

USOAP-AG RECOMMENDATIONS

Title	Group A: 12 recommendations regarding data, information and intelligence in support of the USOAP CMA
Objectives	To explore means to improve the sharing and usage of data, information and intelligence gathered and generated by ICAO, stakeholders, industry and other relevant sources in support of the USOAP CMA.
Rationale	<p>Within the concept of continuous monitoring, the usage of a wide array of data and information from ICAO and from different stakeholders was envisioned in support of USOAP CMA in the prioritization of States for USOAP CMA activities, the determination of the scope of activities, preparation of activities and other USOAP procedures. As such, ICAO has entered and enhanced legal agreements with certain States, and international and regional civil aviation organizations to share confidential safety data and information.</p> <p>Throughout the transition and operation of the USOAP CMA, Monitoring and Oversight (MO) identifies, analyses and uses viable global data and information mostly generated by ICAO for the prioritization of States for USOAP CMA activities and to prepare for planned activities. While the CMA was envisaged to use the Effective Implementation (EI) score as an indicator, along with other sources of data and information, to develop a “USOAP State profile”. USOAP CMA has not developed this product.</p> <p>In order to enhance the current practice, the data and information generated by stakeholders, industry and other relevant sources should be analysed to consider whether they can be used to enhance continuous monitoring of States, including their prioritization for USOAP CMA activities, determination of the scope, preparation for planned activities, and for the potential development of a “USOAP State profile”.</p>
Recommendations	<p>The USOAP-AG recommends to:</p> <p><u>Indicators for the prioritization of States for USOAP CMA activities and the USOAP State profile:</u></p> <p>A.1. Enhance the prioritization process by further defining the USOAP indicators described in Doc 9735, <i>Universal Safety Oversight Audit Programme Continuous Monitoring Manual</i>, as well as their source of data/information, relative weight and correlation, where relevant.</p> <p>A.2. Conduct a periodic strategic review of the USOAP indicators, their presentation and use to ensure effectiveness and relevance.*</p> <p>A.3. Establish and implement means for MO to evolve the “State safety risk profile” into a documented, data/information-driven and risk-based “USOAP State profile” that includes the USOAP indicators, is produced at regular intervals, and shared only with the State concerned.</p> <p><u>Data and information from “stakeholder and industry audit/assessment programmes”¹:</u></p>

¹ “Stakeholder audit/assessment programmes” refer to audits, inspections, reviews, evaluations and/or assessments on the safety oversight, accident/incident investigation and safety management capabilities of States conducted by aviation authorities, regional safety oversight organizations, or any other international, regional or sub regional aviation organization.

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	<p>A.4. Map relevant stakeholder and industry audit/assessment programmes, including their specific outputs, to the applicable USOAP audit areas, critical elements and/or SSP components.*</p> <p>A.5. Create a matrix of the potential inputs² to the USOAP CMA that may contribute to assess/determine States’ safety oversight, aircraft accident/incident investigation or safety management capabilities.*</p> <p>A.6. Explore ways to use these inputs in the prioritization process, preparation phase of activities, and future development of a USOAP State profile.</p> <p>A.7. Explore the possibility to develop and implement data bridging mechanisms to facilitate the use of relevant data from stakeholders or industry audit/assessment programmes into the USOAP CMA.*</p> <p>A.8. Regularly review and maintain the mapping and matrix up-to-date.*</p> <p>A.9. Explore means to use the data/information generated by industry audit/assessment programmes already in place but are not currently covered by or subject to ICAO Standards in support of the USOAP CMA.*</p> <p><u>Other relevant sources:</u></p> <p>A.10. Enhance the engagement with States using services or delegating specific functions to RSOOs, and when applicable with RAIOS, by exploring means to use data in support of:</p> <ul style="list-style-type: none"> a. the development of accurate and up-to-date self-assessments to ensure that the level of the involvement of RSOOs in the relevant Protocol Questions (PQs) is effectively reflected; b. the development of corrective action plans; and c. the preparation for USOAP CMA activities. <p>A.11. Enhance or build synergies between the USOAP CMA and audit/assessment programmes of RSOOs, where applicable.</p> <p>A.12. Explore the use of different sets of safety data to continue evolving the CMA concept, such as:*</p> <ul style="list-style-type: none"> a. occurrence reports; b. incident reports³; c. operational and air navigation data.
Benefits and challenges	<p>A periodically conducted strategic review of the current data and information sources used by the programme as indicators for the prioritization of States for USOAP CMA activities may enhance the effectiveness and relevance of the indicators. Furthermore, defining these indicators in Doc 9735 could enhance communication and increase transparency with States on the process of prioritization of USOAP CMA activities. The strategic review may also improve the targeting of priority issues.</p>

“Industry audit/assessment programme” refers to an audits, inspections, reviews, evaluations and/or assessments on the aviation industry that can contribute to determine the safety oversight, accident/incident investigation and safety management capabilities of States, and which are conducted on the industry by aviation authorities, regional safety oversight organizations, or any other international, regional or sub regional aviation organization.

