



International Civil Aviation Organization

RASG-MID Steering Committee

Seventh Meeting (RSC/7)
(Cairo, Egypt, 3 – 5 March 2020)

Agenda Item 2: Global developments related to Aviation Safety

GLOBAL DEVELOPMENTS RELATED TO AVIATION SAFETY

(Presented by the Secretariat)

SUMMARY

This paper provides an update on the global developments related to aviation safety, particularly the Global Aviation Safety Plan (GASP), roll out of SSP Implementation Assessments under the USOAP CMA and Global Aviation Safety Oversight System (GASOS).

Action by the meeting is at paragraph 3..

REFERENCES

- RASG-MID/7 Report
- The Global Aviation Safety Plan (GASP, Doc 10004)

1. INTRODUCTION

1.1 In line with ICAO's Safety Strategic Objective, the 2020-2022 edition (third edition) of the GASP, which was endorsed during the 40th Session of the ICAO Assembly, outlines key safety enhancement initiatives for the triennium. The GASP provides a framework for States, regions and industry to cooperate and collaborate to support States in managing organizational challenges and operational safety risks. It outlines the roles and responsibilities for States, regions and industry. The global aviation safety roadmap, presented in the GASP, serves as an action plan to assist the aviation community in achieving the GASP goals through a structured, common frame of reference for all relevant stakeholders.

2. DISCUSSION

2020-2022 Edition of the GASP

2.1 The 2020-2022 edition (third edition) of the GASP, was endorsed by the 40th Session of the ICAO Assembly. It outlines key safety enhancement initiatives for the triennium. The goals in the 2020-2022 edition of the GASP are as follows:

- Goal 1: Achieve a continuous reduction of operational safety risks
- Goal 2: Strengthen States' safety oversight capabilities
- Goal 3: Implement effective State safety programmes
- Goal 4: Increase collaboration at the regional level
- Goal 5: Expand the use of industry programmes
- Goal 6: Ensure the appropriate infrastructure is available to support safe operations

2.2 The 2020-2022 edition of the GASP has been restructured in two parts. Part one addresses safety planning, including the identification of organizational challenges and operational safety risks as well as the definition of roles and responsibilities of the different stakeholders within the GASP. Part two addresses the implementation of safety enhancement initiatives aimed at improving safety.

2.3 To mitigate the risk of fatalities, States, regions and industry need to address the high-risk categories (HRCs) of occurrences. The selection of types of occurrences considered to be global HRCs (previously referred to as "global safety priorities") is based on actual fatalities from past accidents, high fatality risk per accident or the number of accidents and incidents.

2.4 The following HRCs, in no particular order, have been identified for the 2020-2022 edition of the GASP: controlled flight into terrain; loss of control in-flight; mid-air collision; runway excursion; and runway incursion.

2.5 In line with the 2020-2022 edition of the GASP, each region and State is encouraged to develop a regional aviation safety plan and national aviation safety plan, respectively, in which the strategic direction for the management of aviation safety for a set time period will be presented. Each plan should be developed in line with the GASP goals, targets and HRCs.

2.6 The 2020-2022 edition of the GASP includes the global aviation safety roadmap, which serves as an action plan to assist the aviation community in achieving its goals through a structured, common frame of reference for all relevant stakeholders. The roadmap presents globally recognized safety enhancement initiatives for States, regions and industry to address each of the GASP goals. The operational safety risks portion of the roadmap is included in the GASP to assist States, regions and industry in addressing the five HRCs. The safety enhancement initiatives should be implemented as soon as practicable to mitigate the risks associated with the HRCs. The roadmap supports the validation of the effectiveness of the safety enhancement initiatives and suggests a structure to identify hazards associated with the HRCs and to develop additional safety enhancement initiatives to mitigate the associated safety risks.

2.7 The ICAO/ACAO Global Aviation Safety Plan (GASP 2020-2022) and National Aviation Safety Plan (NASP) Workshop was held at the ICAO MID Office, Cairo, Egypt, 1-2 March 2020. The aim of the Workshop was to develop competencies for persons involved in the planning and implementation of national aviation safety plan, in alignment with the ICAO Global Aviation Safety Plan (GASP) and the regional aviation safety plan. This includes identifying national operational safety risks and other safety issues, such as challenges related to the State safety programme (SSP) implementation, and planning initiatives to address them. The Workshop addressed also the State's strategic approach to managing safety in civil aviation, including national safety goals, targets and indicators. The Workshop materials are available at: <https://www.icao.int/MID/Pages/2020/GASP%20and%20NASP%20%282%29.aspx>.

