



Arab Republic of Egypt

Ministry of Civil Aviation

Egyptian Civil Aviation Authority

TIPS IN AIRPORT CERTIFICATION PROCESS

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NCLB Workshop Cairo 1-5 October 2017

Agenda :

1. Aerodromes' Certification Requirements

2. Tips For Caa

Competent authority requirements

Problem you may face, how to improve

3. Tips For operator

what is the requirements

Problem you may faced, how to improve

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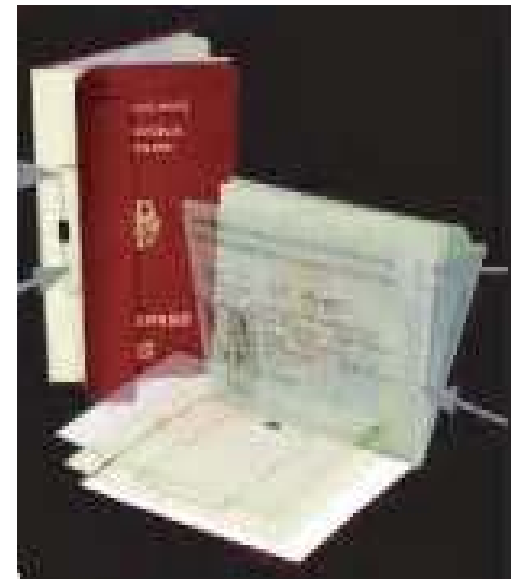
Problem you may faced, how to improve

1 - Aerodromes' Certification Requirements :

Article 15

of the ICAO Convention:

Requires that all aerodromes open to public use, under the jurisdiction of the country, provide uniform conditions for aircraft of all other contracting States.



1 - Aerodromes' Certification Requirements :

Articles 28 and 37 of the ICAO Convention:

Oblige

- each State to provide, in its territory, airports and other air navigation facilities and services in accordance with the Standards and Recommended Practices (SARPs) developed by ICAO. Volume I of annex 14 to the Convention contains SARPs on the subject of aerodrome design and operation. Responsibility for ensuring safety, regularity and efficiency of aircraft operations at aerodromes under their respective jurisdictions rests with individual States.

1 - Aerodromes' Certification Requirements :

1.4.1 States shall certify aerodromes used for international operations in accordance with the specifications contained in this Annex as well as other relevant ICAO specifications through an appropriate regulatory framework.

For that?

State shall certify the aerodromes.



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2 – Tips for CAA :



2 – Tips for CAA :

(CAA safety oversight system)

the methods of ownership, operation and surveillance of aerodromes differ among States.

- The most effective and transparent means of ensuring compliance with applicable specifications is the availability of a

*separate safety oversight
entity (caa)*



2 – Tips for CAA :

- ◎ **State should establish and implement an effective safety oversight system**

well-defined :