² Inputs should include data and information generated, collected or analysed within ICAO.

³ Accidents and incidents subject to (Annex 13) investigations and their associated published reports, among other sources of data and information, are sources already considered by the USOAP CMA for prioritization and in preparation for the deployment of activities.

* This recommendation may be progressed as an initiative of the USOAP consultation platform referred in Recommendation C.2.

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	<p>The development of a “USOAP State profile” would provide information on the areas of interest for monitoring safety oversight, accident/incident investigation and safety management capabilities of States, supporting the enhancement of the representation of the EI score. The USOAP safety profile may share information to States on areas of interest, which may provide opportunities to States for continuous monitoring with the possibility of improving and proactively addressing weak spots without a USOAP CMA activity. These recommendations may also improve communication between States and ICAO.</p> <p>Though ICAO has already concluded a number of agreements with stakeholders and industry for the sharing of confidential information, certain agreements may need to be updated or concluded to realize the recommendations of this grouping. As the outputs of stakeholder and industry audit/assessment programmes are identified and mapped against the USOAP CMA to ascertain how and to what extent the stakeholder and industry programmes may support the programme, synergies between the USOAP CMA and stakeholder and industry programmes could be enhanced. The use of additional information generated by these processes may support the prioritization of States for USOAP CMA activities and their preparation as well as the determination/assessment of States’ safety oversight, aircraft accident/incident investigation and safety management capabilities into a “USOAP State profile”.</p> <p>Detailed and up-to-date information on the services that RSOOs/RAIOs provide to support States may improve efficiencies and effectiveness on the fulfilment of States’ safety oversight, accident investigation and safety management capabilities.</p> <p>Additionally, where different sets of operational safety data is available, it could be used in combination with other risk information from unsuccessful outcomes (accidents). The weighing of this information should be used with an understanding that a profile of risk cannot be determined with this data alone or without an understanding of what events or event rates are unusual. The use of this data may support the evidence-based, risk-informed and result-oriented approach of USOAP CMA.</p>
Resource implications	<p>In order to collect, analyze and use the additional viable data and information from stakeholders, industry and other sources, MO will require specific aviation analysis and coordination of human resources and capabilities as well as information technology (IT) tools.</p> <p>Think tanks resources and contributions may also be needed to implement these recommendations.</p> <p>Additional human resources will be needed to adapt USOAP methodologies, processes and tools to enable States, and if relevant, RSOOs/RAIOs to provide information on the processes, functions and interfaces between them.</p> <p>ICAO may require a revision of existing legal agreements or additional legal agreements with stakeholders or industry partners regarding the sharing of confidential data and information.</p>

Title	Group B – 3 recommendations regarding the validation by USOAP of outputs from stakeholders’ audit/assessment programmes⁴
Objectives	To reduce the duplication of ICAO and stakeholders audit/assessment activities to States.
Rationale	ICAO and stakeholders perform audits, inspections, reviews, evaluations and/or assessments on safety oversight, accident/incident investigation and safety management capabilities of States. These entities collect data and information on deficiencies and progress of States in addressing previous findings within their scope and mandate. Though not identical in scope or content, the data and information with supporting evidence of stakeholders’ audit/assessment programmes may feed into the USOAP CMA for validation. These enhanced synergies could provide inputs to the USOAP CMA that may reduce duplications amongst programmes and burden to States. Considering that the USOAP CMA has the widest scope amongst these programmes in both audited entities and technical areas audited/assessed, these recommendations could maximize the programme’s efficiency and effectiveness through enhanced synergies.
Recommendations	The USOAP-AG recommends to: B.1. Map and cross-reference relevant methodologies, processes and tools, including the USOAP CMA PQs for all USOAP CMA activities, with those questions from stakeholders’ auditing/assessment programmes to allow, whenever and to the extent possible, collection of data and information (e.g. findings, progress, and supporting evidence), and their validation by ICAO, in coordination with the State concerned, of the outcomes of stakeholders’ audit/assessment programmes. B.2. Explore forms or mechanisms to enhance synergies between USOAP and stakeholders and industry audit/assessment programmes with a view of reducing the burden on States while safeguarding the global acceptance of the USOAP programme. B.3. To the extent possible, regularly share or coordinate the USOAP Activity Plan with the schedules of stakeholders’ audit/assessment programmes.
Benefits and challenges	Through the mapping and cross-referencing of relevant USOAP CMA methodologies, processes and tools, including PQs, with those from stakeholder audit/assessment programmes, it will become clear where programmes overlap and what data, information and supporting evidence could be collected, used and validated by USOAP. Once validated, this data and information could change the status of a USOAP PQ and may update the State’s EI. Both the collection and validation of the data and information with supporting evidence generated from the stakeholders’ audit/assessment programmes on States and the sharing and coordination of activities across USOAP and stakeholders’ audit/assessment programmes may enhance synergies amongst them reducing duplicated or repetitive audit/assessment on States and further enhance the efficiency and effectiveness of the programme.

