

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

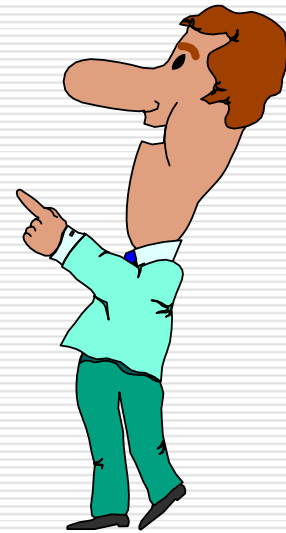
At the end of this module the participants will be familiar with the background, objective, principles, activities, main audit tools and status of implementation of the ICAO Universal Safety Oversight Audit Programme (USOAP).

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

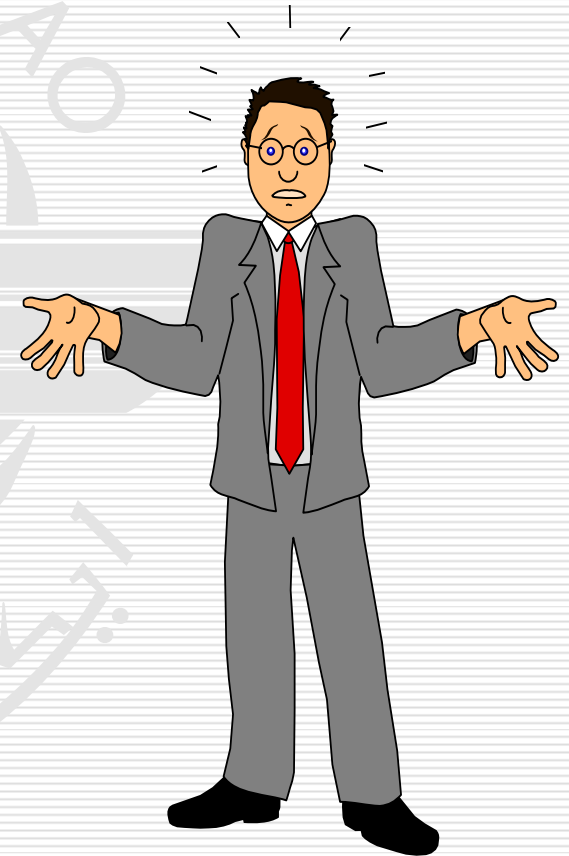


STATES

- ❑ Apply Annex SARPs
- ❑ Carry out their safety oversight responsibilities by implementing the eight critical elements
- ❑ Implement infrastructure according to regional plans

Why an ICAO Programme?

- ❑ 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



D
G
C
A

C
O
N
F

'97



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

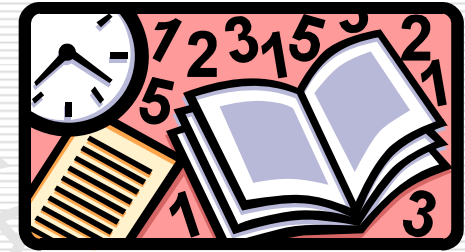
Programme activities

| 1992 | | | | | | |
|------|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

