



Going further than ever before to raise aviation standards worldwide

e-Licensing and e-Examinations REGULATORY TOOLS FOR NAA OVERSIGHT

> Matthew Margesson Head of International Operations UKCAA, International Group iSTARS User Group Meeting 17th – 19th December 2018, Montreal

UK Civil Aviation Authority (UKCAA) International Group (IG)

As the UK's specialist aviation regulator we work so that:

- the aviation industry meets the highest safety standards;
- consumers have choice, value for money, are protected and treated fairly when they fly;
- through efficient use of airspace, the environmental impact of aviation on local communities is effectively managed and CO₂emissions are reduced;
- The aviation industry manages security risks effectively.

The UKCAA has a vision of *making aviation better for those* who choose to fly and those who do not.

As aviation is global, our reach must be global. As an integral part of the UKCAA the International Group (and CAA International as a Social Enterprise) helps the UKCAA enable this.



UK Aviation Industry and UKCAA

- 75% of visitors and 35% of goods arrive by Air
- 2 millions flights, 268 million passengers and 2 million tonnes of freight
- 3rd largest aviation network in the world, 370 international destinations in more than 100 countries. 2nd largest aerospace sector in the world
- Aviation sector generates £31billion, including £27billion in exports
- Supports more than half a million UK jobs, many of them highly skill and high productivity. Aviation supports 3,500 apprenticeships
- £1.7 billion is invested in Research & Development annually



Global growth challenge and opportunity?

6 billion passengers are expected to travel in 2030.

This **posses immense challenges for Governments, Regulators, Agencies, Institutions and Industry.** More movements at airports, increased traffic density, more passengers, more aircraft.....

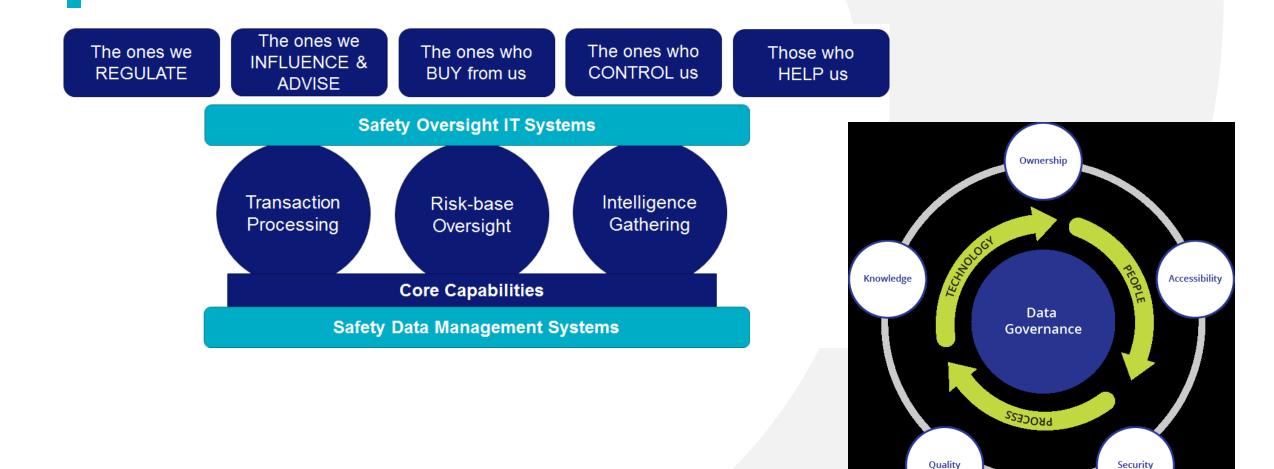
The **expected growth is also a great opportunity** to improve aviation safety, security, navigation, economic development and consumer protection as well as environment. It is also expected to bring **considerable socio-economic benefits** to countries.

We must work together to protect the total aviation system, ensure the effective implementation of standards, embrace risk braced oversight, provide our people with the skills and tools they need, and manage data to accurately support effective decision making.





Data – the strategic Regulatory challenge





Data – the strategic Regulatory challenge

ICAO Annex 19 requires that information is systematically collected, analysed and monitored to identify risks	 This will lead to a more informed, data based, risk aware regulator 	Customer Relationship Management	References Sources (other external)
The Breadth of Data	 Such as accident reports Compliance data Health checks SMS maturity 	Corporate Systems (finance, HR)	Centralised Oversight System (planning, records)
The Recording of Data	 As important as the information itself Categorise Consolidate 	Regulatory Services (e-Tools)	Entity Performance Tool (operational trends and monitoring)

REMINDER

We must work together to protect the total aviation system, ensure the effective implementation of standards, embrace risk braced oversight, provide our people with the skills and tools they need, and manage data to accurately support effective decision making.



