



INTERNATIONAL CIVIL AVIATION ORGANIZATION

A United Nations Specialized Agency

SAM National continuous monitoring coordinators (NCCMC) regional meeting

Overview and updates of the USOAP
CMA

Objective



The objective of this module is to provide an updated overview of the USOAP CMA methodology.

Agenda



- USOAP CMA
- Components of the USOAP CMA
- Critical Elements (CEs) of the safety oversight system
- USOAP audit areas
- Annex 19 – Safety Management



USOAP CMA

USOAP CMA



Continuous monitoring
(Online Framework)



Planning and
scheduling



On-site activities



Off-site
validation
activities



Reports,
analyses and
working papers



Training and
workshops



Components of the USOAP CMA



Collection of safety information



States provide:

- The State Aviation Activity Questionnaire (SAAQ);
- Compliance Checklists (CCs) or Electronic Filing of Differences (EFOD);
- The self-assessment; and
- Updated CAPs.

Collection of safety information



Internal stakeholders include:

- ICAO Secretariat Bureaus/Sections; and
- Regional Offices (ROs).

Collection of safety information



External stakeholders include:

- Airports Council International (ACI);
- Civil Air Navigation Services Organization (CANSO);
- European Aviation Safety Agency (EASA);
- European Commission (EC);
- EUROCONTROL;
- Interstate Aviation Committee (IAC);
- International Air Transport Association (IATA); and
- other national, regional, supranational and international organizations recognized by ICAO.

Note: These organizations conduct activities that generate safety information.



Determination of State safety risk profile



Determination of State safety risk profile



Safety risk factors

- Previous USOAP activity results
- Level of traffic in the State
- Progress made by the State in resolving USOAP deficiencies

Safety risk indicators

- LEI vs. traffic (exposure)
- Existence of SSC(s)
- Level of aviation activities for each audit area
- Projected growth of aviation activities
- Level of acceptability of State's CAPs
- Progress in implementation of State's CAPs
- Ongoing or planned assistance projects
- Major changes in the organizational structure

Safety risk profile

- MO determines the safety risk profile which is generated by determining safety risk factors and indicators.



Prioritization and conduct of USOAP CMA activities



States are prioritized by MO, based on their safety risk profile taking into consideration the approved budget and resources available.

Prioritization and conduct of USOAP CMA activities



The scope of an ICVM is based on:

- Level of aviation activity in the State;
- State's self-assessment;
- Level of progress reported by State in implementing CAPs;
- Level of progress reported by States in addressing not satisfactory PQs; and
- Request by a State (cost-recovery ICVM).

Prioritization and conduct of USOAP CMA activities



The scope of a USOAP CMA audit is based on:

- All relevant PQs;
- Level of aviation activity in the State;
- State's self-assessment; and
- Request by the State (cost-recovery audit).

Prioritization and conduct of USOAP CMA activities



Off-site validation activity

- The objective is to validate CAPs implemented by a State without conducting an on-site activity, i.e. an audit or ICVM.
- This activity is conducted at ICAO HQ.
- CAPs addressing most of the PQ findings associated with CEs 1 to 5 qualify for an off-site validation activity.

Prioritization and conduct of USOAP CMA activities



- CAPs related to the majority of PQ findings associated with CEs 6, 7 and 8 do not qualify for an off-site validation activity.
- Such CAPs must be assessed and validated through an on-site activity.





Lack of Effective Implementation (LEI)

- The validation of collected safety information enables ICAO to continuously update the LEI of the safety oversight capability of a State.
- State LEI for the previous audit cycle is reported on iSTARS and the Online Framework (OLF).

Update of LEI – amendment process



Lack of effective implementation (LEI)

- PQs have been revised and updated,
- The implementation of the new/amended PQs will result in minor impact to States' LEI due to:
 - deletion of some PQs,
 - adding of new PQs, and
 - merging of existing PQs with others.

Update of LEI – amendment process



- PQs are updated on a periodic basis.
- Revision of PQs incorporates input from:
 - ✓ States,
 - ✓ ICAO Air Navigation Bureau (ANB),
 - ✓ Regional Offices (ROs),
 - ✓ USOAP mission team members, and
 - ✓ external stakeholders.