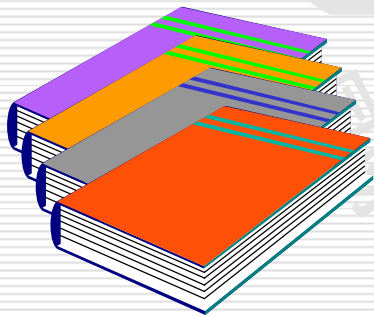
PLANNING



AUDITS



**AUDIT FINDINGS
AND DIFFERENCES
DATABASE (AFDD)**



**REPORTS &
ANALYSIS**

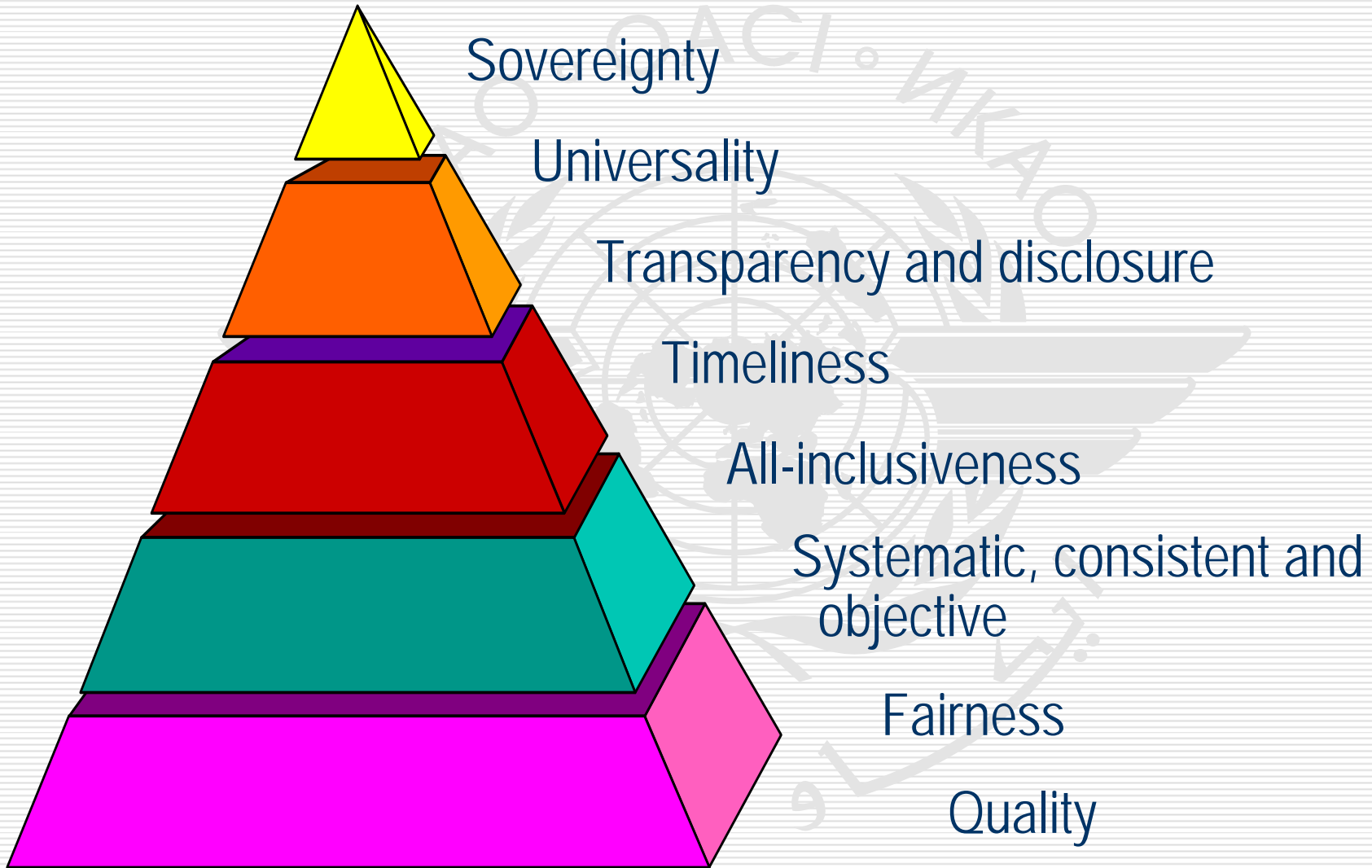


