH370 is a disaster without explanation; and sadly given the vast search area could forever remain so. It asks searching questions both of our

ability to track aircraft in flight and to locate accident sites; each has to be considered separately.

In terms of aircraft tracking, MH370 was a modern aircraft bristling with the ability to communicate – it appears that, for whatever

reason, the communications devices were disabled. A new technology would not have solved the problem, additional operational procedures and isolated devices may be appropriate.

From a Search and Rescue perspective, lessons clearly need to be learnt on the effectiveness of the Emergency Location Transmitters (ELTs) and on the accuracy of the last known position for oceanic flights.

New rules are also needed to ensure airspace users have an obligation to provide regular position information for remote flights (using whatever technology they have); but also crucially we need to overhaul the provisions for ELTs. These should report GNSS position, be significantly more robust and have improved logic to detect the unusual events.



**Stejskal, ERA** If we pass over the fact of a procedural failure by the air defence system where the target while not responding by transponder was still being

tracked by PSR, the only solution in such a disaster would be through satellite communication. The latency of ADS-B over satellite is negligible.



**Higuera, Ineco** A more extensive implementation of ADS-C in all the oceanic airspace would help. That implies an upgrade of the avionics, the

corresponding software development in ATM systems and finally the implementation of the right operational and safety procedures not only in the cockpit and ATC centres involved, but also between the ATC centres themselves.

All this should be accompanied by training all involved staff both in the air and on the ground. The ADS-C is not only able to identify where the aircraft is periodically but to report on any aircraft deviations from the planned trajectory.

ADS-C achieves its highest performance when used with datalink. So the implementation of this last enabler should be also ensured in parallel.

## EASA How should the European Aviation Safety Agency's role evolve? Could it become a competent 'European Aviation Agency' (EAA) with far more supra-national powers?



**Stejskal, ERA** EASA already publishes regulations through the European Union which surpass individual national regulations. Thus there is no need

to change any rules to build up to a EAA.

EASA already has sufficient powers to disseminate EU-wide regulations. EASA should however become more competent in the field of air traffic management. It was promised back in 2009 but in reality not much has happened. Even so, EASA might just be the agency capable of forcing the unification of the Single European Sky.



**Higuera, Ineco** Current tasks of EASA include drafting aviation safety regulation, conducting inspections to ensure their uniform implementation, the type

certification of aircraft, engines and parts, flight crew licensing and flight operations, the field of aerodromes, ATM and air navigation services.

However, military aircraft, customs and police services, and persons and organisations involved in such activities remain outside EASA's scope.

The future role of the agency should change based on the premise that aviation safety should be understood as a single safety system with interrelated and interdependent actors. So, the EASA system should be extended to all aspects of aviation safety under a 'total system approach'.

That means that industry, operators and service providers will have a single body of law to consult thus simplifying their interface with the competent authorities. All this should be accomplished avoiding overregulation and overlaps with the current regulatory system while adapting to national rules.



**Puetz, Quintiq** Considering the focus on safety in the ATC industry, it is of great importance to have a central European organisation advising all fragmented ANSPs.

We are not saying that responsibility should shift to an EAA with supra-national powers, but EASA could distinguish itself in becoming more powerful in determining regulation and setting standards and procedures.

Once the guidelines regarding best practices, the required technology and correct procedures have been set, ensuring that commitment will follow through from the side of individual nations should become less challenging.

Another potentially crucial role, is the element of information sharing. In light of the envisioned de-fragmentation of European airspace through to the SES initiative, ensuring that all relevant parties across borders have all the required real-time information, will be essential to operational continuity. EASA could set the protocol on the correct structure and tools for such information sharing.



**Clinch, SITA** The EU Commission should impose subsidiarity criteria that national aviation authorities would be required to apply to justify doing any tasks at a national level instead of at EASA level. If anything EASA should become a 'European Aviation Authority' not a 'European Aviation Agency' because there are too many agencies already.



**Lallouette, Thales** The mission of EASA has already significantly and successfully evolved over time. This evolution could be accelerated and increased by the European Commission with the ultimate goal of creating a European Aviation Agency.

This would obviously require the full support from the European member states and their national supervisory authorities. This evolution would have to be performed step by step and would also require agreeing on the revision of the governance and financing of its activities.



**Ramu, NetJets** EASA certainly faces some challenges to fully harmonise civil aviation across Europe and strengthening the agency by giving it authority for a strong and effective oversight across Europe would increase the efficiency in the long term.





**Gammicchia, ECA** It seems quite difficult because of two considerations. The first is related to resources. Of course, with the present scheme it would be completely unaffordable for an agency with the structure, budget and role of EASA to become the major player in defining also air transport policies at EU level.

