A Performance Based Environment – what does this mean for the aviation community?

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This paper has been developed to stimulate thinking around the new regulatory approach being driven in through the introduction of the Performance Based Environment (PBE). This paper explores some of the challenges and opportunities presented by the shift in EASA’s regulatory approach and addresses how business advantage can be created by linking safety performance with business performance. Aviation regulation is predominately focussed on the safe operation of aircraft and has evolved in response to a long history of accidents and failures. For Commercial Air Transport operators, an Air Operator’s Certificate (AOC) is granted and continues to remain valid, on the condition that the Operator complies with the relevant regulations. Commercial airliner accident statistics for 2016 are considered the second safest year in history, however when judged in terms of the number of hull-loss accidents (19) and fatalities (325) it is evident that risks still exist in compliant systems. Accidents sadly continue to occur in compliant organisations, suggesting that ‘regulatory compliance is no longer enough’.

A change in regulatory approach

The International Civil Aviation Organisation (ICAO) and subsequently the European Aviation Safety Agency (EASA) have reflected on the adequacy of the regulations to achieve even greater levels of aviation safety and have each concluded that if safety is to be improved, a different approach is now required. Therefore the PBE concept was introduced by EASA manifesting first in the Air Operations rules introduced in 2012 (ORO.GEN. 200) and soon to be developed further into the aviation community through NPA 2013-01.
The EASA Performance Based Environment (PBE) paper provides a sound synopsis of the challenge and outlines an approach that has potential to significantly evolve the way in which civil, and subsequently defence, aviation is regulated. In the past, changes to regulatory system philosophies have required minor shifts in the way that organisations and aviation authorities demonstrate and assess compliance. The shift towards a PBE approach focuses on the performance of an organisation’s management system and the way risk is controlled as a result, requiring a complete transformation in the way regulators and regulated organisations think and work. Far more flexibility and judgement will be required, particularly in the case of identifying risks and agreeing appropriate management system performance criteria and, in the early days following the transition, how each party will build confidence that the organisation is equipped for success.

**Performance Based Oversight – how is performance to be assessed?**

The Safety Management International Collaboration Group (SMICG) has developed a means of assessing the maturity of an organisation’s management system and thus, its ability to proactively manage safety performance. The assessment includes a maturity scale and is structured to allow for the initial approval of an organisation or, for existing approval holders, the transition to a revised management system. It outlines a structure that aims to provide visibility of the maturity of an organisation’s safety management arrangements and highlights any areas of weakness.

The SMICG template for management system assessment has become the default approach for EASA member states’ aviation authorities. It requires organisations to demonstrate how effectively they are meeting the intent of the safety requirements. SMIGG is intended to be scalable in order to accommodate an organisation’s size and complexity. It also reflects an assessment philosophy that is aligned to performance by using positive, affirming terminology. Therefore viewing an organisation’s capability and resilience to manage safety, rather than merely drafting a template-driven manual that ticks the boxes.

**Benefits of a PBE**

The shift towards PBE provides approved organisations with a prime opportunity to further advance safety whilst improving commercial and operational performance. The approach will improve understanding of risk and focuses on achieving the desired level of safety performance while enabling better targeting of resources. Organisations will be far more responsive to risk and therefore more effective at risk based decision making. As PBE matures, the approach should also reduce the regulatory oversight burden, promising further benefits for both the regulated community as well as the regulator.

**Transition to PBE - What are the Challenges**

Both approved organisations and regulators alike will have to adjust to the new perspective that PBE requires. It is a transformation of mindset as well as rule sets. Baines Simmons’ current experience dealing with Air Operators that are starting to address the performance question has provided an insight into key challenges that we believe will be common across industry. These include:

- **Understanding of the intent of the regulations:**
  Organisations who have not established a clear understanding of the regulations and their intent cannot determine what high performance will look like for them. Without this, it becomes impossible to determine and agree to key safety performance questions and the associated
safety performance indicators.

- **Leadership and alignment:**
  Successful adoption of PBE will require change. A number of studies on change initiative success rates have clearly shown that where the senior leadership team are not engaged they are highly likely to fail. Baines Simmons’ experience in working with clients on transformation programmes supports that this is just as applicable to the aviation industry. Senior leadership teams need to be demonstrably committed to the change and work with their management teams to establish alignment of understanding throughout the organisation.

- **Finding a practical approach that works:**
  Once goals and objectives are agreed, practically building or structuring an organisation and its systems to deliver against them is a challenge management teams have to face. What is involved in achieving the safety objectives in everyday practice? How can these be aligned to identifying relevant, business performance criteria? And, once core processes are established, how do you report on their delivery? EASA’s Air Operations rule (ORO.GEN. 200) provides a starting point; Organisations need an effective management system to ensure the effective mitigation of risk across company boundaries. By extension, it requires accountabilities and responsibilities for performance to be duly understood and fulfilled.

- **Driving through and sustaining change:**
  Setting goals and building capability will only deliver limited and short term results if the people within the organisation are not supportive of the changes. Creating a positive safety culture to support performance and continuous improvement is a challenge organisations will need to tackle if they are to build a performance-oriented culture. Similarly, a workforce that does not possess the appropriate level of competence to achieve high levels of performance will jeopardise the success rate of any transformation.