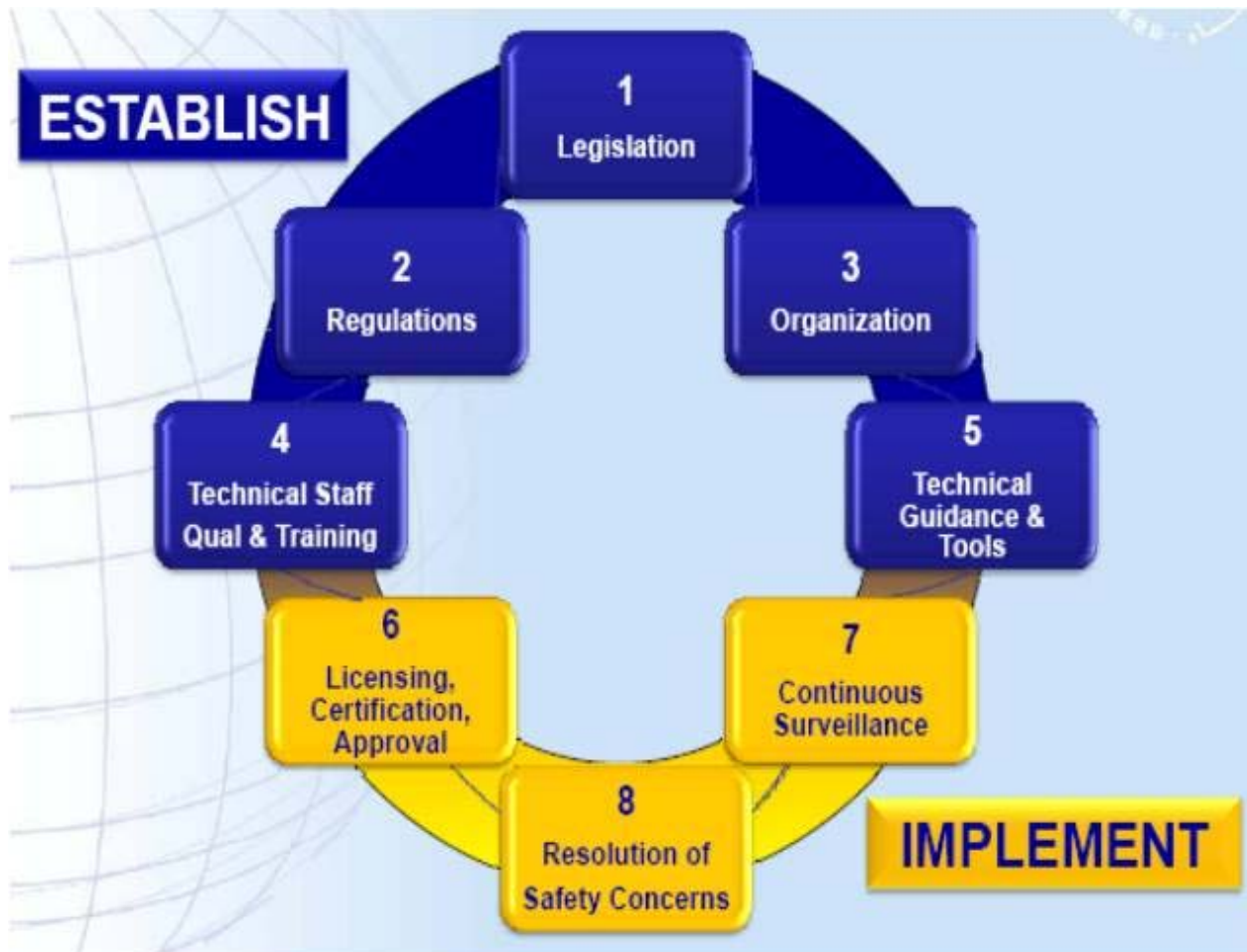
- 1. safety oversight mechanism with support of**
- 2. appropriate legislation.**

to support (caa) to carry out the function of safety regulation of aerodromes

2 – Tips for CAA :

- ◎ **Stats in their effort to establish and implement an effective safety oversight System, need to consider the critical elements for safety oversight (CE).**

2 – Tips for CAA :



2 – Tips for CAA :

ICAO'S analysis

- ◎ ICAO's analysis indicates that implementation of Critical Element 6 - Licensing, Certification and Approval of a State's aviation service providers is fundamental to the reduction of accident rates.



SAFETY

2014–2016
Global Aviation Safety Plan



2 – Tips for CAA :

ICAO'S analysis

- Furthermore, through a **root cause analysis**, **deficiencies** in Critical Element 6 can be **traced** to protocol questions in critical elements 1 to 5, which establish a safety oversight system.



SAFETY

2014–2016
Global Aviation Safety Plan



2 – Tips for CAA :

1-Lack of legistelation bases

- ◎ ***Will Effect On State's Capability of To***
- ◎ **the adoption of**
aerodrome certification regulations,
- ◎ **impose operating**
restrictions and/or sanctions at a certified aerodrome, in the event of non-compliance with the certification requirements or an unresolved safety deficiency/concern

2 – Tips for CAA :

2-Lack of policy and responsibilities

- ◎ **Entrust the DGCA with the duties and responsibilities to *issue, review, transfer, refuse* and cancel aerodrome certificates; develop, issue and amend Aerodrome Directives, Bulletins, Orders, etc., consistent with the regulations; and establish an entity to assist in carrying out the functions and responsibilities of the DGCA**

2 – Tips for CAA :

- 3- Insufficient no of qualified and technical person related to the volume of activities (certification process / surveillance planes /
- 4-Lack of resource to provide Appropriate training to maintain and enhance their competence at the desired level

CAA should have methodology for determining on staffing and Appropriate training to maintain and enhance their competence at the desired level. The training should include initial and recurrent (periodic) training.

2 – Tips for CAA :

4-insufficient Technical guidance, tools and provision of safety-critical information

- to enable the caa technical personnel/inspectors to perform their safety oversight functions effectively and in accordance with established procedures in a standardized manner.
- to the service provider to the implement the relevant regulations.