⁴ “Stakeholder audit/assessment programmes” refer to audits, inspections, reviews, evaluations and/or assessments on the safety oversight, accident/incident investigation and safety management capabilities of States made by aviation authorities, regional safety oversight organizations, or any other international, regional or sub-regional aviation organizations.

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	<p>However, because USOAP and stakeholders’ audit/assessment programmes are dynamic in nature, serve different objectives, are different in scope, criteria or depth, do not run on the same schedule, and do not align on auditors/SMEs/assessors competencies, the different aspects must first be mapped and assessed to determine during what activities the collection and validation of data and information with supporting evidence is feasible and beneficial. The mapping and assessment would need to be updated whenever either programme is amended.</p> <p>Another challenge is to get all States to accept that the USOAP CMA results could change based on assessments validated by ICAO but performed by other stakeholders’ programmes.</p>
Resource implications	<p>The implementation of these recommendations will result in efficiencies and reduction of duplicated interventions in States. The initial projects deriving from these recommendations may be managed and performed by SMEs within MO with counterparts from stakeholders, but this may result in delays to other tasks due to the shifting in priorities for the SMEs involved in these projects. Consultants or secondees may be necessary to assist in these projects.</p> <p>Once the initial mapping and cross-reference of relevant USOAP CMA methodologies, processes and tools, including PQs, have been completed, MO will require coordination resources and capabilities, and IT tools for the updates to the mapping and cross-reference as well as the collection and analysis of data and information from stakeholders’ audit/assessment programmes.</p> <p>The proposed validation exercises by USOAP will increase the workload of MO Standards and procedures officers (SPOs), technical officers (TOs) and long-term secondments supporting the programme.</p>

Title	Group C – 2 recommendations regarding coordination mechanism/consultation platform
Objectives	<p>A. To enhance the coordination and sharing of data, information and intelligence within ICAO programmes and initiatives, and between USOAP CMA, and stakeholder and industry programmes for the benefits of the USOAP CMA.</p> <p>B. To enhance the efficiency and effectiveness by providing strategic and technical advice for the evolution of the USOAP CMA.</p>
Rationale	<p>The programmes and initiatives created by ICAO, stakeholders and industry (such as domain and objective-specific audit/assessment/inspection/standardization programmes) generate data and information that may be useful in the monitoring of States under the USOAP CMA. The establishment of an internal coordination mechanism within ICAO programmes and initiatives, and a consultation platform between the USOAP CMA, States, stakeholders and industry programmes have the potential to generate aviation intelligence and reduce overlaps between these programmes. Furthermore, these programmes and initiatives bring together experts that can provide strategic and technical advice that may enhance the efficiency and effectiveness of the USOAP CMA.</p>
Recommendation	<p>The USOAP-AG recommends to:</p> <p>C.1. Establish an internal coordination mechanism to facilitate the sharing of data and information that may be useful for <i>inter alia</i> the monitoring of States under the USOAP CMA and the coordination amongst ICAO endorsed initiatives;</p> <p>C.2. Establish a consultation platform with selected States, stakeholders and industry partners to provide strategic and technical advice on a continuous basis for the evolution of the USOAP CMA to further enhance its efficiency and effectiveness. Consistent with its current governance model, the consultation platform may start specific initiatives (specific recommendations presented in Group A could be advanced using this consultation platform) and provide advice to the Secretariat related to the proposals on the evolution of the USOAP CMA to be presented to the Council for approval. Regular triennial reports to the Assembly and annual reports to the Council remain unaffected.</p> <p>Both the coordination mechanism and consultation platform may include exchanges with established expert group(s) where needed, as appropriate. While they are envisioned to contribute to the evolution of the USOAP CMA, they will support those that participate therein. The USOAP-AG membership may be retained to provide inputs at the strategic level to the consultation platform.</p>
Benefits and challenges	<p>Internally, ICAO programmes could increase their sharing of data, information, intelligence, coordination, and alignment within and across the Organization.</p> <p>Externally, improved consultation between the USOAP, stakeholder and industry programmes may provide enhanced efficiency as well as strategic and technical advice that will contribute to the continuous evolution of the programme.</p> <p>Both internally and externally, some challenges are identified in the sharing of relevant data and information and in the alignment of objectives of all parties.</p>
Resource implications	<p>To establish a coordination mechanism within ICAO, the Secretariat would need to define the terms of reference and nominate focal points from the ICAO endorsed programmes, requiring allocation of human resources across ICAO bureaus and departments.</p>

