



ICAO

UNITING AVIATION

# What is expected of AMEs, Medical Assessors and CAAs?

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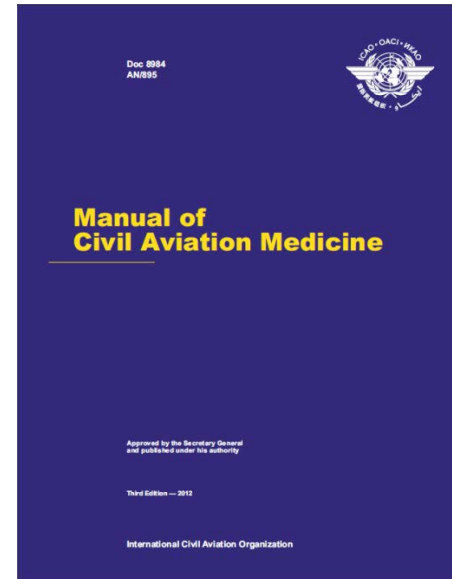
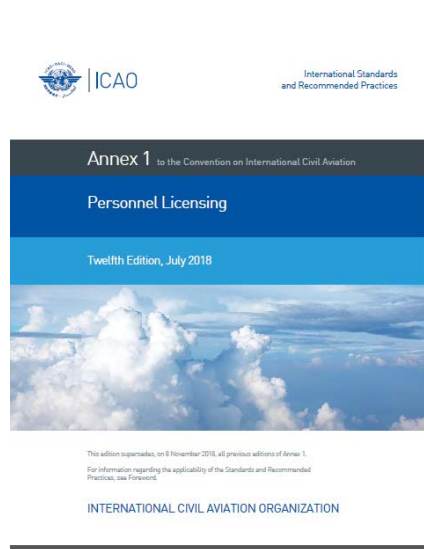
*Chief, Aviation Medicine Section, ICAO*

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- Annex 1, Personnel Licensing
- Manual of Civil Aviation Medicine





- Standard – solid dark blue text = mandatory to implement
- *Recommendation – italic light blue text = desirable to implement*
- Guidance material – orange text = not required to implement, but serves as possible example/ best practice



- A physician with **training in aviation medicine**
- **Practical knowledge and experience** of the aviation environment
  - *Examples: flight experience, simulator experience, on-site observation or any other hands-on experience deemed by the Licensing Authority to meet this requirement*
  - should include, whenever possible, actual flight deck experience in aircraft engaged in commercial operation as well as experience in the operational working conditions of air traffic controllers
- **Refresher training** at regular intervals



- **Submit sufficient medical information to the Licensing Authority** to enable the Authority to undertake Medical Assessment audits
- **Demonstrate adequate competency** in aviation medicine
  - *The competence of a medical examiner should be evaluated periodically by the medical assessor*
- **Report to the Licensing Authority** any individual case where, in the examiner's judgement, an applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence being applied for or held, is not likely to jeopardize flight safety
- **As most conditions of relevance to flight safety will be elicited from the history, a relationship of trust** must be fostered by the examiner. The AME is called upon to exercise clinical judgement based upon a careful review of the medical history and a thorough examination of the applicant



- A **physician, qualified and experienced** in the practice of aviation medicine
  - *Expected to **maintain the currency of their professional knowledge***
  - Normally have **advanced training** in the specialty of aviation medicine
  - **Extensive experience** in regulatory and clinical civil aviation medicine
  - Desirable, as a minimum, an accumulated total of at least ten hours per year of **flight deck time**
  - **Employees of or consultants** for the Licensing Authorities, supervisors of the Aviation Medical Examiner



- **Competent in evaluating and assessing** medical conditions of flight safety significance  
(Significance = to a degree or of a nature that is likely to jeopardize flight safety)
  - Evaluate medical reports *submitted by medical examiners*
  - **Audit** of medical reports by designated medical examiners
  - **Final assessments** in borderline cases
  - Will normally be in charge of Accredited Medical Conclusions
- **Refresher training** of medical examiners will usually fall within the remit of the medical assessor