2.8 The meeting may wish to recall the Assembly Resolution A40-1 – ICAO global planning for safety and air navigation; Appendix A (bullet 3 and 4):

“Urges Member States to implement national aviation safety plans consistent with the GASP to continually reduce fatalities and the risk of fatalities”; and

“Urges Member States, regional safety oversight organizations (RSOOs), regional aviation safety groups (RASGs) and international organizations concerned to work with all stakeholders to implement regional aviation safety plans consistent with the GASP to continually reduce fatalities and the risk of fatalities”

2.9 It is to be highlighted that the MID Region Safety Strategy has been developed in line with the GASP. The 6th Edition of the Strategy includes selected goals from the new GASP 2020-2022, taking into consideration the regional specific objectives and priorities including new safety targets with specific timeframes.

2.10 The GASP indicates 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 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.

2.11 ICAO developed a dedicated site on its secure portal for the RASGs to list emerging issues and potential safety risks. For consistency of reporting, States and regions should use the existing categories in the CICTT and advise of the need to create and/or modify the categories. Additional information on the dedicated site for additional operational safety risks and emerging issues is found on the ICAO website at <https://www.icao.int/gasp>.

Roll-out of SSP Implementation Assessments (SSPIAs) under USOAP CMA

2.12 The amended SSP-related PQs:

- *reflect* Annex 19 Amdt 1, SMM 4th edition and lessons learnt from the voluntary assessments conducted;
- *form* a dedicated list of PQs (complementing the PQs on “core” safety oversight and investigation functions);
- *are not linked to Critical Elements (CEs)* but rather to the applicable SSP component (e.g. State Safety Risk Management, State Safety Assurance and State Safety Promotion);
- *are not assessed* as “satisfactory/non-satisfactory”, but in terms of *progress achieved*;
- are supported by references from ICAO manuals;
- *are broken down into 8 areas*: GEN (SSP general aspects), SDA (safety data analysis), PEL, OPS, AIR (AMO aspects only), ANS (ATS aspects only), AGA, and AIG;
- *complement, and do not impact*, the State’s Effective Implementation (*EI*) score.
- Do not generate findings, nor require the State to submit a “corrective action plan” (CAP);
- are conducted by a *limited pool of assessors*, to ensure consistency; and
- use the SSP-related PQs in selected audit areas (e.g. GEN + SDA + OPS + ANS + AIG).

2.13 The Plans for Phase II of SSPIAs:

- In 2020, ICAO will start developing guidance to support the determination of maturity levels (0: not present and not planned, 1: not present but being worked on, 2: present, 3: present and effective, 4: present and effective for years and in continuous improvement) for each PQ.

- The target is to start using in 2021 the SSP-related PQs including guidance to support the determination of maturity levels. This will enable a quantitative measurement of the level of progress achieved by the State in SSP implementation.
- The first SSPIA to be conducted under Phase 2 will start no earlier than 6 months after the publication of the assessment tool (i.e. SSP-related PQs + guidance to support the determination of maturity levels) on the OLF.

2.14 The criteria to prioritize the scheduling of SSPIAs:

- level of implementation of SSP Foundation PQs and evidence of:
 - a) a robust and sustainable safety oversight system and aircraft accident/serious incident investigation system; and
 - b) an effective mandatory safety reporting system, State aircraft accident and incident database and safety analyses; and
- effective completion and updates of PQ self-assessment by the State (for all PQs, including SSP-related PQs).

USOAP Newsletter

2.15 The meeting may wish to note that the first issue of the USOAP Newsletter at **Appendix A** has been issued which includes useful information.

Global Aviation Safety Oversight System (GASOS)

2.16 The main objectives of GASOS include:

- strengthening existing SOOs/AIOs to make them more effective and efficient in supporting States; and
- promoting the provision of advice or assistance of safety functions, as needed, by States to capable and qualified SOOs/AIOs that have been assessed and recognized by ICAO.

2.17 It is important to underline that under GASOS, States maintain responsibility for safety oversight, accident investigation and safety management under the Chicago Convention and its Annexes.