Title	Group C – 2 recommendations regarding coordination mechanism/consultation platform
	<p data-bbox="478 285 1923 350">Externally, MO will have to set up and support a consultation mechanism with representatives of selected States, stakeholders and industry to support the development of strategic and technical initiatives/advice.</p> <p data-bbox="478 388 1923 453">ICAO may also need to engage in additional legal agreements with stakeholders and industry to implement these recommendations depending on the parties and initiatives involved.</p>

Title	Group D: 5 recommendations addressed to manage requests for cancellations or postponements, including enhanced transparency
Objectives	<p>A. To enhance the efficiency and efficacy of the USOAP CMA by reducing the number of requests for cancellation or postponement of USOAP CMA activities.</p> <p>B. To enhance transparency by sharing information on postponements or cancellations of USOAP CMA activities.</p>
Rationales	<p>In 2019, almost 20 per cent of States postponed or cancelled the planned USOAP CMA activity in their State (C-WP/14993, paragraph 3.2 refers).</p> <p>The postponement or cancellation of a planned USOAP CMA activity by a State has a direct impact on the programme, affecting the resource allocation, activity planning, and team member scheduling. Changes to the USOAP Activity Plan can further affect the sustainability of human resources as staff scheduling and the on-the-job training (OJTs) of auditors/SMEs depend on the planned activities and the availability of short-term secondments. From the technical side, States prioritized for activities that were not deployed, result in an unaddressed priority for the programme that has to be re-assessed within the planning cycle of the following year.</p> <p>States may not be aware of the effects and implications cancellations and postponements of USOAP CMA activities have on the programme and States.</p> <p>Enhanced transparency by sharing information on the implications, effects and the specific reasons of postponements or cancellations of USOAP CMA activities to the aviation community would improve the efficacy and efficiency of the programme. This would discourage requests for postponements or cancellations thus minimizing disruptions to the programme.</p>
Recommendations	<p>The USOAP-AG recommends to:</p> <p>D.1. Urge States to accept the scheduled USOAP CMA activity as per the Resolution A40-13 and the MoU regarding the USOAP CMA. The communication, such as a State letter, should indicate that the USOAP Activity Plan published by electronic bulletin (EB) is a formal communication mechanism from ICAO to States.</p> <p>D.2. Urge States to communicate a request for a postponement or cancellation to MO as soon as possible but no later than 120 days before the scheduled activity as published in the June edition of the USOAP Activity Plan EB. Unless exceptional circumstances arise, apply financial implications to a State if the postponement or cancellation is requested within 120 days of the scheduled activity. The financial implications consist of all costs associated with the postponement or cancellation of that activity.</p> <p>D.3. In parallel with the recommendation in item D.4 below, publish postponements or cancellations of the USOAP CMA activities and the associated reasons in the USOAP Activity Plan and explore a means to share this information with the public.</p> <p>D.4. Consider an escalating process to engage States requesting postponements or cancellations that may include the issuance of a mandatory information request (MIR) and a subsequent significant safety concern (SSC), if appropriate.</p>

Title	Group D: 5 recommendations addressed to manage requests for cancellations or postponements, including enhanced transparency
	D.5. Augment guidance material to address the various effects and implications of postponements and cancellations to the programme and States, and include examples of justified reasons and circumstances for a postponement or cancellation of an activity.
Benefits and challenges	By imposing consequences to States on their requests for postponement or cancellation of USOAP CMA activities, ICAO may expect a decrease in the disruptions to the USOAP Activity Plan. This would improve the allocation of resources and overall activity planning. By stabilizing the scheduling of team member and execution of OJTs, the pool of auditors/SMEs available for activities will likely increase as well, improving the consistency in the scheduling and execution of USOAP CMA activities. Furthermore, priorities not assessed by the programme due to unjustified reason would emerge.
Resource implications	The creation of additional guidance for the recommendations will further require contributions from SMEs in MO, and consultants or secondees may be necessary to assist in this project. The mechanism to share the information on postponements or cancellations to the public will require Council approval. Review of possible required amendments to the MoU taking into account national circumstances.