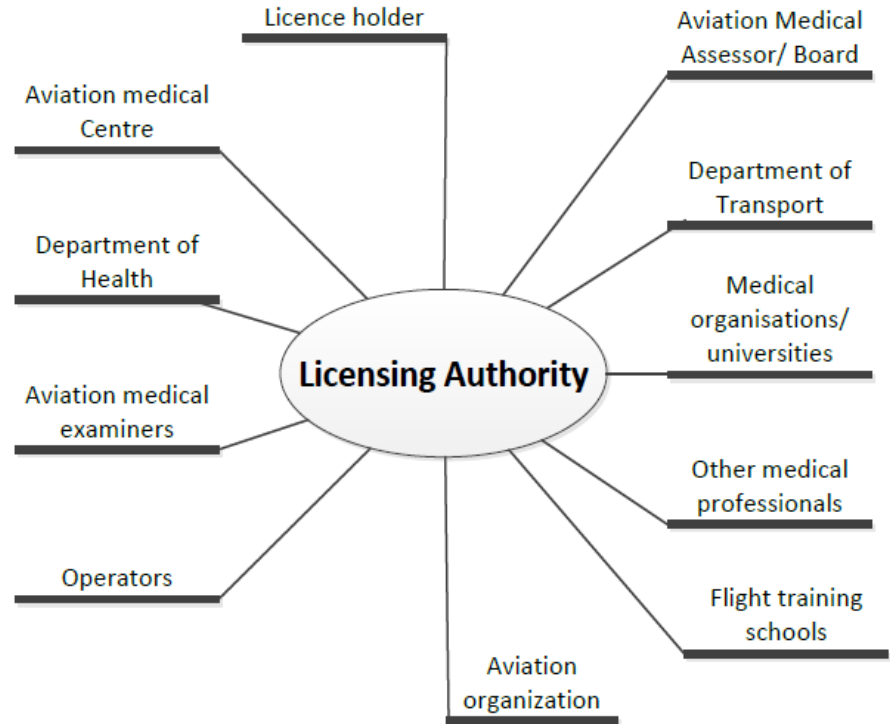
- The authority designated by a Contracting State as **responsible for the licensing of personnel**
- The appropriate environment for the medical examination can be facilitated by the medical department of the Licensing Authority, which should strive for a **certification process that is transparent and based as far as possible on scientific evidence**
- Applicants are more likely to be forthcoming with personal information if they believe that, should they declare a condition that could have aeromedical significance, they will **be treated fairly by the Authority**, and that efforts to keep the applicant operating will be made wherever possible by those having decision-making authority over the issuance of Medical Assessments





# Licensing Authority

- Rationale for protocols
  - **Safety**
  - **Preservation of life/ health**
  - Operational efficiency
  - Economical sustainability
  - Reputation

