A37-WP/37 TE/11 27/07/10

ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 29: Report on the implementation of the ICAO Universal Safety Oversight Audit Programme (USOAP) under the comprehensive systems approach and Evolution of the ICAO Universal Safety Oversight Audit Programme (USOAP) beyond 2010

TRANSITIONING TO A CONTINUOUS MONITORING APPROACH (CMA)

(Presented by the Council of ICAO)

EXECUTIVE SUMMARY

The ICAO Universal Safety Oversight Audit Programme (USOAP) cycle of comprehensive systems approach (CSA) audits was initiated in 2005 and will be completed by the end of 2010. The 36th Session of the Assembly had directed the Council (A36-4 refers) to examine different options for the continuation of the USOAP beyond 2010. Therefore, the Council worked with the Secretariat and decided that the CSA should evolve to a continuous monitoring approach (CMA) that would still include but not be limited to the conduct of CSA audits. The CMA will involve the establishment of a system to monitor the safety oversight capability of Contracting States on an ongoing basis. It will also enable safety information sharing between ICAO and other interested stakeholders.

The implementation of the CMA will require a transition period, tentatively set at two years, to allow ICAO and member States to gradually implement the actions required under the new approach. New activities will be introduced during the transition period, including safety audits and ICAO coordinated validation missions (ICVMs). ICAO will also conclude new and amend existing agreements with member States, and regional and international organizations for the sharing of safety information.

A draft Resolution is proposed to the Assembly for adoption, and incorporates certain previous Resolutions affecting the USOAP.

Action: The Assembly is invited to:

- a) support the CMA, as outlined in paragraph 2;
- b) support the CMA transition plan, as outlined in paragraph 3 and Appendix B; and
- c) review the modifications proposed and adopt the Resolution on a continuous monitoring approach for USOAP in Appendix C to supersede Assembly Resolutions A35-6, A36-4 and portions of A36-2.

Strategic Objectives:	Strategic Objective A: Safety – Enhance global civil aviation safety.
Financial implications:	Resources for the activities referred to in this paper are included in the proposed budget for 2011 to 2013.
References:	Doc 9902, Assembly Resolutions in Force (as of 28 September 2007) Doc 9935, HLSC 2010

1. **INTRODUCTION**

- The six-year cycle of the Universal Safety Oversight Audit Programme (USOAP) comprehensive systems approach (CSA) is set to conclude at the end of 2010. In September 2007, the 36th Session of the Assembly directed the Council to examine different options for the continuation of the USOAP beyond 2010, including the feasibility of applying a new approach based on the concept of continuous monitoring (A36-4 refers). Pursuant to this Resolution, the Secretariat proposed a number of options to the Council on the future of the USOAP. The Council (C-187) selected the best and most cost-effective option and directed the Secretary General to begin to develop the methodology and tools required to implement a CMA, including the necessary detailed guidance to States. It also directed the Secretary General to provide a transition period to the CMA, in order to allow States and ICAO to gradually implement the different elements of the new approach.
- 1.2 The 2010 High Level Safety Conference unanimously supported the decision to transition to a CMA. However, there was concern that the two years currently allotted to this transition might not be sufficient (Doc 9935, Recommendation 1/2 refers). Consequently, the Conference recommended that regular reports be made to the Council, providing updates on progress made by States, and by ICAO, in implementing the objectives of the transition plan. Based on these reports, additional time may be provided to complete the transition of the USOAP to a CMA.

2. TOWARDS A CONTINUOUS MONITORING APPROACH

- 2.1 In developing a methodology for the introduction of CMA, including its transition plan, ICAO has endeavoured to seek input from all stakeholders. The CMA concept and transition plan have been coordinated with select member States, regional and international organizations and with aviation experts to ensure that all factors are taken into consideration.
- 2.2 The CMA concept will involve the establishment of a system to monitor the safety oversight capability of Contracting States on an ongoing basis. In applying this monitoring system, ICAO will adopt a harmonized and consistent approach to assessing the safety level of aviation activities and evaluating safety management capabilities. In order to facilitate States' participation in the CMA, ICAO has already begun developing an interactive online framework, as well as a centralized database to properly manage data gathered by the USOAP on an ongoing basis. This database will also include validated information received from ICAO Regional Offices, regional and international organizations, as well as directly from States.
- Under the CMA, the USOAP will carry out a variety of activities, listed in Appendix A, including CSA audits. Other such activities will include limited CSA audits, safety audits and ICAO coordinated validation missions (ICVMs). These activities will provide the USOAP with enhanced flexibility and enable ICAO to tailor activities to respond to the situation and needs of each State. The CMA will also allow ICAO to identify when other types of activities, such as technical assistance, are required. In order for ICAO to determine what type of activity is appropriate for each State, continuous feedback from States will be necessary under the CMA.

2.4 The Council's decision to adopt the CMA has been formally notified to all ICAO States (EB 2009/27 refers). Any update will be provided regularly in the same manner. In addition, a detailed transition plan has been prepared for the two year period from 2011 to 2012. In January 2013, implementation of the CMA will begin gradually, taking into consideration that some States may require more time in order to fulfil their obligations under the new approach. Details on the transition plan, including timelines for the implementation of all the major components of the CMA, are in Appendix B.

3. THE TRANSITION TO A CONTINUOUS MONITORING APPROACH

- 3.1 It is important to note that most of the information necessary to launch the CMA is already available to ICAO. This information comes from the results of the CSA audits of each member State. However, during the transition period member States will need to complete certain actions in order to facilitate the implementation of the CMA. The first step will be to sign a new Memorandum of Understanding (MoU) with ICAO and nominate one or more National Continuous Monitoring Coordinator(s) (NCMC), as applicable. NCMCs will receive Computer-Based Training (CBT), which will provide them with complete information on the State's responsibilities and obligations under the CMA.
- 3.2 States, through their NCMCs, will need to provide ICAO with certain information prior to the launch of the CMA in 2013, including updates on progress made in implementing the Corrective Action Plans (CAPs) which were originally submitted to address the ICAO findings and recommendations identified during each State's CSA audit. NCMCs will provide ICAO with regular updates on the level of aviation activity in their States through updated State Aviation Activity Questionnaires (SAAQs). The information provided will be shared through an online interactive system with all ICAO member States. It should be noted, however, that this information is essentially the same as that which was previously provided to ICAO by States prior to their CSA audit.
- 3.3 In addition to the information already mentioned, States will be responsible for developing a plan for the completion of the CMA protocols within a specific time frame. Once their plan is developed, States will then need to adhere to their established timelines for completing the protocols using the online framework. The CMA protocols will be updated to reflect the latest changes to the ICAO Annexes and to reflect lessons learned during the CSA audit cycle. In order to maintain the usefulness of the information collected during this cycle, only approximately 10% of the audit protocols will be updated. Under the CMA, States will no longer be required to complete Compliance Checklists. Instead, they will be responsible for filing any differences using the online mechanism currently being developed.
- 3.4 ICAO will also be responsible for completing a number of actions during the transition period. The organization will be working with stakeholders to refine the comprehensive guidance materials and online tools that will be required by States and ICAO Regional Offices under the CMA. A new edition of ICAO Doc 9735 *Safety Oversight Audit Manual*, is scheduled for publication in June 2011. Meanwhile, work is already underway on developing the online framework, which will be tested with the help of select States. New agreements and amendments to existing agreements for the sharing of confidential safety information will also be concluded between ICAO and international entities, including the International Air Transport Association (IATA), the European Commission (EC), and its agency, the European Aviation Safety Agency (EASA). These agreements will reduce the burden on States caused by repetitive audits or inspections designed to evaluate their safety oversight capabilities. The transition period will also be used to conduct CMA workshops in each ICAO region to ensure that States are well informed of the transition plan and trained in the CMA reporting tools.

- 3.5 Some of the activities mentioned in paragraph 2.3 will begin to be introduced during the transition period. ICVMs, which are designed to determine the status of corrective or mitigating measures taken by States on safety deficiencies, including significant safety concerns, have already started in 2010 and will continue in the next triennium. It is envisaged that ten ICVMs will be carried out in 2011 and twenty in 2012. As of 1 January 2012, ICAO will also be able to carry out safety audits at the request of member States, on the condition that the results of these audits are made available to all member States. Safety audits will be conducted on a cost-recovery basis, with their scope defined by the requesting State.
- 3.6 The deployment of the CMA is planned to commence from January 2013 and will see the implementation of the full array of activities, including CSA audits and limited CSA audits. The results of all such activities will be displayed on a restricted website and kept updated as information becomes available. An overview of the audit results for each member State will continue to be made available to the public.
- 3.7 The Secretariat believes that two years is sufficient to complete the transition to a Continuous Monitoring Approach, given that the work is well underway. However, regular updates will be made to the Council during the transition period, containing information on the progress made by States, and by ICAO, in implementing the objectives of the transition plan. Based on these reports, and recognizing the importance of an effective transition to the CMA, it may at some point be determined that additional time is required to complete the transition.

4. ASSEMBLY RESOLUTION ON THE CONTINUOUS MONITORING APPROACH

- 4.1 The introduction of the CMA requires a new Assembly Resolution. A draft Resolution has been prepared which consolidates a number of existing Resolutions relating to the USOAP and removes those elements no longer in force. The proposed Resolution incorporates the essential elements of Assembly Resolutions A35-6: *Transition to a comprehensive systems approach for audits in the ICAO Universal Safety Oversight Audit Programme (USOAP)* and A36-4: *Application of a continuous monitoring approach for the ICAO Universal Safety Oversight Audit Programme (USOAP) beyond 2010*, as well as Articles one to six of A36-2: *Unified strategy to resolve safety-related deficiencies*. The draft Assembly Resolution may be found attached at Appendix C, with the new portions, not coming from existing Assembly Resolutions, shaded in grey.
- 4.2 If the Assembly adopts the attached Resolution, it will supersede Resolutions A35-6 and A36-4, as well as the articles of A36-2 mentioned above.

5. **CONCLUSION**

The CMA approved by the Council and presented in this paper represents the best and most cost-effective means of gathering and disseminating safety oversight information in a continuous manner. A new Assembly Resolution supporting the CMA and which combines the key elements of previous USOAP Resolutions will allow ICAO to move forward with the implementation of the transition plan with a view to launching the CMA in the most practicable timeframe.

APPENDIX A

CONTINUOUS MONITORING APPROACH ACTIVITIES

1. INTRODUCTION

1.1 The following represents a list of activities that will be conducted under the Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA). The CMA will allow ICAO to determine which activity or activities are appropriate for each State, based on their own particular situation. This will allow the Organization to focus its resources on those States which most require them. The activities outlined below will be phased in gradually through the transition period, with all activities underway once the transition to the CMA is complete.

2. ICAO COORDINATED VALIDATION MISSIONS (ICVMs)

2.1 The primary purpose of an ICVM is to ascertain whether previously identified safety deficiencies have been satisfactorily resolved by assessing the status of corrective actions or mitigating measures taken by member States to address findings and recommendations, including Significant Safety Concerns (SSCs).

3. COMPREHENSIVE SYSTEMS APPROACH (CSA) AUDITS

3.1 CSA audits will be carried out by ICAO to determine States' capability for safety oversight by assessing the effective implementation of the eight critical elements of a safety oversight system and the status of States' implementation of all safety relevant ICAO Standards and Recommended Practices (SARPs) (found in 16 of the 18 ICAO Annexes), associated procedures, guidance material and best safety practices. CSA audits are tailored to the level of complexity of aviation activities in the State to be audited. The timing and duration of CSA audits, as well as the size and composition of the audit teams, are determined through a review of the information submitted by the State.

4. LIMITED CSA AUDITS

4.1 Limited CSA audits will use the same methodology as CSA audits. However, they will be limited in scope to address specific areas, such as air navigation services, aerodromes, aircraft flight operations, airworthiness, etc. While the goal of these limited audits is the same as for CSA audits, they will be useful in States where the safety oversight mechanisms in some technical areas are less developed than others, or where a specific technical area has undergone a significant change. The area or areas to be audited would be determined through a review of the deficiencies identified by previous USOAP audits and of information submitted by the State on progress made in the implementation of their corrective action plan.

5. **SAFETY AUDITS**

- Requests for the conduct of Safety audits may be submitted by Member States to ICAO. Such requests may be made for a number of reasons, principally when a Director General of Civil Aviation (or equivalent) wishes to have an independent evaluation of his or her State's safety oversight capability, in full or targeting a specific area as defined by the requesting State.
- 5.2 ICAO will only approve a request to conduct a safety audit if sufficient resources are available and if the conduct of the safety audit does not interfere with regularly scheduled USOAP-CMA activities. Safety audits will be conducted on a cost-recovery basis.
- 5.3 The methodology used in a safety audit will be the same as under a CSA audit and will be carried out in accordance with all the same conditions that would be stipulated in a Memorandum of Understanding prior to such a CSA audit. These will include timelines for reporting and provisions for the transparency of relevant audit information, which will be made available to other member States. Information gathered during the safety audits will be considered validated information and will be used to update the requesting State's level of effective implementation of the critical elements of a safety oversight system as well as the global average.

APPENDIX B

CONTINUOUS MONITORING APPROACH (CMA) TRANSITION PLAN

A detailed transition plan has been prepared for the two year period from 2011 to 2012, leading to the gradual implementation of the CMA in January 2013. This transition plan includes timelines for the implementation of all the major components of the CMA.

Task	Start	End	01 - 2011	Q2 - 20	11 03 - 2011	03 - 2011 04 - 2011		2012	02 - 2012	03 - 201	2 (04 - 2012		01 - 20:	2013
MEMBER STATES TRANSITION TO CMA		=114	4 2 232	4 2 23		Q. ISSE	- 4-								
Member States to sign new MoU	1/6/2011	31/8/2011													
Member States to assign National Continuous Monitoring Coordinator (NCMC)	1/6/2011	31/8/2011													
NCMC to complete Computer Based Training (CBT) on CMA	1/9/2011	1/3/2012					<i></i>								
States to update Corrective action plan (CAP) from the CSA audit cycle using the on-line framework	1/9/2011	1/7/2012													
States to develop a plan for the completion of their CMA protocols and communicate it to ICAO		1/7/2012			W.		//////////////////////////////////////								
States to update State Aviation Activity Questionnaire (SAAQ) using the on line framework	1/9/2011	1/9/2012			22					umamumi.					
States to complete USOAP CMA protocols using the on-line framework according to established CMP	1/1/2012	31/12/2012													
Full CMA Launched	1/1/2013	1/1/2013											•		
ICAO TRANSITION TO CMA															
Publish new edition Doc 9735	1/6/2011	1/6/2011			\rightarrow										
Develop and expand agreements with International Entities	1/1/2011	31/12/2011					_								
Conduct CMA testing of the on-line framework with some member States	1/1/2011	30/9/2012													
Conduct Regional CMA Workshops	1/8/2011	29/12/2011													
Secretariat launch CBT Auditor training	1/6/2011	31/12/2012													
Conduct ICAO Coordinated Validation Missions (ICVMs) (10 ICVMs in 2011) (20 ICVMs in 2012)	1/1/2011	31/12/2012													
Conduct Safety Audits at the request of member States	1/1/2012	28/3/2013													\Rightarrow
Full CMA Launched	1/1/2013	1/1/2013											•		

APPENDIX C

DRAFT RESOLUTION FOR ADOPTION BY THE 37TH SESSION OF THE ASSEMBLY

Resolution 29/1: The Universal Safety Oversight Audit Programme (USOAP) continuous monitoring approach

Whereas the primary objective of the Organization continues to be that of ensuring the safety of international civil aviation worldwide;

Whereas Article 37 of the Convention requires each Contracting State to collaborate in securing the highest practicable degree of uniformity in regulations, standards, procedures and organization in relation to all matters in which such uniformity will facilitate and improve air navigation;

Whereas safety oversight, and the safety of international civil aviation in general, is the responsibility of Contracting States, both collectively and individually, it also depends on the active collaboration of ICAO, Contracting States, industry and all other stakeholders in the implementation of the Global Aviation Safety Plan (GASP);

Whereas the DGCA/06 Conference made recommendations to allow public access to appropriate information on safety oversight audits and to develop an additional mechanism to rapidly resolve significant safety concerns (SSCs) identified under USOAP;

Whereas the High Level Safety Conference (HLSC) 2010 made recommendations for ICAO to develop criteria for the sharing of SSCs with interested stakeholders and to assess how the information on SSCs could be shared with the public in a form which would allow them to make an informed decision about the safety of air transportation;

Whereas the HLSC 2010 made recommendations for ICAO to enter into new agreements and amend existing agreements for the sharing of confidential safety information with international entities and organizations in order to reduce the burden on States caused by repetitive audits or inspections and to decrease the duplication of monitoring activities;

Recalling that the 32nd Session of the Assembly resolved that a Universal Safety Oversight Audit Programme (USOAP) be established, comprising regular, mandatory, systematic and harmonized safety oversight audits to be carried out by ICAO;

Whereas the implementation of the USOAP has been a major achievement for aviation safety, successfully meeting the mandate given by Resolutions A32-11 and A35-6 and providing the ability to evaluate contracting States' oversight capabilities and identify areas of improvement;