Title	Group E: 18 recommendations regarding human resources
Objectives	<p>C. To sustainably and effectively cope with the expected volume of required USOAP CMA functions and tasks;</p> <p>D. To sustainably and effectively perform the required number of USOAP CMA activities.</p>
Rationale	<p>The sustainability and effectiveness of the USOAP CMA programme are challenged by four aspect of human resources.</p> <p>Firstly, since the implementation of the USOAP CMA cycle, the programme has evolved to require many functions and tasks, including: standardization; auditing and validation activities; technical reviews; assessment of CAPs; development, update and delivery of workshops; selection, training and monitoring of performance of long-term secondments; and support to States in coordination with the Regional Offices. To foster the USOAP CMA principles of universality, transparency and disclosure, and systematic, consistent and objective, as well as all auditing principles, USOAP CMA activities may only be team-led by USOAP-qualified ICAO staff members, usually the SPOs or TO in MO or the ROs.</p> <p>To sustainably and effectively perform the USOAP CMA functions and tasks, the programme requires for each audit area a minimum staffing of one SPO supported by one TO. Currently, the programme operates with six out of eight SPOs in the technical areas of PEL, OPS, AIR, ANS, AGA and SM. Since the inception of CMA, the programme has lacked an SPO in the areas of AIG and LEG, with the functions discharged by secondments or other MO officials as an interim measure. USOAP also relies on long-term secondments to discharge the workload expected to be undertaken by the TO supporting the audit areas. The use of long-term secondments as essential technical staff to USOAP requires the investment of time and resources of the SPO in training the secondees before they can perform at the level of a TO, which generally takes a year. As secondments are generally provided to ICAO for 2 to 3 years, this level of investment is lost upon their departure and must be re-invested in the next secondment, placing additional burden on the SPO.</p> <p>Therefore, the current staffing of USOAP has important challenges to sustainably and effectively cope with the expected volume of required USOAP CMA activities.</p> <p>Secondly, in order to perform USOAP CMA activities, the programme depends on short-term secondments to serve as auditors or SMEs. If there is a lack of available auditors/SMEs, USOAP CMA activities may be reduced in scope or cancelled. This lack of availability of auditors/SMEs has been identified by the programme to be stemming from:</p> <ul style="list-style-type: none"> - Unable to participate: auditors/SMEs unable to participate in an activity due to scheduling conflicts, or States unable to release their staff to participate in two USOAP CMA activities per year as per their obligation following State letter AN 19/34-15/35. - Avoiding a perceived/actual/potential conflict of interest: policies are in place preventing auditors/SMEs from auditing their own State or a State they have provided assistance to, and ICAO regional officers from participating in activities of States in their respective regions. - Change in status: auditors/SMEs may change jobs or retire, making them ineligible to participate as short-term secondments in USOAP CMA activities. This information is not always provided up front, so the programme may only be confronted with this information when their availability has been requested for an activity.

