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UNITING AVIATION

ICAO Aviation Medicine

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Prague/ September 2018





- An independent organization (specialized agency) of the United Nations
- Development of Standards, Recommended Practices and guidance material
- Head office in Montreal and 8 regional offices



192 Contracting States



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SARPs, guidance material & implementation support

Needs Analysis / Validation



Global Plans



Global & Regional

SARPs & PANS

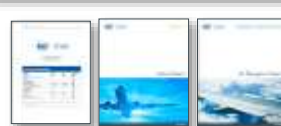


Implementation Planning



Training & Guidance

Assess & Measure



Compliance & Verification



if needed

MANUALS



CIRCULARS



SYMPOSIA



REGIONAL IMPLEMENTATION

RASGs
for Safety

PIRGs
for Air
Navigation



RSOOs

COSCAPs

RAIOs

FPPs

IMPLEMENTATION KITS (iKITs)

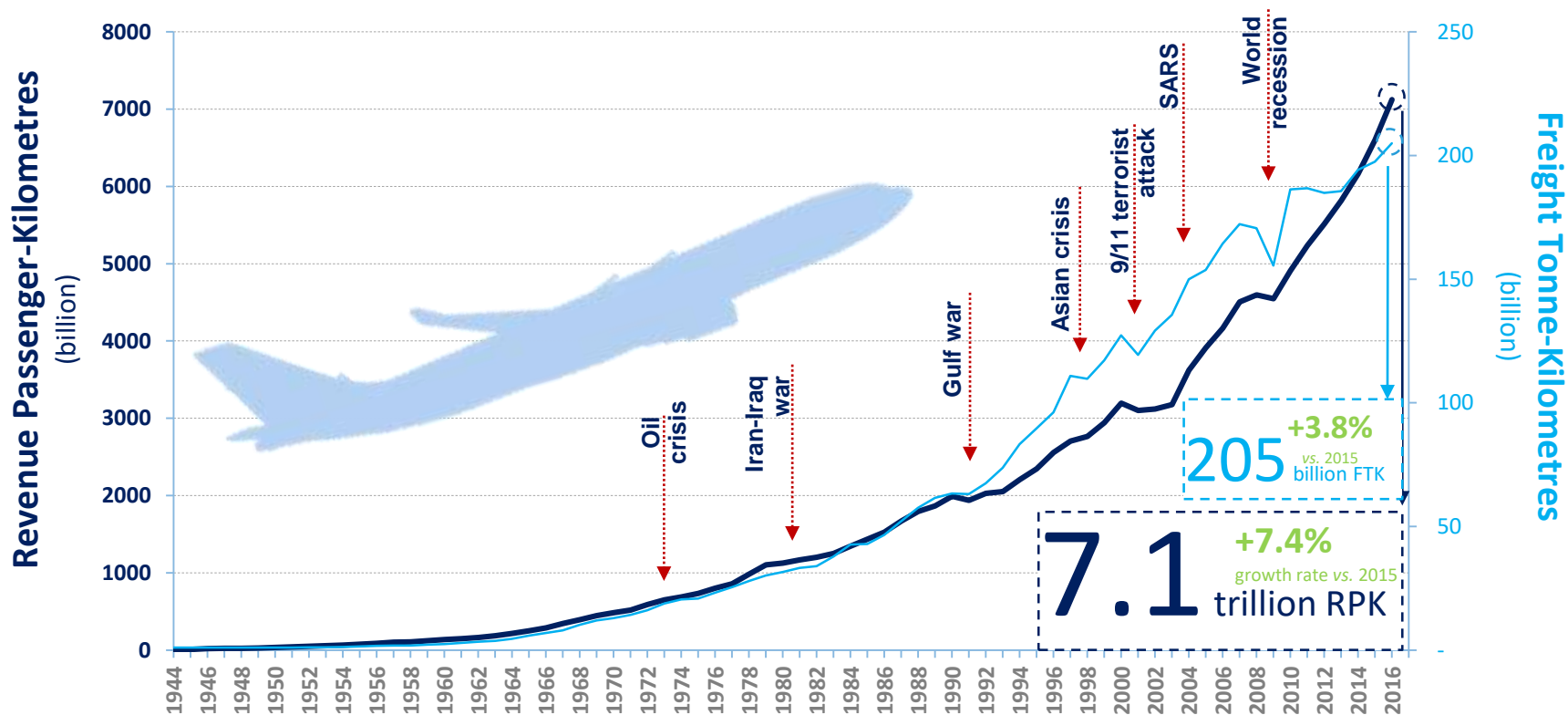




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Why we need standards





2040





- Annex 1, Personnel Licensing
- Annex 2, Rules of the Air
- Annex 6, Operation of Aircraft
- Annex 9, Facilitation
- Annex 11, Air Traffic Services
- Annex 13, Accident and Incident Investigation
- Annex 14, Aerodromes
- Annex 18, Safe transport of dangerous goods
- Annex 19, Safety Management
- PANS-ATM, Doc 4444, Procedures for Air Navigation Services – Air Traffic Management