2.18 The 40th session of the Assembly adopted Resolution A40-6. This resolution supported the implementation and further development of GASOS in order to develop the necessary measures to strengthen, assess, and support RSOOs and RAIOS to better assist their Member States in accomplishing certain safety oversight, accident and incident investigation, and safety management functions and activities. This resolution superseded A39-14.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper related to Global Aviation Safety developments, and take action as required;
- b) urge States to develop and implement NASP consistent with the GASP and MD Region Safety Strategy; and agree to the following Draft Conclusions:

WHY	To comply with A40-1 and GASP 2020-2022 with regard to the development of NASP
What	Development and implementation of NASP
Who	States
When	August 2020

DRAFT RSC CONCLUSION 7/XX: DEVELOPMENT AND IMPLEMENTATION OF NATIONAL AVIATION SAFETY PLANS (NASP)

That, States:

- a- be requested to establish a National Aviation Safety Plan consistent with Global Aviation Safety Plan (GASP), including the global aviation safety roadmap, and the MID Region Safety Strategy; and based on their operational safety needs;*
- b- present a progress report on the development and implementation of their NASP to the SEIG/1 meeting in September 2020; and*
- c- a progress report on the subject be presented to the RASG-MID/8 meeting.*

WHY	To fully comply with A40-1 and GASP 2020-2022 with regard to the development of RASP
What	Review and update of the MID Region Safety Strategy to be upgraded to a RASP in line with the GASP 2020-2022
Who	Secretariat, States and Stakeholders
When	September 2020

DRAFT RSC CONCLUSION 7/XX: DEVELOPMENT OF THE MID REGIONAL AVIATION SAFETY PLAN (RASP)

That,

- a- the Secretariat, in coordination with the RASG-MID members/focal points, review and amend the MID Region Safety Strategy to upgrade it to a Regional Aviation Safety Plan (RASP) consistent with the GASP 2020-2022; and*
- b- present a Draft Version of the MID Regional Aviation Safety Plan (RASP) to the SEIG/1 meeting in September 2020 for review and further inputs, before presentation to the RASG-MID/8 meeting for endorsement.*

USOAP NEWSLETTER

Produced by Monitoring and Oversight, Air Navigation Bureau, ICAO

Welcome to the First Issue of the USOAP Newsletter!



USOAP HQ staff outside the ICAO building, in front of the ICAO75 logo.

Last year, ICAO celebrated not only the 75th anniversary of its establishment, but also the 20th anniversary of the Universal Safety Oversight Audit Programme (or USOAP). 2019 was in many ways a significant year for USOAP, highlighted by the 40th ICAO Assembly which renewed its endorsement of the Programme, a sweeping revision of the USOAP Protocol Questions that is underway, the first-ever USOAP activity conducted for Afghanistan, and the convening of a USOAP Advisory Group in Montreal.

As USOAP enters a new decade, we at Monitoring and Oversight (MO) are excited to bring to you the first-ever issue of the USOAP Newsletter.

With this newsletter, we hope to keep you informed of the latest developments of USOAP.

In this first issue, we bring you news about USOAP's 20th birthday party and updates about the ongoing Protocol Question revision project as well as introduce five of our USOAP auditors.

USOAP Celebrates 20th Birthday!



The Secretary General and the Director of ANB joined USOAP staff, past and present, for USOAP's 20th birthday party.

Mr. Denis Guindon, Deputy Director, Monitoring and Oversight (MO), hosted a reception on 21 November 2019 at ICAO to celebrate the 20th anniversary of USOAP. The staff of MO's Safety and Air Navigation Oversight Audit Section (OAS) and the Oversight Support Unit (OSU) were joined by several former members of the Programme, including Capt. Jorge Gelso, Mr. Henry Gourджи, Mr. Armando Quiroz, Mr. Michel Painchaud, Mr. Roger Lambo and Ms. Manoosh Valipour.

The guests of honor, the Secretary General, Mme Liu Fang, and the Director of the Air Navigation Bureau, Mr. Steve Creamer, both conveyed warm congratulations to the USOAP team, past and present. A framed picture depicting the story of USOAP was presented to Mme. Liu, while all the guests received a USOAP 20th anniversary commemorative medallion.