- **Gaining confidence in your systems and communicating it:**
  Beyond the assurance that the compliance monitoring function is design to provide, organisations must be able to demonstrate that they are effectively managing safety. An assured safety performance programme that embeds continuous improvement philosophies is a discipline that many organisations will need to consider as their organisation matures in the PBE landscape. A programme that is well established, well implemented and well maintained will deliver the answer to Accountable Managers on ‘how well they are managing safety’ as well as serve as an invaluable aid in communicating that confidence to their stakeholders, including regulators, customers and board members.

**Strong regulatory foundations are key**

With the new focus introduced by PBE, it is perhaps natural to view the established compliance approach to system performance as a done deal. PBE is not intended to replace compliance. Far from it. Organisations need to approach the transition to PBE as an evolution rather than a revolution. The foundations are already in place - if effective intent-based compliance is achieved. This is the cornerstone of aviation safety after all.
However, as with the building analogy, the strength of the structure is dependent on its foundations. Organisations that try to build advanced Safety Management Systems on ineffective compliance foundations will produce safety data and make risk based decisions that are fundamentally flawed. Additionally, such flawed foundations prevent organisations from continuously improving business performance, included in EASA’s Basic Regulation as an Essential Requirement.

In Baines Simmons’ experience, the current style of managing regulatory compliance in many organisations tends towards being reactive and largely disconnected from business performance. Indeed, instead of seeing effective compliance as a useful tool to help them achieve their business objectives, functional managers are often too busy ‘doing the day job’ (upon which they are measured) to worry about regulations. This leads to situations where Compliance Monitoring Managers (who are responsible for assurance) having to ‘push’ compliance to those who are responsible for its ensuring compliance. Hence the responsibilities for assuring and ensuring begin to blur leading to poor management system performance.

**Embedding compliance into staff day-to-day responsibilities**

An organisation that relies on managers applying a detailed regulatory knowledge to day-to-day operations would drown in its own tick-boxes. The solution lies in cascading the responsibility for regulatory compliance as low in the management structure as possible, so that the day job quietly looks after itself. Integrating the intent of regulatory compliance in personal responsibilities that focus on output performance is an efficient way of building in performance. This is simply an alignment of performance management, where individuals will recognise non-compliance as a threat to their contribution to the business output and warning lights should start flashing.

In order to build a performance-driven organisation, design an organisation capable of managing itself from the ‘shop floor’, where regulatory compliance is the natural bi-product of focusing on performance at all levels.

**PBO is the opportunity we’ve all been waiting for**

*‘With every challenge comes opportunity’*

The move to a performance-based regulatory system will promote a renewed focus on achieving the objectives of the current requirements, therefore applying a smart approach to achieving and demonstrating compliance. In addition to the obvious opportunity of taking aviation safety to even higher levels, opportunities also exist to genuinely link safety performance to business performance. Something often discussed, however seldom converted into reality. A resilient design, a well manufactured product, a package of effective maintenance or a reliable and optimally maintained aircraft are all good for business. The fact is, these examples all lie at the heart of regulatory intent already.
PBE starts with strong regulatory foundations, relies on adopting a management system approach and already exists in the way in which organisations work. It informs a vision for the future, where people are set up to be ‘unconsciously competent and compliant’, and creates a world in which managers are seldom faced with fire-fighting or compliance challenges and a world in which output and safety performance align with business objectives.


About the Author

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Chris is a highly experienced aviation safety improvement consultant with 28 years of military and civil expertise. He assists clients to better understand their current and future safety improvement priorities. He is one of our leading regulatory and safety improvement management specialists, offering clients extensive practical advice and understanding of how to implement continuing airworthiness and safety change initiatives into the Airworthiness and Safety sector; Chris has first hand experience supporting safety management and cultural development programmes across major clients such as Qantas, Rolls-Royce, MoD and other world class carriers and MROs.

Expertise and capability

- Consults strategically and technically at senior management levels to develop effective safety management system strategies, plans and implementations.
- Programme manages safety cultural change projects into organisations to evolve enhanced safety and learning culture environments to support effective error management and safety behaviours.
- Builds airworthiness safety competencies to develop client understanding of EASA Continuing Airworthiness regulations, Error and Safety Management Systems.
- Advises and supports EASA Safety Management and Human Factors working groups.

Career background and experience

Chris is a Baines Simmons subject matter specialist for EASA Part-145 and Part-M, Human Factors, Error Management, Just Culture and SMS. Prior to joining Baines Simmons in 2003, Chris was engaged in military and civil aircraft maintenance and engineering. He has experience as a Licensed Aircraft Maintenance Engineer in supervisory and management positions within Base and Line Maintenance environments. Chris holds a first class Honours degree in Aeronautical Engineering. He is a current member of the European Human Factors Advisory Group.

About Baines Simmons

We are specialists in aviation regulations, compliance and safety management and partner with the world’s leading civil and defence aviation organisations to improve safety performance.

As trusted advisors to businesses, armed forces, governments and regulators across all sectors of aviation, we help to advance best practice, shape safety thinking and drive continuous improvement to safety performance through our consulting, training and outsourced services.