**RASG-MID SAFETY ADVISORY –
05 (RSA-05) September 2015
MID-Region Aerodromes
Certification Toolkit**

RASG-MID SAFETY ADVISORY – 05
(RSA-05)
September 2015



MID-Region

Aerodromes Certification Toolkit

Date of Issue:	September 2015
Revision No:	First Edition
Document Ref. No.:	RASG-MID/MIDRAST/RGS/SEL/03-1
Owner:	RASG-MID

2 – Tips for CAA :

- ◎ State may re-build there oversight system
- ◎ *Through building capacity there safety oversight system*
- ◎ State may consider entering into a cooperative arrangement with another State / organization or participating in a suitable regional cooperation arrangement.
- ◎ State may request assistance under the Technical Cooperation Program of ICAO

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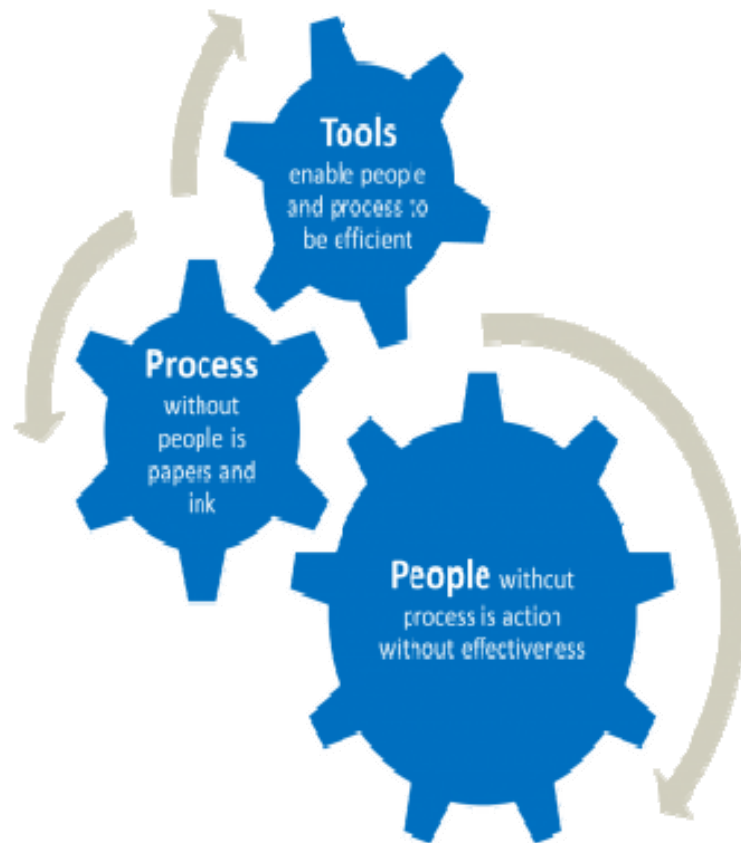
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3 – Operator's Tips :



3 – Operator's Tips :

airport operator requirement



**To have airport certificate
should establish:**

Facility – equipment...
Procedures –mechanism ..
Competent Person

**Comply with the caa national
requirement**

3 – Operator's Tips :

certificate challenges

- You should Conducted gap analysis between your systems and the national regulation

3 – Operator's Tips :

Problem you may faced,

1. Lack of procedures
2. Lack of Personnel Skills & qualifications
3. Safety Management Systems not fully operational
4. physical characteristics of aerodromes
5. WILDLIFE control management Challenges
6. Joint-use civil/military aerodromes

3 – Operator's Tips :

1. Lack of procedures
 - ⊙ no defined system for reporting cycle and no determination of responsibilities
 - ⊙ *No exchanging data (data is the blood of any system)*
 - ⊙ *Ex.*
 - *Self inspection report*
 - *Wild life observation report*
 - *....etc*
 - ⊙ The manual didn't comply with minimum requirement



3 – Operator's Tips :

Do you have system but the paper didn't reflect the current status ?

**Or
does your
manual need
to be
modified ?**

Counted Lack of procedures

- **ICAO DOC**
- **9981 ch 2 item 2.2 /Doc 9774**
- **ACAC aerodrome certification manual**
- **RASG-MID SAFETY ADVISORY – 05 (RSA-05)**
- **For caa How to assess the acm**
- **EAC 139-2**

3 – Operator's Tips :

2- Lack of Personnel Skills & qualifications

- Aerodrome operators should demonstrated that their overall level of competence in operational safety matters has been me
- ***It is noted in some airport***
 - The absence of suitably qualified and experienced personnel
 - ***It may initiate :***
 - ***Redundancy***
 - ***Deviation***
 - ***,,,,etc***



An airside
inspection.
BAA plc

3 – Operator's Tips :

Have you ?