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Regulatory process: proposal origin

Governing Bodies

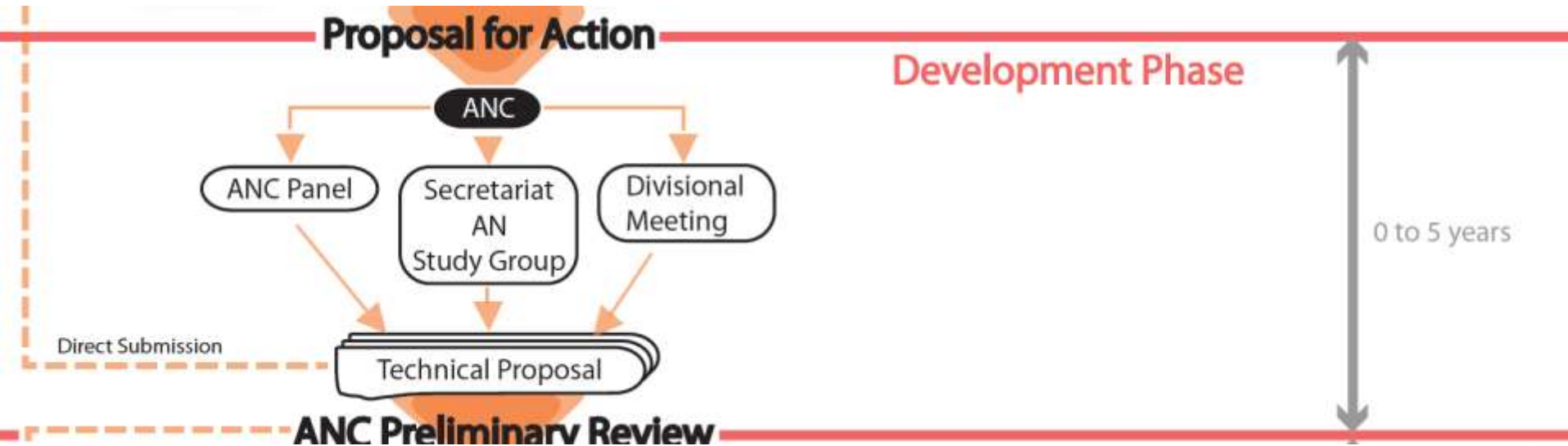




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Regulatory process: proposal development