Title	Group E: 18 recommendations regarding human resources
	<p>The possibility of having additional Team Leaders from States personnel may also expand the pool of Team Leaders for the conduct of activities.</p> <p>Thirdly, in 2016 a designee programme was introduced to support the USOAP CMA in performing an increased number of tasks and activities. Its key feature is for ICAO to retain specialized expertise gained through investments in training, conduct of missions and overall USOAP CMA corporate knowledge, under a programme that designates tasks to highly qualified and experienced USOAP CMA experts. Designees support the performance of off-site validation activities, CAP assessments and updates. USOAP-qualified auditors/SMEs are currently no longer eligible to perform in USOAP CMA activities upon their retirement from their CAAs or regional organizations. Expanding the USOAP Designee Programme to allow the inclusion of these retirees into the pool of already-qualified auditors/SMEs would support this increasing number of tasks and activities.</p> <p>Fourthly, the training and qualification process for auditors/SMEs is labour-intensive for MO, adding an additional burden to SPOs and senior team members during the conduct of a USOAP CMA activity. In order to optimize the on-site training and qualification process after the candidates have successfully completed their computer-based training (CBT), which is free for qualified candidates under State letter AN 19/34-15/35, an enhanced training methodology that simulates a USOAP CMA activity and provides practical tools to candidates before final qualification would alleviate the burden to SPOs and senior team members during the conduct of a USOAP CMA activity. The enhanced training methodology should be applicable to multiple candidates concurrently. Therefore, more candidates could be pre-qualified and prepared for their final qualification on-site during the mandatory on-the-job-training (OJT).</p>
Recommendation:	<p>To strengthen the ICAO staff in order to ensure a sustainable and effective functioning of the USOAP CMA, the USOAP-AG recommends to:</p> <ul style="list-style-type: none"> E.1. Perform an analysis of activities conducted and resources available to ICAO, including MO and ROs in order to identify needs, challenges, opportunities and possible solutions to execute the USOAP CMA. E.2. Ensure that MO is sufficiently staffed to ensure the sustainability of the USOAP CMA and that the ROs contribute accordingly. <p>To encourage more short-term secondment applications to ensure an adequate pool of auditors/SMEs to perform the required number of USOAP CMA activities, the USOAP-AG further recommends to:</p> <ul style="list-style-type: none"> E.3. Re-issue State letter AN 19/34-15/35 with a special emphasis on the areas and languages the programme requires at that point in time while highlighting that the CBT is provided free of charge to nominees that qualify according to the requirements in State letter AN 19/34-15/35;

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	<p>E.4. Modify the section of “required qualifications and experience” in each attachment to State letter AN 19/34-15/35 to require “<i>complete fluency both spoken and written in English, French or Spanish and working knowledge of English</i>”;</p> <p>E.5. Identify or mobilize resources to provide for training and guidance materials, including the CBT in English, French and Spanish;</p> <p>E.6. Consider the principles contained in Doc 10070, <i>Manual on the Competencies of Civil Aviation Safety Inspectors</i> when re-issuing State letter 15/35;</p> <p>E.7. Promote the new State letter during high-level meetings or activities attended by senior officials;</p> <p>E.8. Establish and implement a mechanism (e.g. online tool or database) for Member States to notify the availability of short-term secondments to serve as auditors/SMEs during USOAP CMA activities;</p> <p>E.9. Provide States with detailed information in Doc 9735 addressing prioritization, planning and allocation of human resources to perform USOAP-CMA activities;</p> <p>E.10. Review the need for the current target requiring three auditors/SMEs in the roster (short-term secondments) per one audit area and per activity;</p> <p>E.11. Explore the possibility of requesting States to engage their retired USOAP-qualified personnel to perform USOAP CMA activities as short-term secondments; and</p> <p>E.12. Explore the possibility of enabling senior USOAP-qualified short-term secondments from States to become Team Leaders in USOAP CMA activities.</p> <p>To further expand the pool of available designees to perform the required number of USOAP CMA activities, the USOAP-AG recommends to:</p> <p>E.13. Explore the expansion of the USOAP CMA designee programme with defined criteria to include former seconded State personnel with experience as USOAP CMA auditors/SMEs.</p> <p>To further optimize the training and qualification process of auditors/SMEs, the USOAP-AG recommends to:</p> <p>E.14. Enhance the guidance as well as the training and qualification process by establishing and implementing a documented system to evaluate candidates, focusing on knowledge, skills, attitudes;</p> <p>E.15. Enhance the training process by providing a classroom-style training that addresses both on-site and off-site activities and simulates at least one USOAP CMA activity. The training should include an assessment of the candidates before advancing to the final on-site assessment during the OJT;</p> <p>E.16. Provide remote face-to-face training and incorporate recurrent training as part of periodic training plans;</p>