**WORKING
PAPERS**



**TRAINING &
SEMINARS**

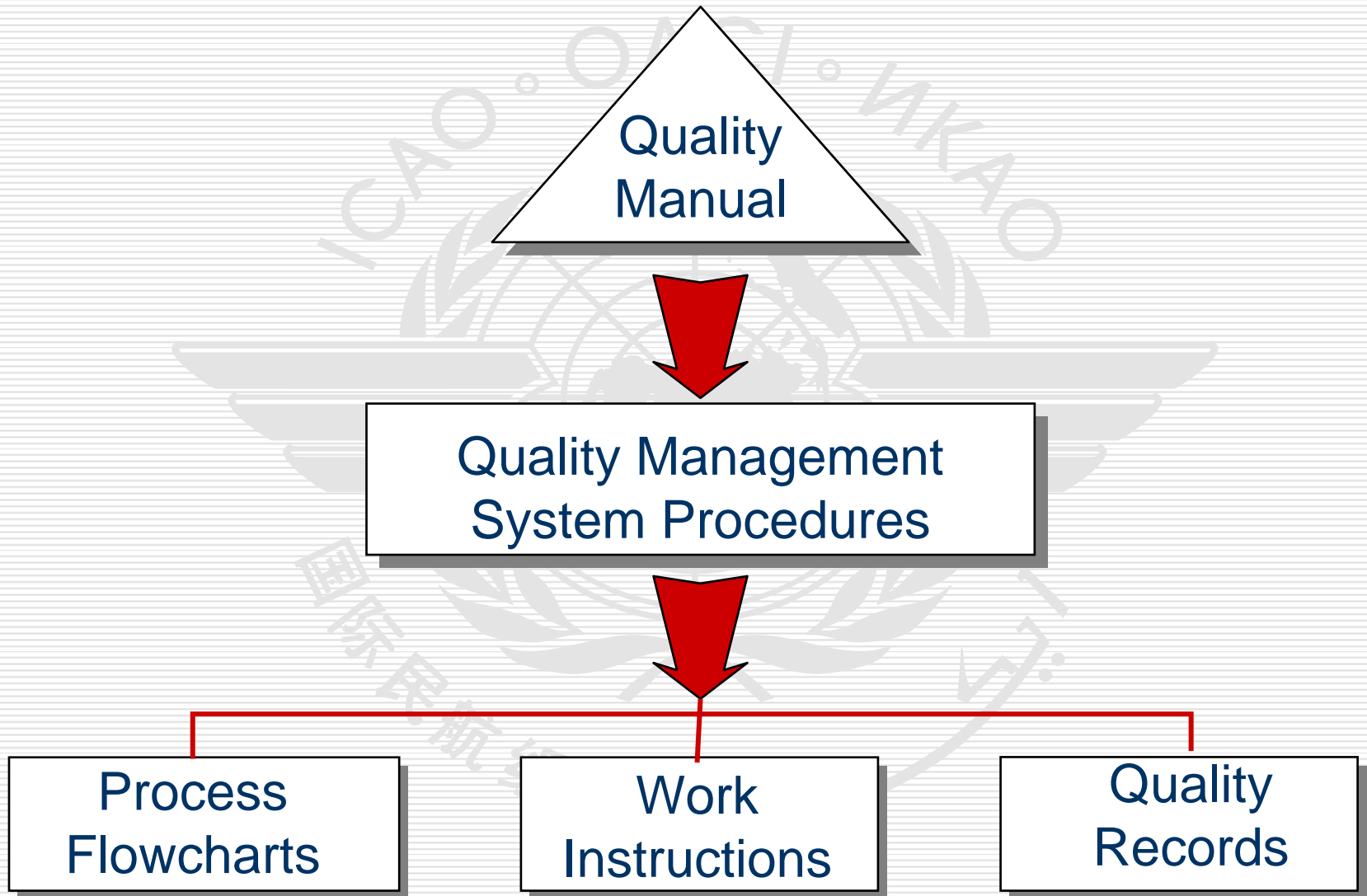
USOAP principles



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



SOA's customers