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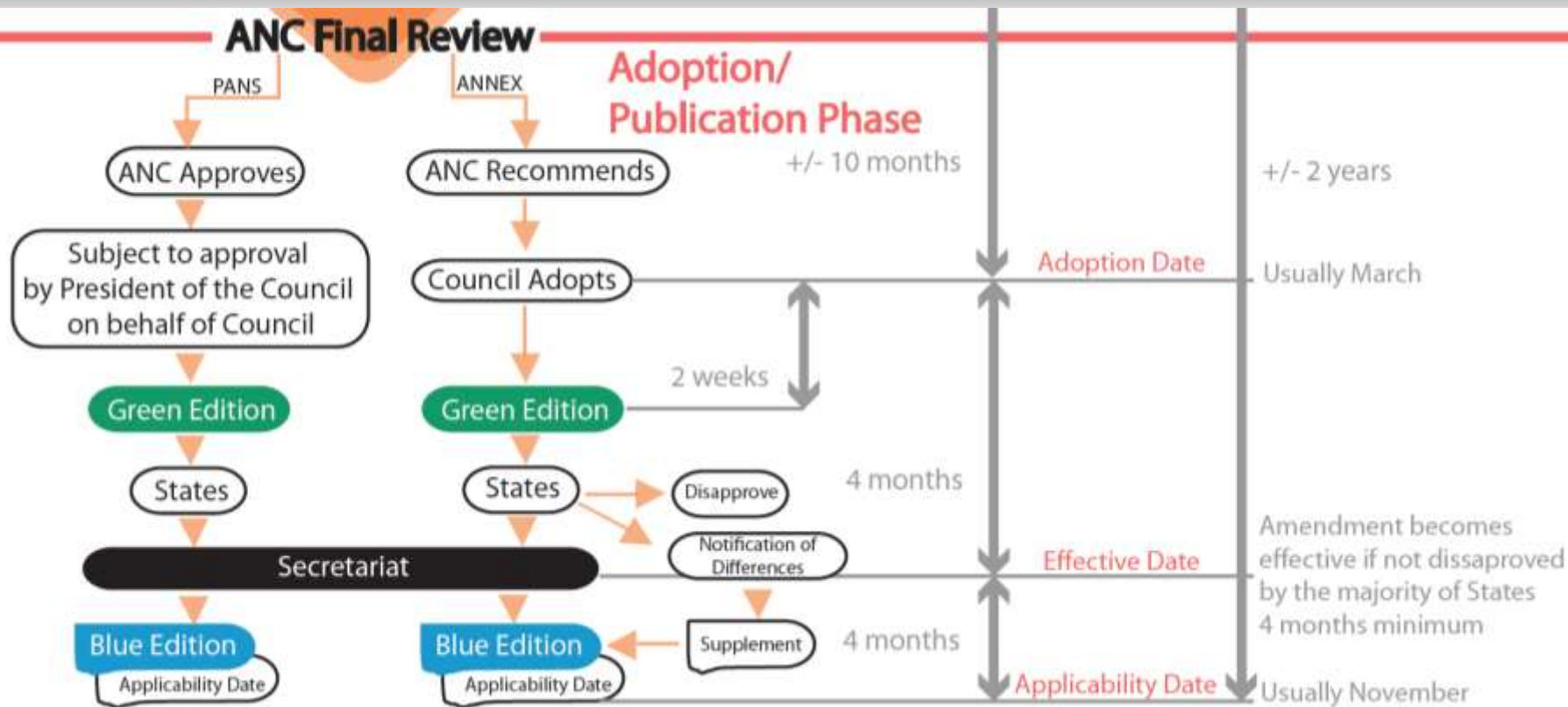
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Reg

Regulatory process: final review & publication

ANC Final Review

Adoption/ Publication Phase





- Standard
 - States will conform/mandatory/necessary
 - Differences are notifiable
- Recommended practice
 - States will endeavour to conform/ desirable
 - Differences not notifiable under convention, but urged to do so by Assembly
- Definitions, tables, figures and appendices in Annexes
 - seen as part to SARPs
 - Thus filing of differences
- Guidance material
 - assist States with implementation, but it is not a requirement for a State to implement



- **Category A:** A Contracting State's requirement is more exacting or exceeds the SARP
- **Category B:** A Contracting State's requirement is different in character or other means of compliance
- **Category C:** A Contracting State's requirement is less protective or partially implemented/not implemented



- Article 1 of the Chicago Convention:
 - every State has complete and exclusive sovereignty over the airspace above its territory
- Article 38 of the Chicago Convention :
 - Any State which finds it impracticable to comply in all respects..., shall give **immediate notification** to the International Civil Aviation Organization of the **differences** between its own practice and thatstandard.
 - In the case of **amendment**..., any State... shall give notice **within 60 days**... the **action** which it proposes to take. ... Council shall make **immediate notification** to all other states of the difference....
- In case a more stringent regulation is adopted, notification to ICAO is compulsory when such regulation is applied also on foreign licence holders and aircraft

- **Rationale for SARPs**

- Safety
- Preservation of life/ health
- Operational efficiency & economical sustainability
- Reputation



- **Intrinsic nature of Aviation Medicine is complex**

- Combination of regulatory, clinical & occupational medicine
- Individual crew vs public health & safety
- Combination of technical, environmental & human elements
- Multiple hazards – physiological, physical disease, psychological, chemical, environmental, behavioural
- Measurable objective assessment vs subjective assessments



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Challenges in risk assessment & decision making