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	<p>E.17. Improve associated guidance addressing the preparation, conduct and reporting, including information on how to write findings, FAQs on frequently “difficult” or “problematic” PQs to provide better post-training reference materials; and</p> <p>E.18. Introduce a monitoring mechanism to evaluate auditor performance.</p>
Benefits and challenges	<p>In order to improve the overall productivity and standardization, reliability of staff, retention of corporate knowledge, succession planning, increase in HQ team leaders for USOAP CMA activities, and reduction of burden and potential burn-outs to SPOs, ICAO should ensure the necessary human resources for MO to execute the expected volume of functions and tasks in a self-sufficient and effective manner, without relying on States’ long-term secondments to sustainably run the programme.</p> <p>Expanding the pool of short-term secondments and streamlining the process to feed this workforce will increase the availability and capacity of short-term secondments to serve as auditors/SMEs for the conduct of USOAP CMA activities. This would optimize their scheduling and reduce the risk of changes to the scope of activities due to a lack of auditors/SMEs, providing more stability to the USOAP CMA activities and also to States.</p> <p>Additionally, States offering short-term secondments as auditors/SMEs will have more predictable information on when their staff members will be requested to participate in USOAP CMA activities. States will need to invest resources into maintaining the mechanism to provide up-to-date information on the availability of their short-term secondments. The participation of State experts in the programme will provide them a higher level of understanding and exposure to ICAO, the USOAP CMA, its processes and requirements.</p> <p>The expansion of the designee programme will allow the programme to retain specialized expertise of States USOAP-qualified auditors/SMEs upon their retirement to support the conduct of USOAP CMA activities and provide training to junior auditors/SMEs. Proper management of conflicts of interest is needed.</p> <p>Though the States would have to release their staff for the classroom training at ICAO, the candidates would benefit from the in-depth knowledge of the conduct of an ICAO activity and tools to better perform their final assessment and OJT on-site. The improved training and qualification process could also decrease the workload for SPOs as well as reduce the costs of providing multiple OJTs to candidates.</p>
Resource implications	<p>Dedicated staff member to undertake the SPOs-related tasks addressing the areas of AIG and LEG within the OAS audit team, coordinate with the relevant expert groups and other related work. Additional TOs to support the audit areas within the OAS audit team and execute the expected volume of functions and tasks without relying on State long-term secondments to sustainably run the programme.</p>

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	<p>The projects deriving from these recommendations may be managed and performed by SMEs within MO, but this may result in delays to other tasks due to the shifting in priorities for the SMEs involved in these projects. Consultants or long-term secondments may be necessary to assist in these projects. ROs will need be involved to identify needs, challenges, opportunities and possible solutions to enhance support from the ROs to the USOAP CMA.</p> <p>For States, the involvement of their staff as short-term secondments to the USOAP CMA will require the investment of time and effort during both the training phase and the execution of USOAP CMA activities as auditors/SMEs.</p> <p>Identification or mobilization of resources needed to implement recommendations addressing language requirements will need to be quantified on a yearly basis.</p> <p>Review of possible required amendments to the MoU regarding the USOAP CMA.</p>

Title	Group F – 3 recommendations regarding long-term considerations to continue evolving USOAP
Objectives	To ensure the continued relevance, applicability and global acceptance of the programme by enhancing its sustainability and resilience.
Rationale	<p>Development of new breakthrough technologies for the civil aviation market is seen by the aviation industry as a way to help secure their competitiveness. Disruptive technologies, automated functions, new business models, externalization of risks (following the outsourcing of many activities), and new types and sources of data have an impact on the safety management systems in the industry, particularly with respect to the change management and the consideration of emerging issues⁵. States must be able to adapt to these emerging issues in order to ensure an effective and continuing discharge of their safety oversight and safety management functions. Assessment of the capacity of a State to cope with a continually evolving environment has been introduced in the SSPIAs.</p> <p>It is essential that the States have the necessary capacity to integrate the industrial developments, whether technological or organizational, in their safety functions. Any serious weakness in this area could result in a significant performance deterioration of the safety functions to be carried out by States. As each State has its own industrial environment, this capacity assessment should not be seen as a performance comparison between States but as a process to identify possible hazards specific to a State. In the long-term and recognizing that the EI and the SSPIA maturity levels to be defined may not be sufficient to determine the safety oversight, aircraft accident/incident investigation and safety management capabilities of States, USOAP should continue evolving to integrate the SSPIAs into the traditional USOAP CMA activities to ensure a holistic monitoring of States. This continued evolution should ensure an evidence-based, risk-informed and result-oriented programme, while developing the transition to a future programme scoped to ensure continued relevance and applicability, consistent with the policy of the Organization to pursue a proactive approach to safety under the safety management concept, as contained in Annex 19.</p> <p>The number of off-site activities is minor compared to the number of on-site activities. In particular, there were thirty-six USOAP CMA activities performed in 2019; ten CMA Audits, seventeen ICAO Coordinated Validation Mission (ICVMs), seven off-site activities and two SSPIAs. It is thus recommended to foster the off-site activities when feasible and using the most efficient and available tools, abiding by the CMA principles. Increasing the number of off-site activities may serve for updating the assessments of States, in particular to assess those PQs that are eligible for an off-site assessment.</p>
Recommendation:	<p>The USOAP-AG recommends to:</p> <p>F.1. Consider, within the development of the USOAP CMA activities and the recently introduced SSPIAs:</p>

* This recommendations may be progressed as initiatives of the USOAP consultation platform referred in Recommendation C.2.