**1. Defined the qualification
of the technical person related to their
responsibilities**

**1. Established and
implement a training
program**

2- what about your SMS

By workshops / safety awareness

**Guidance material :
UK cap 700
EAC 139-60**

3 – Operator's Tips :

3- Safety Management Systems is not fully operational

- Aerodrome operators SMS is not fully operational



3 – Operator's Tips :

3- continued, SMS not fully operational

- **DOC 9981 CHAPTER 2
CERTIFICATION OF AERODROMES**
 - **2.3 INITIAL CERTIFICATION**
- The minimal SMS components that are to be in operation before the certificate can be granted are described in Appendix 1. chapter 2
- SMS requirements also for operator's subcontractors



3 – Operator's Tips :

As a minimum, the following items should be in place

- ① 1) safety policy:
- ② 2) operator's organizational structure
- ③ *The safety manager should be independent from any operational*
- ④ 3) accident and incident reporting
- ⑤ 4) existing hazards at the aerodrome: a procedure in order to identify, analyses and assess hazards to the safe
- ⑥ 5) risk assessment and mitigation of changes:

3 – Operator's Tips :

As a minimum, the following items should be in place

- ⑥ 6) safety indicators: the aerodrome operator sets and monitors its own safety indicators that illustrate its safety criteria, in order to be able to analyse the potential deficiencies;
- ⑦ 7) safety audits: the aerodrome operator has a safety audit program in place which includes a training program
- ⑧ 8) safety promotion: the aerodrome operator should have a process to promote safety-related information.

3 – Operator's Tips :

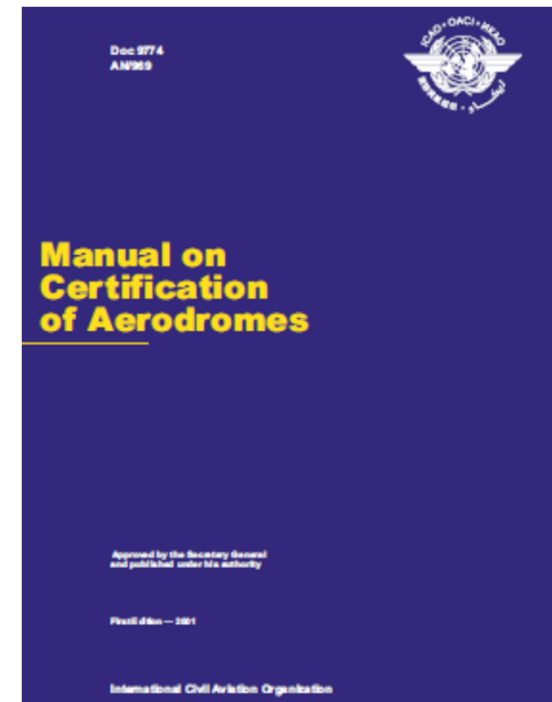
- **4- physical characteristics of aerodromes**
 - *Many aerodromes were constructed prior to the establishment of requirements of the national regulation*
 - *Compliance with new standards requires extensive airside modification in the case of some aerodromes*
 - *Very Expensive to modify*
 - *How to comply with ICAO Standards and Recommended Practices?*



3 – Operator's Tips :

- physical characteristics of aerodromes

- ◉ *According to doc 9774 An aeronautical study should be conducted to assess the impact of deviations from the aerodrome standards specified in Volume I to Annex 14*
- ◉ *Doc 9981*



3 – Operator's Tips :

- **5- WILDLIFE control management Challenges**

can be found on or around the aerodromes
Wildlife hazards, just as any other hazards to
aviation safety, should be

*identified,
assessed and
managed in order to reduce the risk*



3 – Operator's Tips :

• 5- WILDLIFE control management Challenges

- *IATA* wildlife hazard management handbook second edition 2013
- *Uk* wildlife hazard management at aerodromes cap 772
- *FAA*
- *RASG AC-*
- *ACI Wild life hazard management handbook second edition 2015*



3 – Operator's Tips :

6- Joint-use civil/military aerodromes

- ⦿ Military operation in civil airport may **cause hazard**
- ⦿ They **use special equipment** (arresting system) (affect with RESA availability)
- ⦿ **Construction** in military area during airport operation rwy incursion between vehicle and aircraft
- ⦿ **Military gate/fence** not comely with ICAO requirement (Source to attract wild life in airport)
- ⦿etc



Photo : Hassan Mousavi

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3 – Operator's Tips :

Cont'd -Joint-use civil/military aerodromes

- ◎ **How to overcome**
 - ◎ *Civil-military cooperation is essential at national, levels*
 - ◎ *Successful collaboration requires: communication and collaboration*
 - ◎ Lateral agreement define **responsibilities**
 - **before construction**
 - **During use the movement areaetc**
 - ◎ **Ref .** European Action Plan for the Prevention of Runway Incursions - Edition 2.0
 - ◎ ICAO DOC 9554
-

3 – Operator's Tips :

Conclusion

The airport certification process requires collaborative approach at all levels in order to implement the national and international regulatory provisions related to airport certification.

Aeronautical studies and risk assessment may be used to develop mitigation measure and reduce risk of certain deviations.



QUESTIONS?