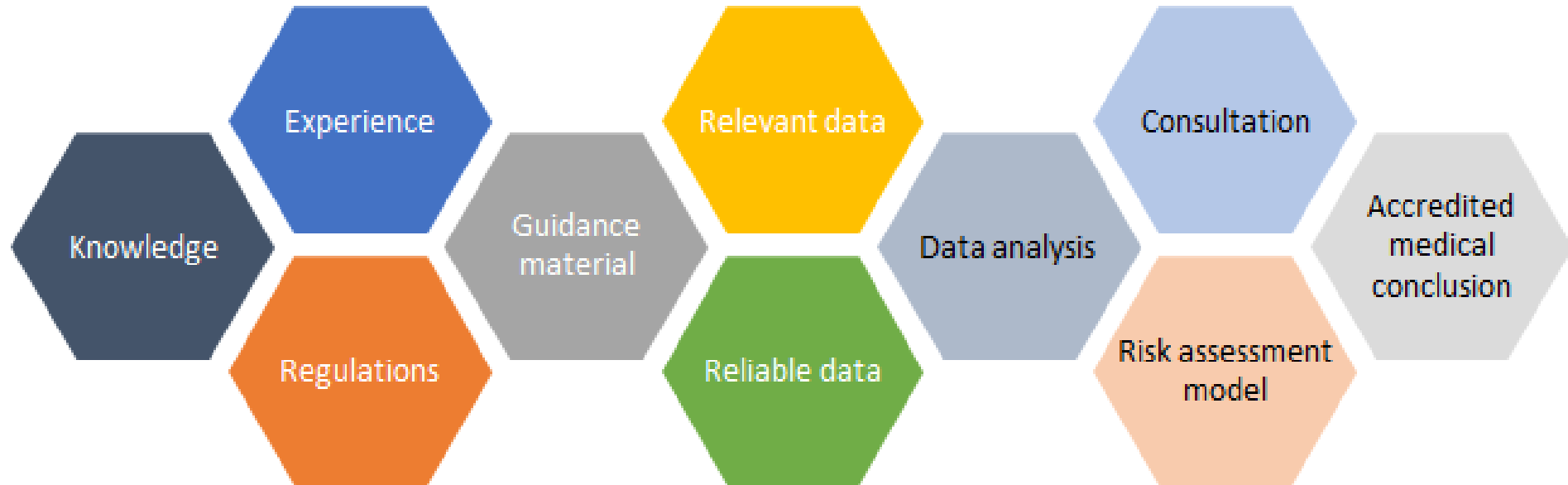




- Apply basic safety management principles to the medical assessment process of licence holders
  - **routine analysis of in-flight incapacitation events and medical findings** during medical assessments to identify areas of increased medical risk;
  - **continuous re-evaluation of the medical assessment process** to concentrate on identified areas of increased medical risk
- The Medical Assessment shall not be issued or renewed unless the following conditions are fulfilled:
  - **accredited medical conclusion** indicates that in special circumstances the applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence applied for is **not likely to jeopardize flight safety**.
  - **relevant ability, skill and experience of the applicant and operational conditions** have been given due consideration; and
  - **the licence is endorsed with any special limitation or limitations** when the safe performance of the licence holder's duties is dependent on compliance with such limitation or limitations.



The conclusion reached by **one or more medical experts** acceptable to the Licensing Authority for the purposes of the case concerned, **in consultation with flight operations or other experts as necessary**.





- Annex 1, 1.2.4.9, has been worded to make it clear that **flexibility may be exercised only in the exceptional case.**
- The **decision should be documented** in each individual case, and it should show how a particular decision was arrived at by means of the accredited medical conclusion
- The provision of a degree of flexibility **must not** lead to a situation where its use **becomes the rule rather than the exception.**
- When evidence accumulates that flexibility is being utilized repeatedly in a particular respect, then the **appropriateness of regulations** defining the medical requirements comes into question



- Should have resources or should have arrangements to **permit special practical testing**
- It may be necessary **to restrict the applicant to operating the type of aircraft** in which the applicant has demonstrated competence
- Medical flights or other practical tests **can be utilized in a number of fields**
- The **presence of a medically qualified pilot** on the check flight can add greatly to the value of the subsequent reports.
- It is evident that many such possible operational restrictions exist but they should only be established **after consultation with flight operations experts.**



**ICAO carries out audits and other monitoring activities to determine its Member States' safety oversight capabilities by:**

- Assessing the effective implementation of the 8 CEs in 8 audit areas (LEG, ORG, PEL, OPS, AIR, AIG, ANS and AGA) through Protocol Questions (PQs); and
- Verifying the status of the Member States' implementation of:
  - safety-related ICAO Standards and Recommended Practices (SARPs);
  - associated procedures; and
  - guidance material.



Primary aviation legislation and  
civil aviation regulations (LEG)  
Chicago Convention &  
Annexes 2 and 19

Civil aviation organization  
(ORG)  
SAAQ

Personnel licensing and  
training (PEL)  
Annexes 1 and 19

Aircraft operations (OPS)  
Annexes 6, 9, 18, 19 and  
PANS-OPS

Airworthiness of aircraft  
(AIR)  
Annexes 6, 7, 8, 16 and 19

Aircraft accident and  
incident investigation (AIG)  
Annexes 13 and 19

Air navigation services (ANS)  
Annexes 2, 3, 4, 5, 10, 11, 12,  
15, 19 and PANS-ATM

Aerodromes and ground  
aids (AGA)  
Annexes 14 and 19



## Significant Safety Concerns (SSCs)

“An SSC occurs when the audited State allows the holder of an authorization or approval to exercise the privileges attached to it, although the minimum requirements established by the State and by the Standards set forth in the Annexes to the Chicago Convention are not met, resulting in an immediate safety risk to international civil aviation.”

Reference: EB 2010/7 dated 19 February 2010





3.401

Has the State promulgated regulations for medical examinations of applicants of various licences by medical examiners?

- Verify regulations regarding medical provisions for licensing, including designation of medical examiners and requirement of a medical assessor.
- Check promulgation of latest amendments to Annex 1.



3.403

Does the State use the services of medical assessors to evaluate reports submitted to the licensing authority by designated medical examiners ?

- Functions and responsibility of the medical assessor must be clearly described.
- Alternative system can be acceptable, but it must guarantee effective oversight of all designed medical examiners or centres.