EI calculation



For any group of applicable PQs, EI is calculated based on the following formula:

$$EI (\%) = \frac{\text{total number of not satisfactory PQs}}{\text{total new PQs} - \text{added PQs} - \text{not applicable PQs}} \times 100$$

EI can be calculated for each CE, for each audit area and as a general value.

The lack of efficient implementation can be calculated as follows:

$$LEI (\%) = 100 - EI (\%)$$

Mandatory information request (MIR)



A Mandatory Information Request (MIR) can be issued by MO when:

- SAAQ, CCs and/or PQs are not submitted, are outdated or are contradictory to other available information;
- CAPs are not submitted or are not kept up-to-date by State;
- Available information is insufficient; and/or
- Concerns are raised by internal/external stakeholders.

Mandatory information request (MIR)



- States are required to provide status of PQ compliance.
- MO may communicate with States through MIRs to seek additional information with respect to compliance with requirements.

Update of LEI



- Status of PQs may be changed through the validation process conducted by MO based on:
 - CAPs or other information received from States, supported by appropriate evidence; and
 - Information received from ICAO ROs, recognized organizations and other stakeholders.

Update of LEI



- PQs status can also be modified based on the information received from States in answer to MIRs..



Critical Elements (CE) of the safety oversight system

Critical Elements of an Effective Safety Oversight System



CEs of the safety oversight system



CE-1: Primary aviation legislation

Comprehensive and effective aviation law, consistent with the size and complexity of the State's aviation activity and with the requirements contained in the Convention on International Civil Aviation.

CEs of the safety oversight system



CE-2: Specific operating regulations

Adequate regulations to address, at a minimum, national requirements emanating from the primary aviation legislation, for standardized operational procedures, equipment and infrastructures in conformity with the standards and recommended practices (SARPS) of Annexes to the Convention on International Civil Aviation.

CEs of the safety oversight system



CE-3: State system and functions on safety oversight

The creation of a Civil Aviation Authority (CAA), which is managed by a principal executive officer and counts with the support of technical and non-technical specialized personnel, and with adequate financial resources

CEs of the safety oversight system



CE-4: Qualified technical personnel

The State shall establish minimum qualification and experience requirements for the technical personnel performing safety oversight functions and provide for appropriate training to maintain and enhance their competence at the desired level.

CEs of the safety oversight system



CE-5: Technical guidance, tools and provision of safety-critical information

The State shall provide appropriate technical guidance, procedures and information to the technical personnel to enable them to perform their safety oversight functions effectively and in accordance with established procedures in a standardized manner.

CEs of the safety oversight system



CE-6: Licensing, certification, authorization and/or approval obligations

The State shall implement documented processes and procedures to ensure that personnel and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of a license, certificate, authorization and/or approval to conduct the relevant aviation activity.

CEs of the safety oversight system



CE-7: Surveillance obligations

The State shall implement surveillance and audits to assure that aviation license, certificate, authorization and/or approval holders continue to meet the established requirements by the State to perform the aviation activity for which the licence, certificate, authorization or approval has been granted.

CEs of the safety oversight system



CE-8: Resolution of safety issues

Implementation processes and procedures to resolve detected deficiencies found in the aeronautical system that may affect safety, and that the normative authority or other appropriate entity could have detected.

CEs of the safety oversight system



The definitions of the eight CEs of a safety oversight system are now an Appendix of Annex 19 and referred to as elements.

Guidance on the eight CEs is provided in ICAO Doc 9734, Part A.



USOAP CMA audit areas

USOAP CMA audit areas



Primary aviation legislation and
civil aviation regulations (LEG)
Chicago Convention

Civil aviation organization
(ORG)
SAAQ

Personnel licensing and
training (PEL)
Annex 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)
Annex 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)
Annex 14, and 19



Annex 19 – Safety Management

Annex 19 – Safety Management



Annex 19 – Safety Management

The new Annex 19 and consequential amendments to Annexes 1, 6, 8, 11, 13 and 14, Volume I have been applicable since 14 November 2013.

Review



- USOAP CMA
- Components of the USOAP CMA
- Critical Elements (CEs) of the safety oversight system
- USOAP audit areas
- Annex 19 – Safety Management



Questions?

ICAO

Uniting Aviation on

Safety | Security | Environment