CASE STUDY: OUR WORK WITH e-LICENSING AND e-EXAMINATIONS



Regulatory Remit/Task

Standards and Recommended Practices

People, Process and Tools

Effective Implementation

Risk Based Oversight, Data Driven Decision Making

E-TOOLS OVERVIEW

e-Examinations and e-Licensing System Tools, developed to meet ICAO NAA's PEL requirements;

E-Licensing is a complimentary tool to our globally successful 'high stakes' e-Examinations tool which is now in regular use by NAA's globally for licensing examinations.

Developing e-Licensing to meet complex EASA Licensing we can have an e-Tool that can be used as a multi-state tool, scalable to a single state applying the basic ICAO regulation.



Our ambition and Objective is to support NAAs and the ICAO iSTARS and iMPLEMENT programmes:

- Tools specifically developed for National Aviation Authorities and to fulfill regulatory remits/tasks;
- Global recognition that our tools assure ICAO and EASA compliance;
- By implementing these high-quality tools NAA's will have a complete solution to aid NAA's to be compliant with ICAO PQ's and have a higher level of confidence for future ICAO USOAP Audits;
- Tools use best-in-breed technologies that are secure, improve business process, releasing expertise and alleviating manual process;
- NAA staff are effectively equipped for their roles and responsibilities. All users, including industry, report high engagement levels and satisfaction with the Tools;
- Management information and data is meaningful, accurate and readily available to inform data driven decision making.

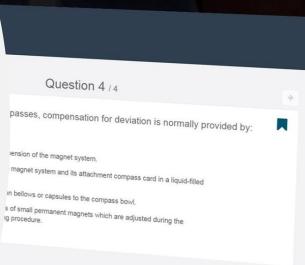
Regulatory Tools e-Examinations

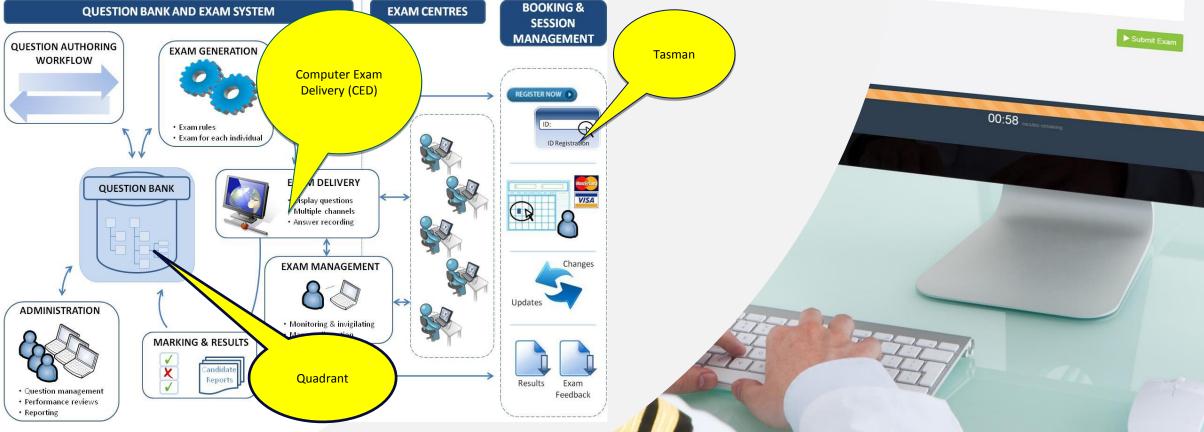
Professional and recreational licensing examinations

Exams booking and session management

Question bank management

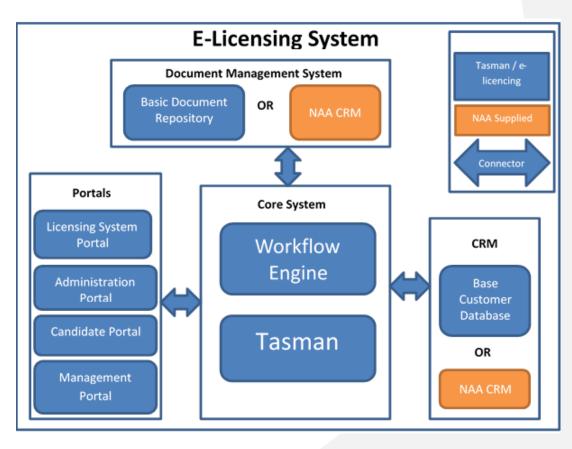
Secure onscreen exam Delivery





Regulatory Tools e-Licensing Our e-Lice

Our e-Licensing management system is designed to support State regulators in the effective issuance of all personnel licences, ratings and renewals across the entire spectrum of aviation requirements, in line with the international and national standards.