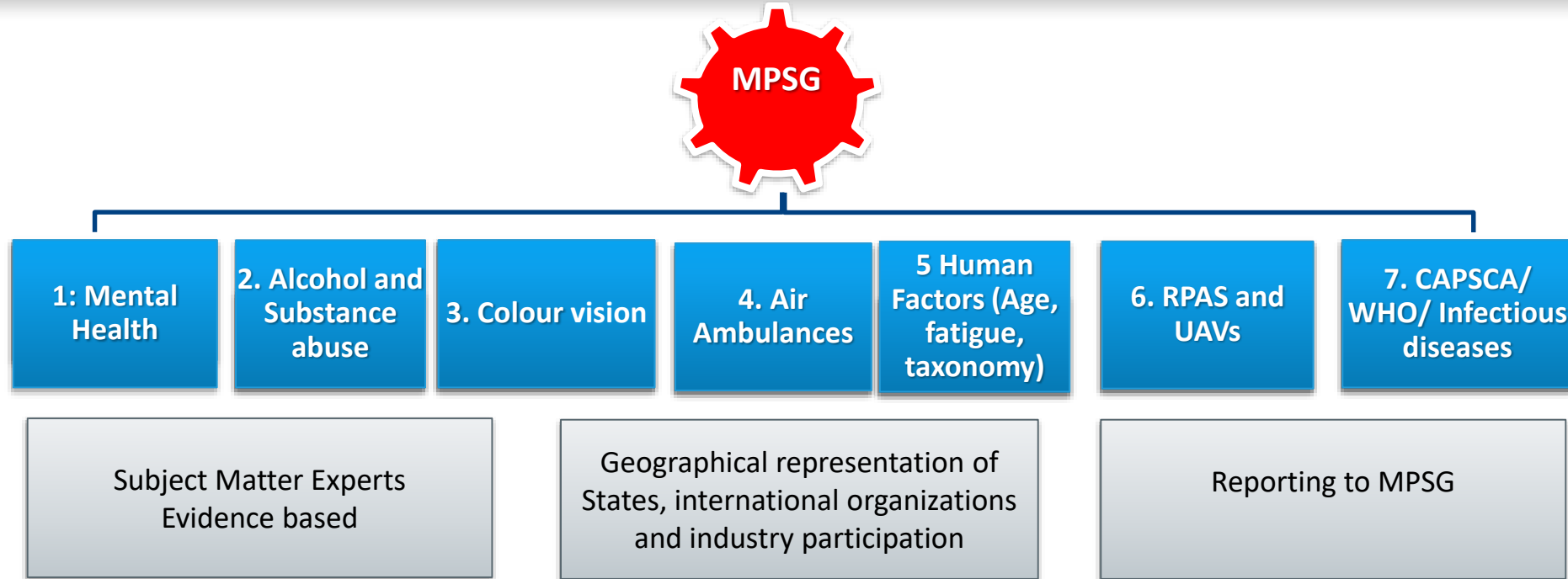
Individual (Pilot & AME)	Medical system	Aviation system
Individual variability	BasicMed/ GP examination	Operational variability
Unpredictability & life stress	Driver's licence acceptability	UAV/ RPAS/ Drones
	Self-certification	Space