3 .405

Has the State established and implemented a process for the evaluation of medical reports submitted by the designated medical examiners (DME)?

- Verify that the process and methods in place for the evaluation of medical reports comply with Doc 9379.
- Review evidence to confirm effective implementation.



3 .411

Do designated medical examiners (DME) systematically submit signed reports to the licensing authority after completing the medical examination of an applicant?

- If the medical examination is carried out by 2 or more examiners, verify that an appointed examiner is responsible for coordinating the results and signing the report.
- If reports are submitted electronically, verify that adequate identification of the examiner has been established.
- Review evidence to confirm effective implementation.
- Verify that all reports are available at the Licensing authority for proper review and analysis even if the State does not employ a medical assessor (with respect of the confidentiality).



3 .415	Does the licensing authority perform medical assessment audits?	<ul style="list-style-type: none"><li>- The purpose of such audits is to ensure that designated medical examiners meet applicable standards for good medical practice and aeromedical risk assessment. Guidance on aeromedical risk assessment is found in the Manual of Civil Aviation Medicine (Doc 8984).</li><li>- Confirm that audit process is established.</li><li>- Review evidence to confirm effective implementation</li></ul>
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3.419

If the medical Standards prescribed in Chapter 6 of Annex 1 for a particular licence type are not met, has the State established a system for the possible issuance or renewal of the appropriate medical assessment following conditions as stipulated in Annex 1?

- 1) Confirm that the appropriate medical assessment is not issued or renewed unless the following conditions are fulfilled:
  - a) Accredited medical conclusion indicates that, in special circumstances, the applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence applied for is not likely to jeopardize flight safety.
  - b) Relevant ability, skills and experience of the applicant and operational conditions have been given due consideration.
  - c) The licence is endorsed with any special limitation or limitations when the safe performance of the licence holder's duties is dependent on compliance with such limitation or limitations.
- 2) Procedure for coordination between medical assessors and licensing authorities should be established.



3 .451

Has the State established a procedure for the designation of medical examiners and provided guidance material to them?

Description of the system and criteria for the designation of medical examiners:

- Conditions and duration of the designation.
- Scope of authority given to a medical examiner (e.g. issuance of waivers, classes of medical assessment, etc.).
- Guidelines provided to the medical examiners (e.g. template reports, manual for the medical assessment, etc.).
- Methods for informing medical examiners of new medical-related provisions



3.453	Does the State ensure that designated medical examiners (DMEs) receive training in aviation medicine and have practical knowledge and experience of the conditions in which the holders of licences and ratings carry out their duties?	<ul style="list-style-type: none"><li>- Review evidence to confirm effective implementation (check medical examiners files).</li><li>- Examples of practical knowledge and experience are:<ul style="list-style-type: none"><li>flight experience,</li><li>simulator experience,</li><li>on-site observation and</li><li>any other hands-on experience deemed by the licensing authority</li></ul></li></ul>
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3 .455	Does the State ensure that designated medical examiners (DMEs) attend refresher training in aviation medicine at regular intervals?	<ul style="list-style-type: none"><li>- Confirm participation in refresher trainings (training or seminar organized by the State or outside).</li><li>- Verify intervals of 3-5 years.</li><li>- Review evidence to confirm effective implementation.</li></ul>
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3 .459

Has the State implemented a system for the supervision and control of designated medical examiners (DME)?

Description of the oversight system for DMEs.

- Verify inclusion of premises and equipment inspections.
- Demonstration of use of latest ICAO SARPs.
- Up-to-date refresher training.
- Timely transmittal of reports to Licensing Authority's medical department.
- Review evidence to confirm effective implementation.



3 .461

Does the CAA take action in the event that sufficient evidence exists to demonstrate that a designated medical examiner (DME) has not performed his/her duties in accordance with the prescribed procedures?

- Review enforcement system and/or procedures.
- Review evidence to confirm effective implementation of a graduated response system (warnings, sanctions).



3.422

If the State authorizes its national licence holders to perform their medical examinations in a foreign State, is there a system in place to ensure:

- a) the proper and valid designation of the foreign medical examiners, and
- b) the proper surveillance of the foreign medical examiners?

- Check the system in place.
- Check if foreign authorities are contacted or if they make available sufficient information.
- Check the system for receiving and assessing medical reports and if said system is carried out by the foreign authority.
- Check if there is a system to ensure that an overseas designated medical examiner is properly designated, trained and in good standing with the overseas Licensing Authority



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THANK YOU