ICAO COMPLIANCE REVIEW

ICAO PQs Assurance Review - ICAO Compliance, Assurance and Assistance to ICAO states; **Compliance Manual** produced.

For completeness all individual Protocol Question's (PQ) have been reviewed for PQ categories 1, 2, 3, 4, 5 and 7* and have been scored as to their proximity to PQ 3 PEL and to e-Licensing and e-Examinations systems.

The objective of the scoring is to assist NAA's with ICAO compliance and assurance of their handling of the above PQ's

* Due to the subject matter, PQ 6 & 8 were not reviewed.



ICAO iSTARS Programme Support

The ICAO Protocol Questions Compliance Manual is designed to assist States through the USOAP process by bringing together all of the elements into one document.

The manual aligns closely to the iSTARS Apps for:

- PQ Tester;
- Dashboards;
- ICAO DOCs.

And can be used in conjunction with the USOAP Apps:

- USOAP Data Tables;
- USOAP Info;
- USOAP Report.

The compliance manual can be used in conjunction with e-Examinations & e-Licensing of as a standalone product.





ICAO iMPLEMENT Programme Support

e-Examinations and e-Licensing system tools provide robust and secure management of an NAA's PEL activities.

- Portal connectors to CRM, Medical and Financial handling.
- Self-service Application handling through candidate portal.
- Self-service Application handling for ATO's through ATO portal.
- NAA administration portal with work allocation, reporting and audit trails.

The two systems tools assist NAAs Manpower Planning, Training - staff, inspectors and examiners which are iMPLEMENT Apps.

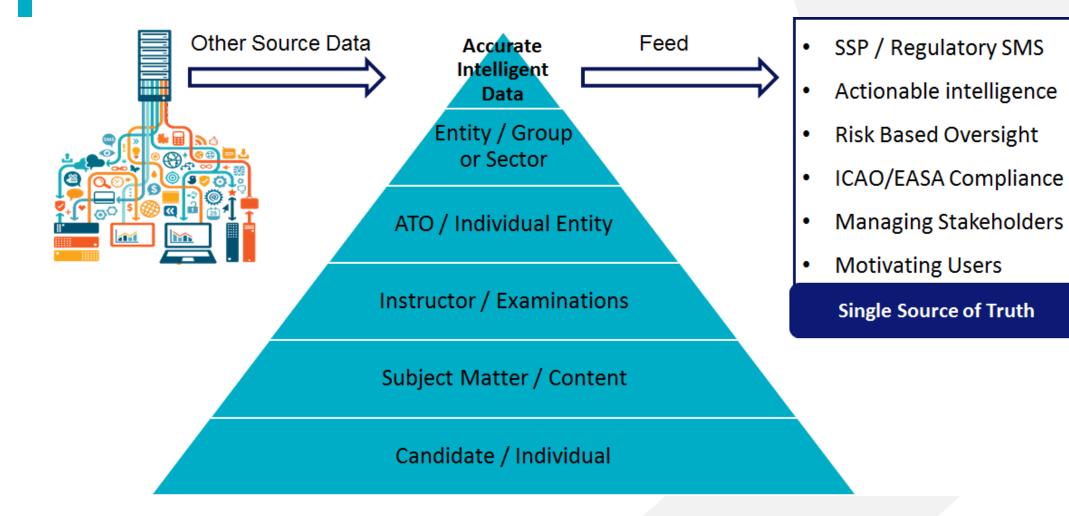
CAAi ICAO Protocol Questions Compliance Manual

The manual has been compiled to meet the needs of NAA users. Our objective is to pull together all materials associated with PQ's 1, 2, 3, 4, 5 & 7 into one place.





Data – Bringing the Picture Together









UK Civil Aviation Authority

Thank you!

UK Civil Aviation Authority International Group

Aviation House Gatwick Airport South West Sussex RH6 0YR United Kingdom

www.caa.co.uk/international