The second one is related to the political framework within the EU. Most of the competences that would have to shift to the new EAA would be the ones that are now performed within the European Commission through, among others, DG MOVE.

Although it would be a good thing to gather all the issues related to air transport in

one single agency, there would probably be governance issues regarding the competences within member states and the EU institutions, as is already the case at Commission level. The agency would however have less ability to trade off opposing interests.



**Ravenhill, Helios** EU aviation policy should be expressed simply: One Sky, One Agency. The continued evolution of EASA toward the goal of being the European Aviation Agency should be supported. Of course it is more complicated than that and caveats are needed.

The evolution should be slow and meas-

ured; resources and budgets need to keep up with responsibilities; governance arrangements need to reflect additional roles. The role should be one of harmonisation and rulemaking – with oversight and audit remaining at national/regional level and performed in the local language; the agency's role being to support and audit the national agencies to ensure the hallowed 'level playing field' is achieved.

Finally, economic regulation should not be rolled up with safety regulation – where economic regulation is required, it should be performed by an independent body with adequate separation from safety responsibilities. But yes, EASA should grow and evolve.

## FABS Do you see evidence of a shift by Functional Airspace Blocks away from being simply 'clubs' to assuming a more operational function?



**Gammicchia, ECA** We still have a long way ahead regarding the implementation of the FABs concept! Not much has changed in the operational reality we experience every day. From the flight deck viewpoint we still perceive very significant differences when changing from one provider to another, even in the same FAB.

There are still different entities when transferring between area control centres (ACC), with different restrictions being applied and still not enough flow of information to allow more efficient routes being flown without a need to coordinate with the next ACC.

There are obviously sovereignty issues but it is mainly money and revenues which are at stake. We know there will be 'winner' and 'losers' within the ANSP community. This requires a real political will to negotiate a long-term integration road-map and compensation agreements, and, here, there is a big question mark.



**Ravenhill, Helios** No. That might be unfair to some FABs (particularly Sweden/Denmark) but in general, I feel that FABs have had their day. We need to re-evaluate the policy entirely. One of the strengths of the Single European Sky is the separation of regulator from service provider, but we need to go further and separate member states from their service providers.

An ANSP decision-making process should be focussed entirely on cost-efficient, safe service provision to airspace users and not get mixed up in national, regional and EU politics. The shift in SES2 from FABs being an airspace optimisation issue to one of service provision optimisation has failed.

FAB councils put ANSPs and member states in

the same decision-making process; the ANSPs in FABs vary in size and complexity – they do not make good bedfellows for collaboration. For FABs we should go back to SES-1 and place real obligations on member states to have genuine cross-border airspace structures that optimise traffic flows.

For service provision we should take the lead from the industry and provide regulatory support for the emerging industrial partnerships between ANSPs, for example Borealis, to take on more service provision functions and hence reduce fragmentation and cost.



**Stejskal, ERA** Any evidence of FABs shifting from purely economic savings to a common operational view has not materialised.

FABS have received much interest from industrial lobby groups who want to deploy their new technologies within specific FABs which will only increase the technological gaps between European ANSPs.

Moreover, the European SESAR project by its own rules actually supports such activity and does not offer diversity. It is frequently heard that it would be more natural to build local partnerships rather than FABs.



**Higuera, Ineco** In July 2014, the EC formally requested the members of six different FABs to improve as a crucial step towards a more efficient, less costly and less polluting ATM system in Europe.

Those common airspaces have been formally established, although they are not still functional. In other words, they exist only on paper and they should evolve to what is expected from

them in operational terms if we want to support the full implementation of the Single European Sky, then reducing the airspace fragmentation along national borders.

However, different levels of progress in implementation should be recognised between the FABs. So, Sweden and Denmark are moving faster than the rest and also the United Kingdom and Ireland are progressing. But when looking at the heart of Europe, at FABEC, which is responsible for most of the traffic, faster progress should be encouraged.



**Clinch, SITA** Some FABs such as the UK/Ireland FAB are creating operational benefits. The issue with the FAB concept was never that the FABs would not create operational benefits, it was the assumption that imposing alliances between ANSPs managing contiguous airspace would somehow reduce costs instead of just creating bigger quasi monopolies.

The EU Commission should have imposed alliances between ANSPs managing airspace that was not contiguous to create alliances that could have competed against each other to spread into each other's territory.



**Ramu, NetJets** Harmonisation of infrastructure has suffered heavy political resistance. Nevertheless, it is recognised that Europe is over-equipped due to the fragmentation of European airspace.

Through new technologies and harmonisation of practices, there might be a way to rationalise European airspace in a more proportionate way, making the change more politically acceptable. Again, it is important for all operators that the cost-efficiency of the European ATM continues to improve. *ATM*