Safety Oversight Audit Section

Regional Seminar on the Preparation, Conduct and Reporting of an ICAO Safety Oversight Audit

Beijing, China, 12 to 15 December 2006

Overview of the ICAO Universal Safety Oversight Audit Programme (USOAP)

Module 2
Module objective

At the end of this module the participants will be familiar with the background, objective, principles, activities, main audit tools and status of implementation of the ICAO Universal Safety Oversight Audit Programme (USOAP).
Outline

- Background
- Evolution and objective of USOAP
- Programme staffing and activities
- USOAP principles and auditing principles
- Main audit tools
- Status of implementation and results
- Results of the DGCA 06 Conference
- USOAP’s future activities
What is safety oversight?

- Safety oversight is a function by which Contracting States ensure the effective implementation of:
  - ICAO Standards and Recommended Practices (SARPs)
  - the critical elements of a safety oversight system
  - relevant safety practices and procedures

*Safety oversight is a State’s responsibility*
Two complementary roles

ICAO

- Develops principles and techniques to be adopted in the Annexes
- Approves regional air navigation plans

STATES

- Apply Annex SARP
- Carry out their safety oversight responsibilities by implementing the eight critical elements
- Implement infrastructure according to regional plans
Various reports in the early 1990s on the lack of implementation by States of ICAO SARPs.

Accidents indicating insufficient safety oversight by States.

Increased concern over the level of aviation safety world-wide.

Need to reduce accident rates to offset the rapid increase in traffic.
Evolution of the Programme

Voluntary Assessment Programme
1995 – 1998
Annexes 1, 6, 8
88 Requests
67 Assessments
Annex-by-Annex Approach

Mandatory Audit Programme (USOAP)
A-32/11
1999 – 2004
181 Audits
162 Follow-ups
Annexes 1, 6, 8
Annex-by-Annex Approach

Comprehensive Systems Approach
A-35/6
2005
Safety-related Provisions in all
Safety-related Annexes
(All except 9 and 17)
Objective of the Programme

The objective of USOAP is to promote global aviation safety through auditing Contracting States, on a regular basis, to determine States’ capability for safety oversight by assessing the effective implementation of the critical elements of a safety oversight system and the status of States’ implementation of safety-relevant ICAO Standards and Recommended Practices (SARPs), associated procedures, guidance material and safety-related practices.
Safety and Security Audits Branch (SSA)

Office of the Secretary General

Safety and Security Audits Branch - SSA

Safety Oversight Audit Section SOA

Aviation Security Audit Section ASA

Audit Coordination and Reporting Section - ACR
Audit staff

ICAO
REGIONAL OFFICES

ANB AND OTHER ICAO
BUREAUX (HQs)

CONTRACTING
STATES

REGIONAL
ORGANIZATIONS
Programme activities

PLANNING

AUDITS

REPORTS & ANALYSIS

WORKING PAPERS

TRAINING & SEMINARS

AUDIT FINDINGS AND DIFFERENCES DATABASE (AFDD)
USOAP principles

- Sovereignty
- Universality
- Transparency and disclosure
- Timeliness
- All-inclusiveness
- Systematic, consistent and objective
- Fairness
- Quality
ISO certification of SOA

- Demand for external quality assurance
- Aims:
  - Further standardize procedures and processes
  - Increase efficiency and effectiveness
  - Ease the integration of new audit areas
  - Consistently provide product that meets customer requirements.
  - Enhance customer satisfaction
  - Continuous improvement of the system
- SOA was initially certified in October 2002 and re-certified in September 2005.
SOA Quality Management System

Quality Manual

Quality Management System Procedures

- Process Flowcharts
- Work Instructions
- Quality Records
SOA’s customers

ICAO Assembly
ICAO Council
Air Navigation Commission

INTERNAL
ICAO Secretariat

EXTERNAL
International Organizations
Regional Organizations

Contracting States
Auditing principles

The **ISO 19011** International Standard provides guidance on the management of audit programmes, the conduct of internal or external audits of quality and/or environmental management systems, as well as on the competence and evaluation of auditors.

Four of the most important ISO auditing principles have been selected for USOAP purposes.
ISO 19011 auditing principles adopted by USOAP

- **Fair presentation**
  The obligation to report truthfully and accurately

- **Due professional care**
  The application of diligence and judgement in auditing

- **Independence**
  The basis to audit with impartiality and objectivity

- **Evidence-based approach**
  Systematic audit process to reach reliable conclusions
Main audit tools

- State Aviation Activity Questionnaire (SAAQ)
- Compliance Checklists (CCs)
- Audit Protocols
- ICAO documentation and guidance material
- SPO / Team leader checklists
Audits and Audit Follow-ups Completed
First Audit Cycle – 1999 - 2004

In addition, two Special Administrative Regions of China and three territories were audited at the request of the States concerned.
Results of the First Audit Cycle (1999 – 2004)  
Lack of Effective Implementation of the Critical Elements (%)  

Global – Audit Phase 32.6%  
Global – Follow-up Phase 17.5%
CSA audits completed as of 30 November 2006

Contracting States 189
Audits Completed 34

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<tr>
<th>Region</th>
<th>Contracting States</th>
<th>Audits Completed</th>
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Areas of concern identified during CSA audits

- Introduction of SARPs in legal framework
- Incorporation of Annex amendments and notification of differences
- Oversight of delegated tasks
- Establishment of staff qualifications and experience and development of training programmes
- Coordination amongst entities responsible for safety oversight
- Separation of the regulatory and service provision functions
Results of the DGCA Conference 2006

- Greater transparency – audit information to be made public.
- Procedure to deal in a timely manner with significant safety concerns identified during audits.
- Classification of audit findings under the critical elements.
- Consequential amendments to the MOU on safety oversight audits.
Release of audit information to the public

- Information released to the public in the Flight Safety Information Exchange (FSIX) website.
- For audits conducted during the first audit cycle:
  - States were requested to sign a release consent form authorizing ICAO to release either a summary of the audit report and a graph, or the entire report.
  - 24 months for all States to provide consent to ICAO
- For audits under the comprehensive systems approach:
  - Graph depicting implementation of the critical elements
  - MOU amended to allow for the release to the public
  - Consent form for States already audited.
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<tr>
<th>CRITICAL ELEMENT</th>
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10 = Fully implemented
1 = Not implemented

CRITICAL ELEMENT Level of Implementation of the Critical Elements of a Safety Oversight System

□ = State’s level of implementation

- = Global average

Global average:

Primary aviation legislation: 6
Specific Operating Regulations: 6
State Civil Aviation System and Safety Oversight Functions: 7
Technical Personnel Qualification and Training: 8
Technical Guidance, Tools and the Provision of Safety-critical Information: 7
Licensing, Certification, Authorization and Approval Obligations: 8
Surveillance Obligations: 7
Resolution of Safety Concerns: 7

State's level of implementation:

Primary aviation legislation: 7
Specific Operating Regulations: 7
State Civil Aviation System and Safety Oversight Functions: 8
Technical Personnel Qualification and Training: 8
Technical Guidance, Tools and the Provision of Safety-critical Information: 7
Licensing, Certification, Authorization and Approval Obligations: 7
Surveillance Obligations: 7
Resolution of Safety Concerns: 7
Significant safety concerns

A significant safety concern 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 or by the provisions set forth in the ICAO Annexes are not met, resulting in an immediate safety risk to international civil aviation.
Procedure to deal with significant safety concerns

**Preliminary significant safety concerns (SCCs) are described to the State during the audit closing meeting.**

- SCCs are confirmed and validated by SOA (48 to 72 hours. Maximum 15 days).

- Official notification of SCCs to the State, including timeframe for corrective action.

- If State fails to respond, the SCC will be posted on the secure website and Council will be advised.
Classification of audit findings under the critical elements

Audits are conducted using protocol questions

Each protocol question is associated with one critical element

A not-satisfactory answer to a protocol question generates an audit finding

The audit finding identifies the protocol question(s) and the associated critical element(s)
EACH AUDIT FINDING INDICATES THE CRITICAL ELEMENT(S) ASSOCIATED WITH THE PROTOCOL QUESTION(S) FOUND TO BE NOT SATISFACTORY
USOAP’s future activities

- An average of 40 audits per year
- Two seminars per year
- Auditor training courses as required
- Analysis of audit results
- Deployment of selected SOA staff to the regions
- Expansion of the Quality Management System to the entire SSA branch
- Assembly year
Review

- Background
- Evolution and objective of USOAP
- Programme staffing and activities
- USOAP principles and auditing principles
- Main audit tools
- Status of implementation and results
- Results of the DGCA 06 Conference
- USOAP’s future activities
Thank you!

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