INTERNAL



EXTERNAL

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

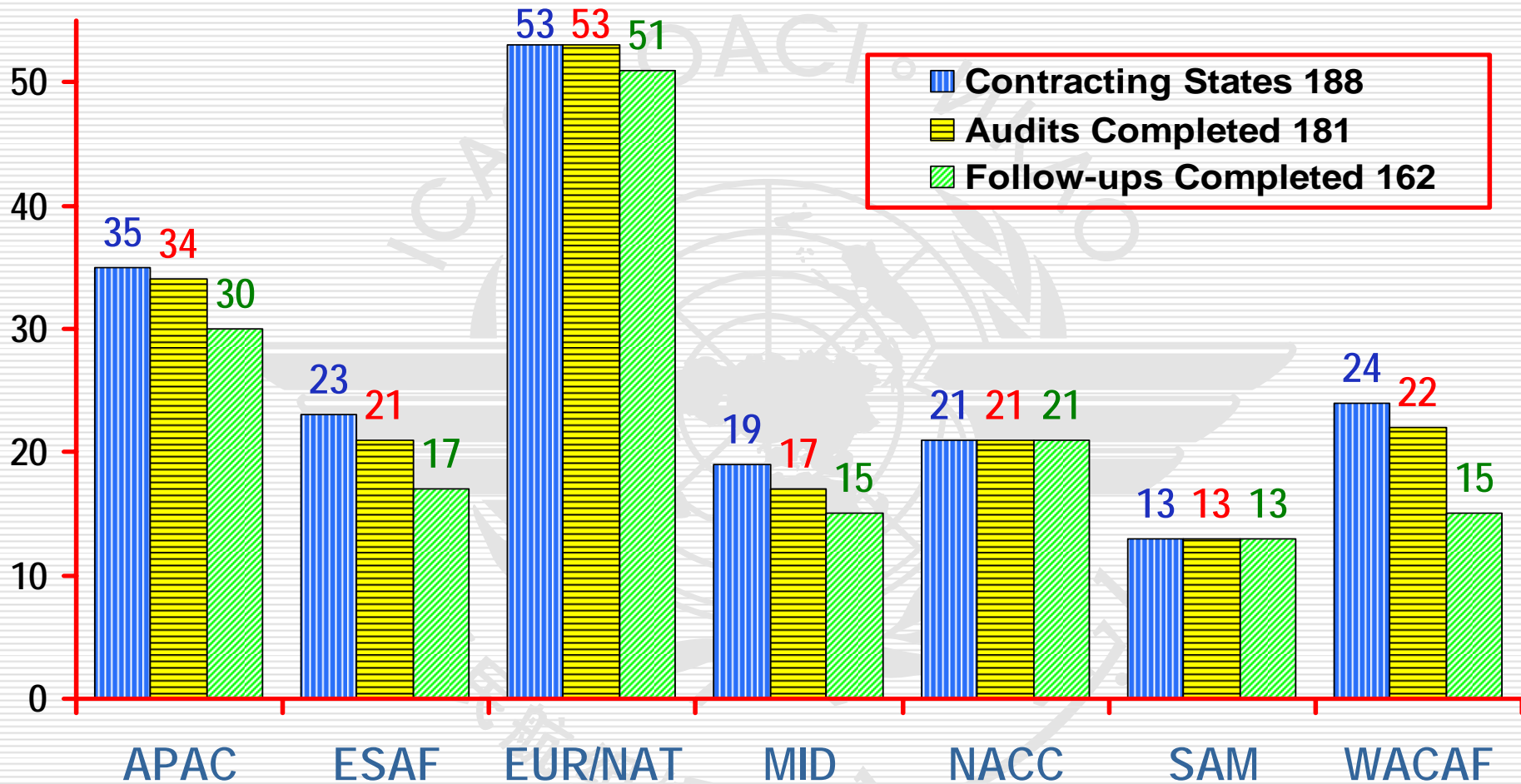
Systematic audit process to reach reliable conclusions