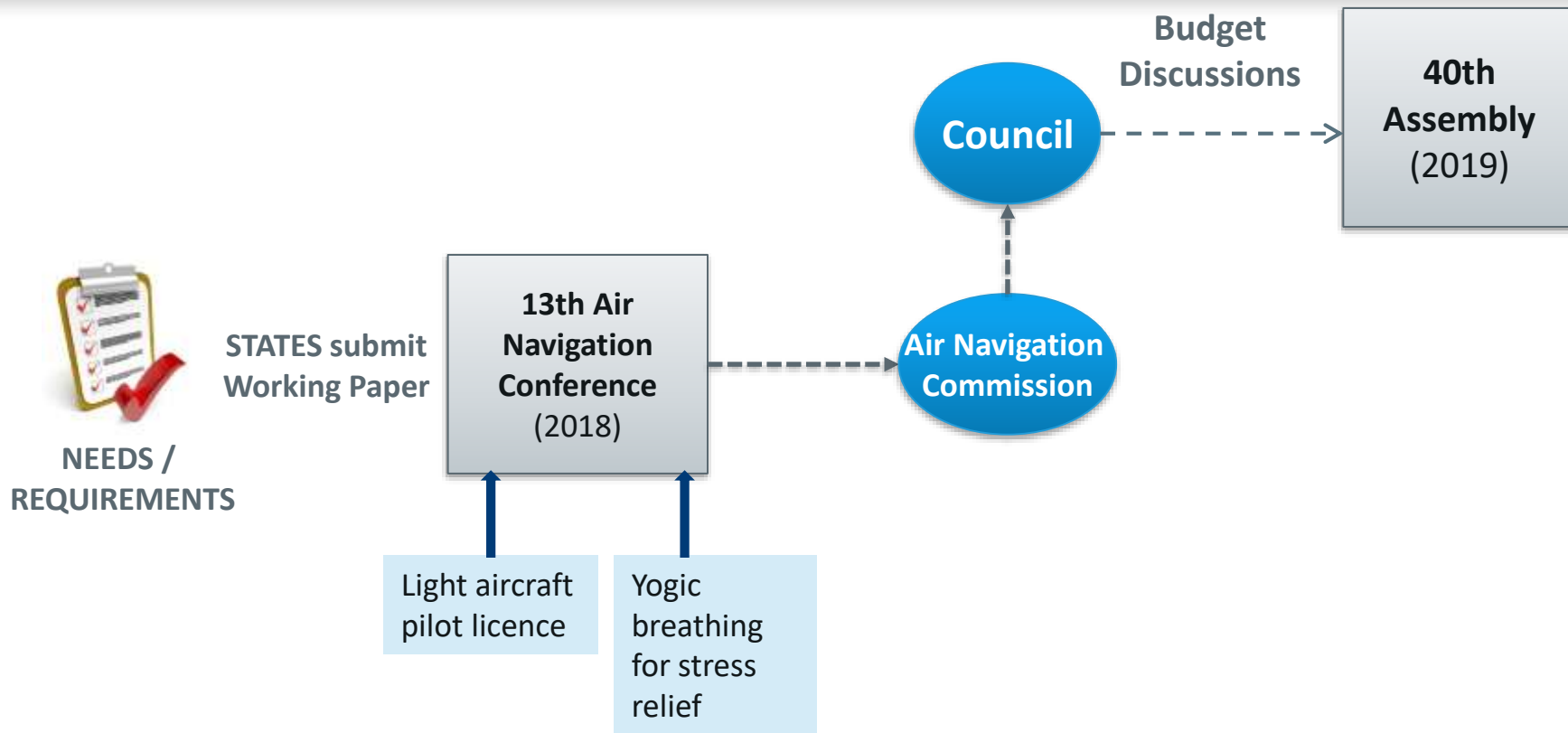
Competency based performance assessments

Scarce expertise - need to develop new expertise use

New technology









- Amendment 137 to annex 1
- Applicable November 2018
- Data analysis and health promotion
- Guidance material in manual
- Supplemented by the Aviation Medicine website, which will serve as a repository for updated medical information and sharing of best practices - practical examples, tools and supporting material
- Supplemented by book – published by ICAO in collaboration with IATA & IFALPA





Current situation

- Lack of standardized aviation medical taxonomy & standardized reporting
- Inadequate accident and incident reporting - differentiating medical, physiological, psychological and human performance factors
- Medical confidentiality issues

Desired situation

- Standardized data collection and reporting
- Sharing of data and research internationally

Application of standardized reporting

- Data analysis of medical incapacity and loss of licence
- Health promotion purposes
- Regulatory amendments
- Global harmonization



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Medical confidentiality



International
Civil Aviation
Organization

Organisation
de l'aviation civile
internationale

Organización
de Aviación Civil
Internacional

Международная
организация
гражданской
авиации

Tel.: +1 514-954-6088

Ref.: AN 5/22-18/83

Subject: State support for the designated disclosure of specific and limited medical confidential information

Action required: Submit the medical confidentiality survey to ICAO by 20 November 2018

PART B. Accident and incident investigation

Annex 13 to the Chicago Convention concerns aircraft accident and incident investigation. Standard 5.4 therein indicates that an investigation shall normally include a) the gathering, recording and analysis of *all relevant information* on that accident or incident.

In some States the investigation authority has full access to medical information concerning the flight crew involved in an accident or incident. In contrast, in other States they have no access at all due to medical confidentiality restrictions.

PART A. Reporting of aircrew and other aviation-related personnel with medical conditions or psychiatric conditions that could be hazardous to aviation or public safety

Some States have implemented legal provisions that mandate medical service providers in that State to report flight crew, whom they believe might pose a threat to the safety of themselves or others. Other States have general obligations to report any person whom they believe might pose a threat to the safety of themselves or others. In contrast, there are also States in which medical professionals don't have any such obligation. The following questions aim to get a view on how this is regulated in your State.

Aviation Safety v Medical Confidentiality

Disclosure of health information for accident prevention and investigation





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Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MIDE) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU