

# Cooperative Development of Operational Safety & Continuing Airworthiness Programme



#### 18th COSCAP-NA STEERING COMMITTEE MEETING

# PROGRESS REPORT ON THE IMPLEMENTATION OF THE ICAO UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME (USOAP) CONTINUOUS MONITORING APPROACH (CMA)

**Discussion Paper 9** 

(Submitted by the ICAO Secretariat)

EXECUTIVE SUMMARY			
	This paper provides a progress report on the implementation and activities of the Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) during 2017, and plans for 2018.		
Strategic Objectives:	This paper relates to the Safety Strategic Objective.		
References:	Doc 10075 — Assembly Resolutions in Force (as of 6 October 2016) Doc 10028 — Assembly 38th Session, Technical Commission Report Doc 10004 — Global Aviation Safety Plan (GASP) Doc 9735 — Universal Safety Oversight Audit Programme Continuous Monitoring Manual (Fourth Edition 2014) Doc 9734 — Safety Oversight Manual – Part A – The Establishment and Management of a State Safety Oversight System (Third Edition 2017) EB 2017/65 EB 2017/60 EB 2017/44 EB 2017/24 EB 2017/24		

#### 1. **INTRODUCTION**

- 1.1 The Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) was introduced over a two-year transition period, from 2011 to 2012, and launched into full-scale implementation in January 2013. The 38th Session of the Assembly noted the progress made during the transition and supported the continued activities of USOAP CMA, urging the continuing cooperation of States to ensure its successful implementation (Assembly 38th Session, Technical Commission Report (Doc 10028), para. 29.1 refers).
- 1.2 This discussion paper provides a progress report on the implementation and activities of the USOAP CMA, highlighting the milestones achieved, activities conducted and improvements made in 2017, as well as activities and developments planned for 2018.

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#### 2. USOAP MILESTONES IN 2017

- In March 2017, the Secretariat established the Group of Experts for a Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) Structured Review (GEUSR). This action stemmed from consideration of C-WP/14559 *Review of Assembly Resolutions and Decisions* by the Council at the fourth meeting of its 210th Session held on 27 February 2017. Australia, Brazil, Cabo Verde, Dominican Republic, Egypt, Finland, Singapore (Chair), South Africa, Switzerland, the United States and the European Aviation Safety Agency (EASA) nominated members to support the work of this group. The aim of this review is to identify adjustments to the USOAP CMA with a view of further strengthening it, taking into consideration the evolving safety strategy of ICAO and States' progress in implementing Annex 19, in particular State safety programme (SSP) requirements. The group held its first meeting in April and a second meeting in September to develop recommendations. A survey that allowed Member States to provide feedback on the GEUSR's work was completed in December. Further details on the GEUSR are presented in paragraphs 4.5 and 4.6 below.
- 2.2 ICAO continued working on the improvement of the USOAP CMA Online Framework (OLF) (https://www.icao.int/usoap). An updated user management module was introduced, increasing user account security and facilitating more detailed user access management by national continuous monitoring coordinators (NCMCs). An application was implemented to improve the process of updating the Annexes in the Electronic Filing of Difference (EFOD) module. The Sign-In and Home pages were updated with a fresher layout and enhanced functionality, including a "Latest News" feature. An activity planning module was introduced creating efficiencies in the planning and scheduling processes by incorporating multiple databases into one source and eliminating duplications. Extensive redevelopment of the OLF increased its speed and reduced response time. Enhancements are continuously introduced to address comments received from users.
- 2.3 In 2017, ICAO performed two voluntary, confidential and cost-recovery assessments of SSP implementation at the request of ICAO Member States. The start of the voluntary and non-confidential SSP implementation assessments has been postponed to the last quarter of 2018, taking into account the need for the fourth edition of the *Safety Management Manual (SMM)* (Doc 9859) (advance unedited English only) to be available for ICAO Member States. Further details are presented in paragraph 4.2 below.
- 2.4 The 2017 edition of the USOAP CMA Protocol Questions (PQs) was published. This edition excludes aspects related specifically to the SSP. ICAO continued working on the development of amended PQs and methodology for SSP implementation assessments.
- 2.5 ICAO continued implementation of the USOAP CMA designee programme (launched in September 2016) to respond to the increased demand of States for validating the resolution of USOAP findings and improving their effective implementation (EI) scores. ICAO increased its pool of designees to support the performance of off-site validation activities, assessments of corrective action plans (CAPs) and CAP updates. The second designee training course was conducted in August 2017.
- 2.6 ICAO carried on with more active participation of qualified ICAO technical officers and technical experts to support continuous monitoring activities, including off-site validation activities. Continuous monitoring activities resulting from this initiative are validated by the Safety and Air Navigation Oversight Audit (OAS) Section. In 2017, there was also increased collaboration with the European Aviation Safety Agency (EASA), as a safety partner, in the collection of evidence regarding the resolution of some USOAP findings of EASA Member States for validation at ICAO headquarters.
- 2.7 ICAO launched the third edition of the Safety Oversight Manual (Doc 9734), Part A—
  The Establishment and Management of a State Safety Oversight System. This edition, available on ICAO-NET (<a href="https://portal.icao.int/icao-net/Pages/Doc9734.aspx">https://portal.icao.int/icao-net/Pages/Doc9734.aspx</a>), introduces updates reflecting the adoption of Amendment 1 to Annex 19— Safety Management and enhancements resulting from the

experience gained over 10 years and feedback received from States and other stakeholders. It is expected that this manual will further assist States in establishing and implementing their safety oversight systems.

Monitoring and Oversight (MO) of the Air Navigation Bureau (ANB) successfully went through its ISO recertification audit in September 2017 with no findings. This constituted a major enhancement as MO effectively achieved the transition to the ISO 9001:2015 standard, following a thorough review and update of its processes and procedures focused on the implementation of a risk-based approach. The quality management system (QMS) scope includes: the conduct of on- and off-site monitoring activities for the purpose of collection, processing and sharing of safety oversight information; and the provision of USOAP CMA-related training and workshops for the enhancement of global aviation safety. USOAP CMA processes, procedures and other documentation managed through the QMS were reviewed and updated. Through the USOAP CMA QMS, ICAO collects data from States regarding their level of satisfaction with USOAP CMA activities. States that provided feedback on CMA activities conducted in 2017 indicated an overall satisfaction rate of 94 per cent, which represents a 2 per cent increase over the overall satisfaction rate reported in 2016.

#### 3. USOAP CMA ACTIVITIES IN 2017

- Appendix A outlines USOAP CMA activities conducted during 2017, including audits, ICAO coordinated validation missions (ICVMs), off-site validations, mandatory information requests (MIRs), SSP implementation assessments (voluntary) and workshops. The USOAP CMA Activity Plan, which is issued as an Electronic Bulletin and posted on ICAO-NET twice a year (EB 2017/2 and EB 2017/35), lists the scheduled USOAP CMA activities. In 2017, a total of fifty-five USOAP CMA activities impacted the States' EI scores. In addition, two SSP implementation assessments (voluntary) were conducted. This represents seventeen additional activities beyond the original target identified in the Operating Plan for the Air Navigation Bureau.
- 3.2 The graphs in **Appendix B** provides a summary of the USOAP CMA status at the global level. The areas with the lowest level of EI are aircraft accident and incident investigation (AIG) and aerodrome and ground aids (AGA), and the Critical Elements (CE) with the lowest level of EI are CE-8 (Resolution of Safety Issues) and CE-4 (Qualified Technical Personnel).
- 3.3 In 2017, Angola, Djibouti, Nepal and Thailand resolved the significant safety concerns (SSCs) identified by ICAO. At the end of 2017, globally, four SSCs remain unresolved by four States, all of them in the area of aircraft operations (OPS).

#### 4. USOAP CMA IMPROVEMENTS PLANNED FOR 2018

- 4.1 USOAP CMA activities planned for 2018 include fourteen USOAP CMA audits, sixteen ICVMs and two regional workshops. Cost-recovery activities may be conducted upon request by States depending on the availability of ICAO resources as well as the risk indicators of the States concerned.
- 4.2 ICAO has also scheduled two additional confidential and cost-recovery of SSP implementation assessments (voluntary) in 2018. The results of these assessments will be used to gather additional experience and train ICAO experts for this new type of activity. ICAO assessments using a set of SSP-related PQs (to be finalized in 2018) will formally commence in 2020, to be conducted in States which meet the criteria established by ICAO in line with the Global Aviation Safety Plan (GASP).
- 4.3 ICAO will continue to monitor States' activities through the OLF, prioritizing activities based on risk factors and indicators. The ongoing collection of data from the OLF allows ICAO to determine the appropriate monitoring and assistance activities for each State and to assign resources where required.

The criteria used for the selection and planning of USOAP CMA activities are outlined in the *Universal Safety Oversight Audit Programme Continuous Monitoring Manual* (Doc 9735), Sections 3.6 and 4.7.

- 4.4 A USOAP CMA standardization training session is planned in June 2018 for all USOAP CMA team leaders, prospective team leaders from the regional offices (ROs) and all technical staff of MO. These sessions are designed to keep ICAO staff involved in USOAP CMA activities abreast of the latest updates and improvements in the programme methodology, processes and tools, for the purpose of ensuring uniformity.
- 4.5 The *Universal Safety Oversight Audit Programme Continuous Monitoring Manual* (Doc 9735) will be amended to reflect and support the evolution of the USOAP CMA and, in particular, the new types of validation activities introduced, the roll-out of the designee programme and potential recommendations of the GEUSR.
- 4.6 It is expected that the GEUSR will finalize its recommendations at its third meeting scheduled in February 2018 and these will then be presented to Council during its 214th Session.

#### 5. **ACTION BY THE MEETING**

5.1 The Meeting is invited to approve the following draft Conclusion:

#### DRAFT CONCLUSION - ICAO USOAP CMA IMPLEMENTATION

That States are urged to fulfil their obligations under the USOAP CMA Memorandum of Understanding (MOU) and to take actions as needed to provide up-to-date information on their safety oversight systems, with particular attention to:

- a) States with an SSC, focus on implementing sustainable corrective and immediate mitigation actions to resolve the SSC with a high priority;
- b) finalise draft and submit the Corrective Action Plans (CAPs) on the On-line Framework (OLF), informing the ICAO Regional Office when complete and ready for review;
- c) complete the compliance checklist/EFOD and update the SAAQ;
- d) implement the CAPs and complete the self-assessment of the PQs on the OLF, including uploading the evidence documents, to report the progress on the OLF, informing the ICAO Regional Office when complete and ready for validation; and
- e) request assistance from the ICAO Regional Office and COSCAP, if required.

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### APPENDIX A

The table below provides more detail on USOAP CMA activities and developments during 2017.

	Activity	<b>Activity</b> Conducted	
1.	On-site USOAP CMA Activities		
1.1	USOAP CMA Audits		
	Determine States' capabilities for safety oversight by assessing the effective implementation of the critical elements of a State safety oversight system.	11 audits were conducted in 2017 (in chronological order): Ukraine, Australia, Uzbekistan, South Africa, Colombia, Germany, Honduras, Lebanon, Bahamas, India and the European Aviation Safety Agency (EASA).	Audit results are available on the USOAP CMA Online Framework at: <a href="https://www.icao.int/usoap">https://www.icao.int/usoap</a> .
1.2	ICAO Coordinated Validation Missions (ICVMs)		
	Assess the status of corrective actions taken by the State to address previously identified findings and determine whether or not the State has satisfactorily resolved deficiencies, including any Significant Safety Concerns (SSCs).	By the end of the year, 21 ICVMs were conducted (in chronological order): Equatorial Guinea*, Costa Rica, France, Angola, Chile, United Republic of Tanzania*, Jordan, Philippines*, Trinidad and Tobago*, Nepal, Rwanda, Mongolia, Finland, Bangladesh, Panama, Thailand, Australia, Indonesia, Burkina Faso, Kuwait and Portugal.	ICVM results are available on the USOAP CMA Online Framework at: <a href="https://www.icao.int/usoap">https://www.icao.int/usoap</a> .  * ICAO also conducted off-site validation activities for these four States (see 2.1 below).

Activity		Conducted	Comments	
1.3	SSP implementation assessments (voluntary)			
	Assess the implementation of an SSP in a State and receive feedback and recommendations for possible enhancements to its SSP.	2 SSP implementation assessments (voluntary) were conducted (in chronological order): France and China.	SSP implementation assessments (voluntary) are confidential and cost-recovery. Results are only made available to the State concerned.	
2.	Off-site USOAP CMA Activities			
2.1	Off-site Validation Activities			
	Assess the status of corrective actions taken by the State to address previously identified findings and determine whether or not the State has satisfactorily resolved deficiencies, without conducting an ICVM.	23 off-site validations were conducted (in chronological order): Malta¹, Gabon, Belgium¹, United Republic of Tanzania², Hungary¹, Dominican Republic, Chad³, Denmark¹, Lithuania¹, Equatorial Guinea², Benin, Turkey, Philippines², Mozambique, Fiji, Nicaragua³, Romania¹, Trinidad and Tobago², Norway¹, Bulgaria¹ and Italy¹.	<sup>1</sup> The evidence for the off-site validation activities conducted for these nine States were collected and assessed by experts from the EASA, on behalf of ICAO, as part of an agreement between the two organizations and agreed to by the States. The evidence were subsequently reviewed and validated by experts from the OAS Section. <sup>2</sup> ICAO also conducted ICVMs in these four States in 2017 (see 1.2 above). <sup>3</sup> Two off-site validation activities were conducted each for Chad and Nicaragua.	
2.2	Mandatory Information Requests (MIRs)			
	Request information or documentation needed for USOAP CMA assessment and validation.	In 2017, 3 MIRs were issued, bringing the total number of MIRs issued to date to 21.	The processing of an MIR is considered as an off-site USOAP CMA activity.	

	Activity	Conducted	Comments		
3.	3. Training				
3.1	Training of Auditor and Subject Matter Exp	oert Nominees			
	Manage the USOAP CMA computer-based training (CBT) as a tool for the selection and training of potential auditors and subject matter experts of the USOAP CMA.	23 nominees qualified for training of auditors and subject matter experts, and were enrolled in the USOAP CMA CBT in 2017.  As of December 2017 and since the launch of the CBT in 2011, 372 participants from 73 States and 6 international/regional organizations have completed the CBT.  The USOAP CMA roster now includes a total of 114 qualified USOAP auditors and/or subject matter experts.	States and recognized organizations are called upon to nominate experts for secondment to ICAO as auditors and subject matter experts, on a long-or short-term basis, in support of the USOAP CMA.  In 2017, France, Malaysia, the Republic of Korea and Singapore continued to provide long-term secondments to support the USOAP CMA.		
3.2	Familiarization Training for State Employees				
	Provide training to States' National Continuous Monitoring Coordinators (NCMCs) and familiarize States' safety oversight employees with USOAP CMA methodology and activities.	As of December 2017 and since the launch of the CBT in 2011, 1281 participants from 111 States and 15 international/regional organizations have taken the CBT for NCMC and familiarization training.	NCMC and familiarization training allows States to enhance the knowledge and competency of their aviation safety personnel regarding USOAP CMA, particularly for preparing for an upcoming USOAP CMA activity.		
3.3	3.3 Workshops				
	Assist States in their participation in USOAP CMA and, particularly, preparation for an upcoming USOAP CMA activity.	9 workshops were conducted with 254 participants from 41 States and 2 international/regional organizations. 3 regional workshops were budgeted and conducted by ICAO. One was hosted by the APAC Regional Office in Bangkok, one was hosted by the MID Regional Office in Cairo, and another was hosted by the SAM Regional Office in Lima. 6 workshops were conducted on a cost-recovery basis (in chronological order): Turkey; Qatar; Jordan; Eastern Caribbean Civil Aviation	Nil.		

Activity	Conducted	Comments
	Authority (ECCAA), St. John's, Antigua and Barbuda; Republic of Korea; and Kenya.	

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#### APPENDIX B

- 1. The graphs below provide a summary of the USOAP CMA status at the global level by audit area and by Critical Element.
- 1.1. All but seven Member States have received a USOAP audit. The current average EI score at the global level is 65.03%. Out of the 185 audited Member States, 126 have an EI of 60% or higher.

# Average level of effective implementation (EI) by Audit Area for 185 States that were audited or received a USOAP activity: 65.03%

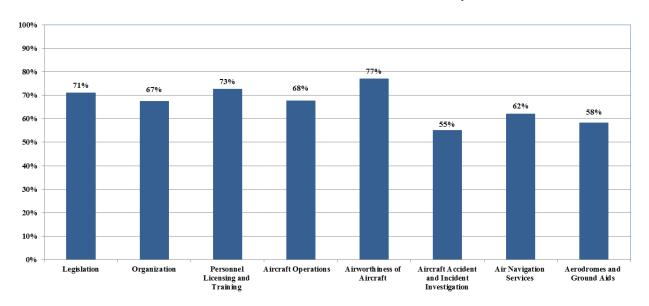


Figure B-1. Average global level of effective implementation (EI)

Average level of effective implementation (EI) by Critical Elements for 185 States that were audited or received a USOAP activity: 65.03%

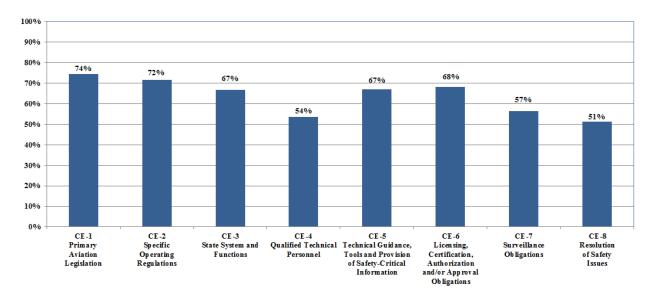


Figure B-2. Average global level of effective implementation (EI)

## APPENDIX C

### ICAO USOAP CMA Activities — Status for 2017

State/Organization	Type of Activity	Dates	Status	
Asia and Pacific (APAC) Region				
A , 1'	Audit (cost-recovery)	3 – 10 Apr 2017	completed	
Australia	ICVM	9 – 13 Oct 2017	completed	
Bangladesh	ICVM	19 – 27 Sep 2017	completed	
Bhutan	ICVM	18 25 Jul 2017	postponed to 2018	
China	SSP implementation assessment (voluntary)	22 – 26 May 2017	completed	
Fiji	Off-site validation activity	Jul 2017	completed	
India	Audit	6 – 16 Nov 2017	completed	
Indonesia	ICVM	10 – 18 Oct 2017	completed	
Mongolia	ICVM	29 Aug – 4 Sep 2017	completed	
Nepal	ICVM	4 – 11 Jul 2017	completed	
Dhilingings	ICVM	30 May – 8 Jun 2017	completed	
Philippines	Off-site validation activity	Jun 2017	completed	
Sri Lanka	Audit	23 Oct 3 Nov 2017	postponed to 2018	
Thailand	ICVM	20 – 27 Sep 2017	completed	
<b>Eastern and Southern A</b>	frican (ESAF) Region			
Angola	ICVM	14 – 23 Mar 2017	completed	
Kenya	Audit	27 Nov 8 Dec 2017	postponed	
Mozambique	Off-site validation activity	Jun 2017	completed	
Rwanda	ICVM	1 – 10 Aug 2017 and 4 – 8 Sep 2017	completed	
Seychelles	ICVM	1 8 Aug 2017	postponed to 2018	
South Africa	Audit	8 – 18 May 2017	completed	
United Republic of Tanzania	ICVM	28 Mar – 6 Apr 2017 and 2 – 9 May 2017	completed	
	Off-site validation activity	Feb 2017	completed	
	<b>European and North Atlantic</b>	(EUR/NAT) Region		
Azerbaijan	ICVM	1 8 Aug 2017	postponed to 2018	
Belgium	Off-site validation activity	Feb 2017	completed	
Bulgaria	Off-site validation activity	Dec 2017	completed	
Denmark	Off-site validation activity	Mar 2017	completed	
Finland	ICVM	5 – 12 Sep 2017	completed	
France	ICVM SSP implementation assessment (voluntary)	13 – 17 Mar 2017	completed	
Georgia	ICVM	3 10 Oct 2017	postponed to 2018	

State/Organization	Type of Activity	Dates	Status
Germany	Audit	19 – 30 Jun 2017	completed
Hungary	Off-site validation activity	Feb 2017	completed
Italy	Off-site validation activity	Dec 2017	completed
Lithuania	Off-site validation activity	Mar 2017	completed
Malta	Off-site validation activity	Jan 2017	completed
Portugal	ICVM	12 – 19 Dec 2017	completed
Romania	Off-site validation activity	Oct 2017	completed
Turkey	Off-site validation activity	April 2017	completed
Ukraine	Audit	13 – 24 Mar 2017	completed
Uzbekistan	Audit	10 – 21 Apr 2017	completed
Norway	Off-site validation activity	Nov 2017	completed
European Aviation Safety Agency (EASA)	Audit	20 – 27 Nov 2017	completed
Middle East (MID) Regi	on		
Jordan	ICVM	3 – 10 Apr 2017	completed
Kuwait	ICVM	13 – 20 Nov 2017	completed
Lebanon	Audit	16 – 27 Oct 2017	completed
Qatar	Audit	3 13 Dec 2017	postponed
North American, Centra	l American and Caribbean (NA	ACC) Region	
Bahamas	Audit	23 Oct – 3 Nov 2017	completed
Costa Rica	ICVM	14 – 21 Feb 2017	completed
Dominican Republic	Off-site validation activity	Mar 2017	completed
Honduras	Audit	21 Aug – 1 Sep 2017	completed
NU	Official Plants	Aug 2017	completed
Nicaragua	Off-site validation activity	Nov 2017	completed
Total dad and Talana	ICVM	3 – 10 Jul 2017	completed
Trinidad and Tobago	Off-site validation activity	Oct 2017	completed
South American (SAM)	Region		
Chile	ICVM	28 Mar – 4 Apr 2017	completed
Colombia	Audit	5 – 16 Jun 2017	completed
Panama	ICVM	19 – 29 Sep 2017	completed
Western and Central Af	rican (WACAF) Region		•
Benin	Off-site validation activity	Apr 2017	completed
Burkina Faso	ICVM	24 – 31 Oct 2017	completed
CI 1	0.66 1. 11.1.1	Mar 2017	•
Chad	Off-site validation activity	Aug 2017	completed
F 1 C .	ICVM (cost-recovery)	7 – 14 Feb 2017	completed
Equatorial Guinea	Off-site validation activity	Apr 2017	completed
Gabon	Off-site validation activity	Feb 2017	completed
Gambia	Audit	11 21 Sep 2017	postponed to 2018
Guinea-Bissau	ICVM	9 16 May 2017	postponed
Senegal	Audit	9 – 19 Oct 2017	postponed

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## ICAO USOAP CMA Activities — Planning Status for 2018

State/Organization	Type of Activity	Dates		
Asia and Pacific (APAC) Region				
Bhutan	ICVM	6 – 17 Aug 2018		
Cambodia	Audit	10 – 20 Dec 2018		
Fiji	ICVM	6 – 13 Nov 2018		
Myanmar	Audit	10 – 20 Dec 2018		
Papua New Guinea	ICVM	6 – 14 Mar 2018		
Sri Lanka	Audit	4 – 14 Jun 2018		
Eastern and Southern African (ES	AF) Region			
Botswana	Audit	14 – 24 May 2018		
Kenya	Audit	2 – 13 Jul 2018		
Madagascar	ICVM	9 – 16 Jan 2018		
Mozambique	ICVM	11 – 18 Sep 2018		
Seychelles	ICVM	10 – 17 Apr 2018		
European and North Atlantic (EU	R/NAT) Region			
Azerbaijan	ICVM	3 – 10 Jul 2018		
Bosnia and Herzegovina	ICVM	25 Sep – 2 Oct 2018		
Bulgaria	Audit	16 – 26 Apr 2018		
Denmark	Audit	6 – 13 Feb 2018		
Georgia	ICVM	13 – 20 Mar 2018		
Norway	ICVM	29 May – 5 Jun 2018		
Poland	Audit	25 Sep – 2 Oct 2018		
Tunisia	Audit	7 – 17 May 2018		
Middle East (MID) Region				
Bahrain	ICVM	7 – 14 May 2018		
Iran	Audit	8 – 18 Sep 2018		
Qatar	Audit	11 – 22 Nov 2018		
North American, Central America	n and Caribbean (NACC)	Region		
Barbados	ICVM	20 – 27 Nov 2018		
Guatemala	ICVM	30 Jan – 6 Feb 2018		
South American (SAM) Region				
Brazil	Audit	19 – 27 Mar 2018		
Peru	ICVM	7 – 14 Aug 2018		
Western and Central African (WA	CAF) Region			
Cabo Verde	ICVM	5 – 12 Jun 2018		
Gambia	Audit	23 Jul – 2 Aug 2018		
Ghana	ICVM	27 Nov – 4 Dec 2018		
Mauritania	Audit	22 Oct – 1 Nov 2018		