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



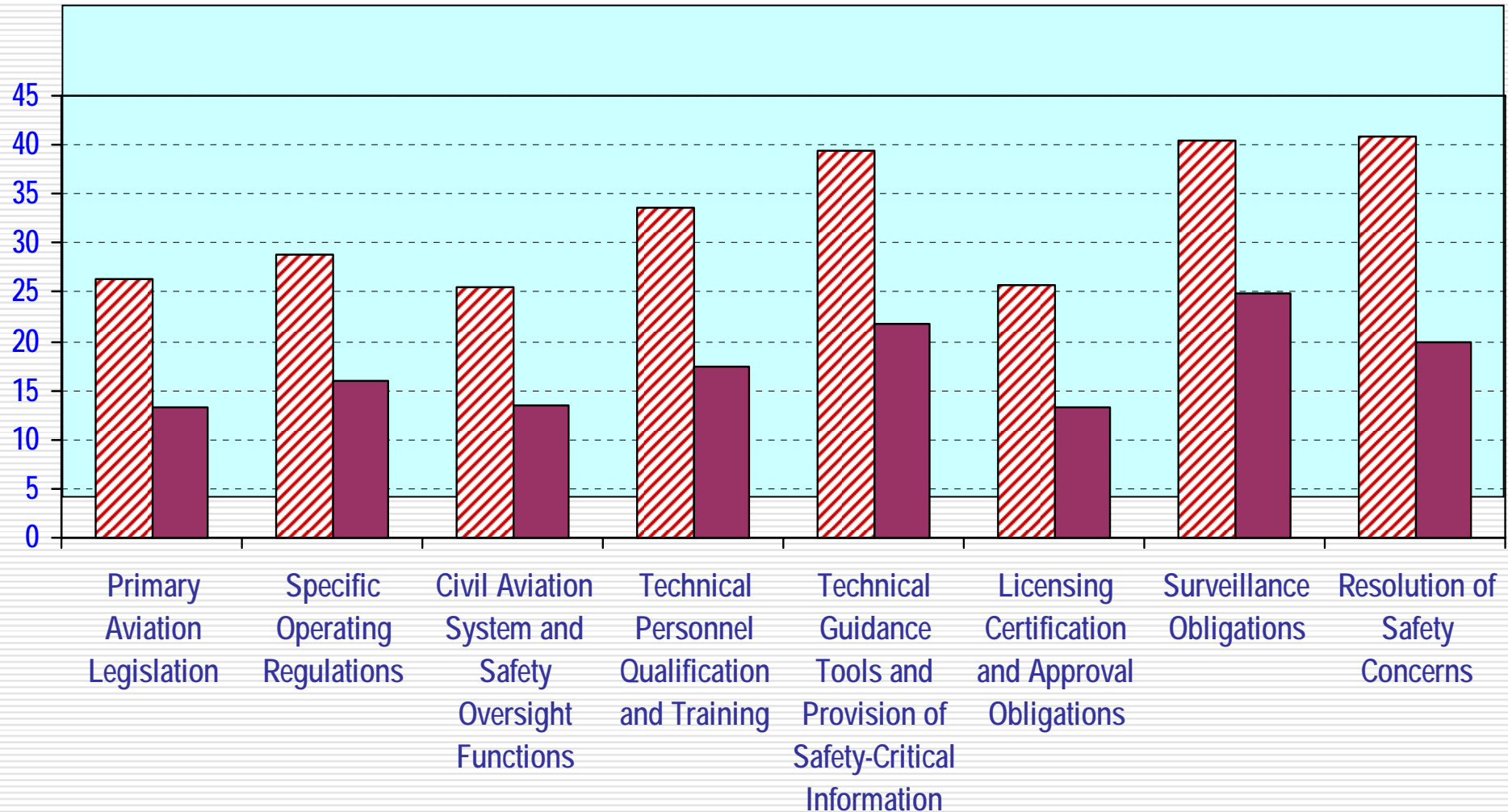
In addition, two Special Administrative Regions of China and three territories were audited at the request of the States concerned

Results of the First Audit Cycle (1999 – 2004)