Recalling that Assembly Resolution A33-8 requested the Council to ensure the long-term financial sustainability of the USOAP, phasing in all of its activities into the Regular Programme budget;

Recalling the objectives of the USOAP, which seeks to ensure that Contracting States are adequately discharging their responsibilities for safety oversight;

Recognizing that it is essential that the USOAP continue to cover all safety-related Annex provisions in order to promote the adequate implementation of safety-related Standards and Recommended Practices;

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Recognizing that the Secretary General has taken appropriate steps to ensure the establishment of an independent quality assurance mechanism to monitor and assess Programme quality;

Recognizing that the effective implementation of State action plans is essential to enhance the overall safety of global air navigation;

Recognizing the safety enhancement contributions resulting from audits conducted by international and regional organizations, including those organizations that have agreements with ICAO such as the European Aviation Safety Agency (EASA), International Air Transport Association (IATA) and European Organisation for the Safety of Air Navigation (EUROCONTROL); and

Recognizing that transparency and the sharing of safety information is one of the fundamental tenets of a safe air transportation system;

The Assembly:

- 1. *Expresses* its appreciation to the Secretary General on the successful implementation of the USOAP Comprehensive System Approach;
- 2. *Directs* the Secretary General, from 1 January 2011, to evolve the USOAP to a continuous monitoring approach (CMA), which will incorporate the analysis of safety risk factors and be applied on a universal basis in order to assess States' oversight capabilities;
- 3. Directs the Secretary General to ensure that the CMA continues to maintain as core elements the key safety provisions contained in Annex 1 Personnel Licensing, Annex 6 Operation of Aircraft, Annex 8 Airworthiness of Aircraft, Annex 11 Air Traffic Services, Annex 13 Aircraft Accident and Incident Investigation, and Annex 14 Aerodromes;
- 4. *Directs* the Secretary General to continue to ensure the maintenance of the quality assurance mechanism established to monitor and assess Programme quality, and the transparency of all aspects of the continuous monitoring process;
- 5. *Directs the Council* to develop criteria for the sharing of SSCs with interested stakeholders and assess how the information on SSCs could be shared with the public in a form which would allow them to make an informed decision about the safety of air transportation;
- 6. *Directs* the Secretary General to make all safety oversight-related information generated by the CMA available to all Contracting States through the ICAO restricted website;
- 7. *Directs* the Secretary General to continue to foster coordination and cooperation between USOAP and audit programmes of other organizations related to aviation safety; for the sharing of confidential safety information in order to reduce the burden on States caused by repetitive audits or inspections and to decrease the duplication of monitoring activities;
- 8. *Directs* the Secretary General to continue to enhance the Flight Safety Information Exchange (FSIX), for the purpose of facilitating the sharing of safety-critical information among Contracting States, industry and other stakeholders, as appropriate;
- 9. Calls on all Contracting States able to do so to second qualified and experienced technical staff to ICAO on a long- or short-term basis, with a view to enabling the Organization to continue to successfully implement the Programme;

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- 10. *Urges* all Contracting States to submit to ICAO, in a timely manner, and keep up to date all the information and documentation requested by ICAO for the purpose of ensuring the effective implementation of the USOAP-CMA;
- 11. *Urges* all Contracting States to cooperate with ICAO and as much as practicable to accept Continuous Monitoring activities scheduled by the Organization, including audits and validation missions, in order to facilitate the smooth functioning of the USOAP-CMA;
- 12. *Urges* all Contracting States to share with other Contracting States critical safety information which may have an impact on the safety of international air navigation and to facilitate access to all relevant safety information;
- 13. *Encourages* Contracting States to make full use of available safety information when performing their safety oversight functions, including during inspections as provided for in Article 16 of the Convention;
- 14. Reminds Contracting States of the need for surveillance of all aircraft operations, including foreign aircraft within their territory and to take appropriate action when necessary to preserve safety;
- 15. *Directs* that the Council report to the next ordinary session of the Assembly on the overall implementation of the USOAP-CMA; and
- 16. Declares that Resolutions A35-6: Transition to a comprehensive systems approach for audits in the ICAO Universal Safety Oversight Audit Programme (USOAP) and A36-4: Application of a continuous monitoring approach for the ICAO Universal Safety Oversight Audit Programme (USOAP) beyond 2010, as well as articles one to six of A36-2: Unified strategy to resolve safety-related deficiencies have been superseded by this resolution.