⁵ Doc 10004, *2017–2019 Global Aviation Safety Plan*, paragraph 3.3.5.1 states that “emerging issues” include concepts of operations, technologies, public policies, business models or ideas that might impact safety in the future, for which insufficient data exists to complete typical data-driven analysis. It is important that the international aviation community remain vigilant on emerging issues to identify potential safety risks, collect relevant data and proactively develop mitigations to address them. The management of emerging issues, particularly potential safety risks, can provide opportunities to foster innovation. The use of new technologies, procedures and operations should therefore be encouraged.

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	<ul style="list-style-type: none"> a. Including a process that will make it possible to assess the capacity of a State to cope with changes that are not yet integrated into the certification and surveillance system that it has put in place*; b. Periodically reviewing and proposing suggestions to further mature the existing SSPIA PQs to assess the capacity of a State to discharge its duties and responsibilities with respect to safety management in a continually evolving environment where aviation industry implements new technologies, new business models, and uses new types and sources of data*; c. Developing or consider already developed indicators to reflect the capacity of the State to cope with a continually evolving environment; and d. Integrating the outcomes of the SSPIA in the future development of a USOAP State profile. <p>F.2. Consider, within the next iteration of the USOAP CMA PQs*:</p> <ul style="list-style-type: none"> a. Reviewing the new set of Priority PQs; b. Partially implementing PQs, rather than a binary YES/NO approach, into EI score; c. A cross-disciplinary approach for USOAP audit areas when determining results per PQ; and d. Capturing observations noted during on-site USOAP CMA activities that may not directly tie to PQs. <p>F.3. Consider, within the context of the long-term evolution of the USOAP CMA:</p> <ul style="list-style-type: none"> a. Continue expanding the use and presentation of the indicators for the prioritization of States for activities; b. Exploring alternative scoping and frequency of USOAP CMA activities tailored to the State and informed by the data, information and intelligence as generated by the USOAP and stakeholders’ and industry audit/assessment programmes, as supported by the original concept of the USOAP CMA.
Benefits and challenges	<p>By continually evolving with the aviation industry and its perpetual industrial changes, the USOAP CMA will stay relevant, applicable and globally accepted. Assessing a State’s sustainability and resilience to the developments of the aviation industry, mainly through SSPIA activities, will allow for the identification of their capacity to cope with these changes. A risk is noted on the capacity assessment and associated indicators to be perceived by some States as a performance comparison; thus clarity in the display of these elements must be pursued.</p> <p>The coordination with relevant groups, including the proposed USOAP CMA consultation platform, the GASP Study Group and the Safety Management Panel, based on their own timelines and mandates, should be pursued.</p> <p>Noting and supporting the GEUSR recommendations and the ongoing process of implementation, by periodically reviewing the presentation of State indicators and the Protocol Questions such as the Priority PQs (PPQs), the USOAP CMA updates and monitors how States address changes in the aviation system. It also enhances the States’ understanding of PQs that have a higher correlation to operational safety risk, enabling a better focus of resources. Accordingly, these recommendations will</p>

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	open up opportunities for USOAP CMA activities to focus on more critical aspects. An optimized balance of on-site and off-site activities would ensure the best use of resources in the execution of USOAP CMA activities.
Resource implications	<p>The projects deriving from these recommendations may be managed and performed by SMEs within MO, but this may result in delays to other tasks due to the shifting in priorities for the SMEs involved in these projects. Consultants or secondees may be necessary to assist in these projects. ROs will need be involved to identify needs, challenges, opportunities and possible solutions to enhance support from the ROs to the USOAP CMA. Implementation of recommendations in the medium-term may also optimize MO’s resources and make them increasingly available to address new projects and/or USOAP CMA priority activities.</p> <p>In order to collect, analyze and use the additional viable data and information from stakeholders, industry and other sources and, where applicable, ensure connectivity between the outputs of an evolving USOAP CMA with historical data series, MO will require specific aviation analysis and coordination of human resources and capabilities as well as IT tools.</p> <p>Dedicated SPOs will be needed to support the further development of this recommendation.</p>