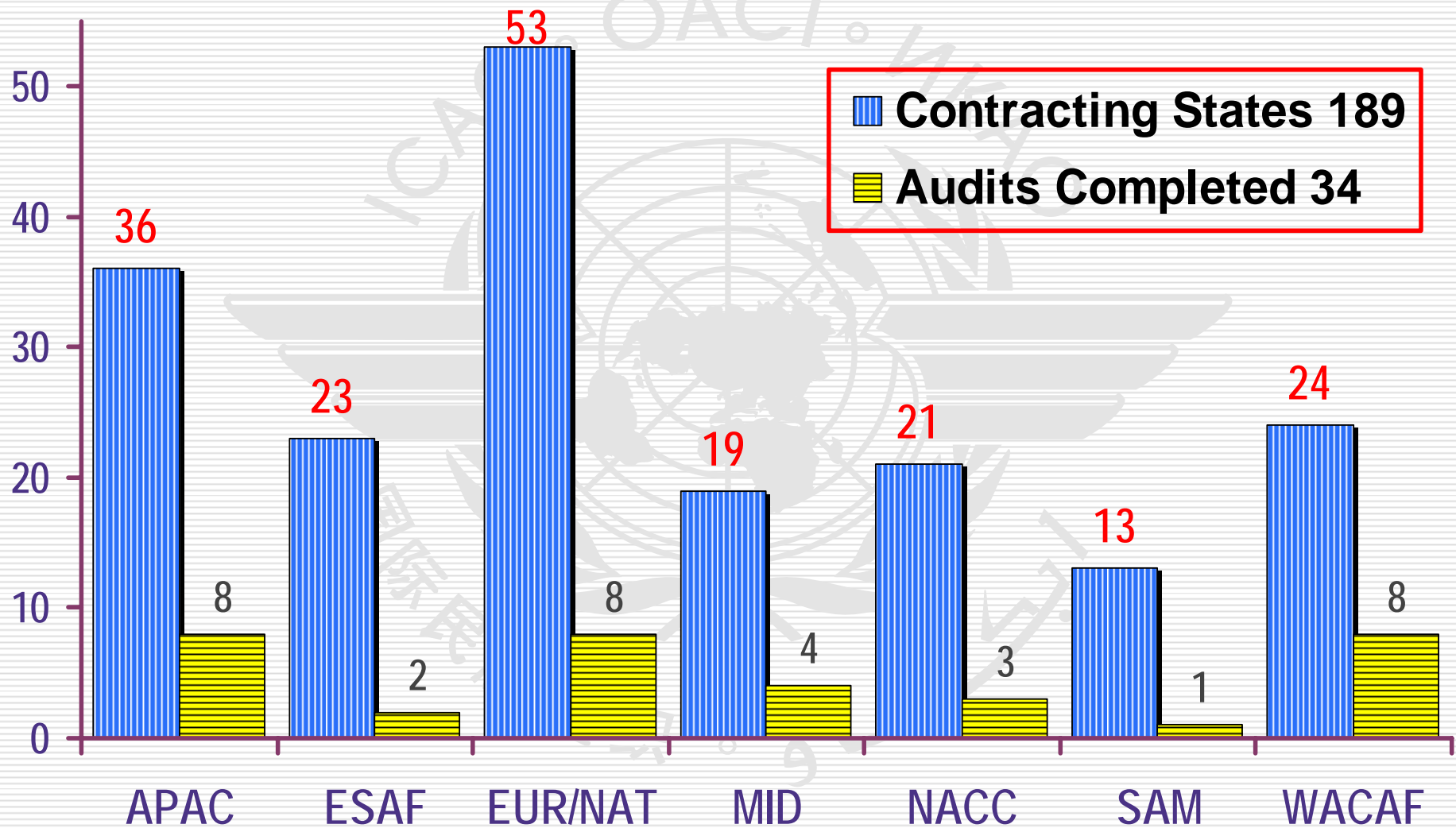
Lack of Effective Implementation of the Critical Elements (%)

 Global – Audit Phase 32.6%

 Global – Follow-up Phase 17.5%



CSA audits completed as of 30 November 2006



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.

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



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graph TD; A[Audits are conducted using protocol questions] --> B[Each protocol question is associated with one critical element]; B --> C[A not-satisfactory answer to a protocol question generates an audit finding]; C --> D[The audit finding identifies the protocol question(s) and the associated critical element(s)];
```

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)

FINDINGS AND RECOMMENDATIONS RELATED TO PRIMARY AVIATION LEGISLATION AND CIVIL AVIATION REGULATIONS

| | | | |
|---|--|---|-------------------------|
| Auditee: Auditland Audit period: 10 to 18 February 2005 | | Finding and Recommendation Number: LEG-01 | |
| Document reference: CC Art.83 bis CIR 295 | | Audit protocol reference: | 1.151 4.385 5.347 |
|  | | | |
|  | | | |
| <div style="border: 1px solid black; padding: 10px;"><p>EACH AUDIT FINDING INDICATES THE CRITICAL ELEMENT(S) ASSOCIATED WITH THE PROTOCOL QUESTION(S) FOUND TO BE NOT SATISFACTORY</p></div> | | | |

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
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Safety Oversight Audit Section

Thank you!