OAS Revision of USOAP Protocol Questions

Following approval by the Council of ICAO on 18 June 2018 to adopt the recommendations of the Group of Experts for a Structured Review of the USOAP CMA (GEUSR), OAS/MO

undertook a thorough and sweeping re-examination and revision of the 2017 edition of the PQs. The main purpose of the revision is to make the PQs strictly focused (on safety oversight), balanced (across all audit areas) and manageable (in terms of the number of PQs) for both States and ICAO.

With these goals in mind, OAS' Standards and Procedures Officers (SPOs) and Technical Officers (TOs) embarked on this huge PQ revision project starting in June 2019. Unlike previous PQ revision projects which entailed updating PQs pursuant to the amendments of Annexes and guidance manuals (in itself also a formidable task), this latest exercise has to meet a set of explicit requirements laid down by the GEUSR, foremost of which is to bring down the number of PQs.

How to balance the GEUSR recommendations with continuing compliance to the established principles and key objectives of USOAP and without sacrificing the integrity and effectiveness of the Programme posed a challenge. Working under a punishing schedule, the SPOs and TOs held several rounds of in-house discussions and also consulted their colleagues within and outside ICAO.

As of publication time, the first phase of the PQ revision is being wrapped up and the next phase is the production process, which includes editorial review, translation (into French, Spanish and Russian), and uploading onto the USOAP CMA online framework. The plan is to publish the English version of the revised PQs in the second half of 2020 on the online framework, so that States and international organizations will have ample time to review and familiarize themselves with the revised PQs.

Among the main features of this 2020 edition are the exclusion of certain PQs that are not directly related to the State safety oversight system or accident investigation, a nearly 20 percent reduction of the total number of PQs and the designation of a subset of Priority PQs.

Once States and international organizations are migrated to the 2020 PQ edition, their Effective Implementation (EI) scores for past and the most current USOAP activities, as indicated on the USOAP CMA online framework, will be updated and adjusted accordingly.

USOAP Advisory Group Holds First Meeting at ICAO

Following the recommendation made at the Thirteenth Air Navigation Conference (AN-Conf/13) in 2018, the ICAO Council at its meeting on 27 May 2019 approved the establishment of an

Ad Hoc USOAP Advisory Group (USOAP AG) by the Secretariat to address duplication of efforts and identify synergies with other audit programmes as a way to enhance USOAP.

The first meeting of the USOAP AG was held at ICAO Headquarters from 2 to 6 December 2019, where the USOAP AG members from 14 States and 7 international organizations reviewed their mandate, agreed on a work programme and were assigned their respective work topics. On the final day of the meeting, a briefing was presented to the Air Navigation Commission on the accomplishments of this first session.

A second meeting is planned in early April 2020 in Paris, France.

First-Ever USOAP Activity for Afghanistan



OAS/MO recently completed a desk audit of the civil aviation safety oversight system of Afghanistan. This was the first-ever USOAP activity for the State and also the first-ever desk audit under USOAP Continuous Monitoring Approach phase.

Designed primarily for States whose security situation as classified under the UN Security Level System precludes an on-site activity by ICAO, the desk audit focuses on the Protocol Questions which do not require an on-site activity, generally from Critical Elements 1 to 5. While limited in scope, a desk audit nonetheless can help States identify shortcomings in their civil aviation safety oversight systems and prepare them for an eventual on-site activity once conditions permit.

The first phase of the Afghanistan desk audit was completed in December 2019 and a closing briefing was presented by MO, led by DD/MO and the OAS management, via video links to the Afghan team on 19 December 2019.

USOAP Activities for 2020

The new year brings a whole new slate of USOAP activities, with the first one taking place in Ethiopia, participated by none other than DD/MO, Mr. Denis Guindon.

For 2020, a total of 15 audits, 15 ICVMs and 3 SSPIAs are planned and our Planning and Scheduling Officer, Mr. Kang Dong-soo, has been busy forming the teams, communicating with and cajoling team leaders and team members.

Details about the USOAP Activity Plan for 2020 can be found in the ICAO Electronic Bulletin EB 2020/3 dated 13 January 2020 and posted on the USOAP online framework's "CMA Library".

Meet Our USOAP Auditors:

A very important factor for the success of USOAP over the past 20 years is the contribution of the auditors and subject matter experts (SMEs) who travel far and wide and battle jetlag to work 16-hour days on audits and validation missions. They come not only from ICAO Headquarters and ICAO Regional Offices, but also as secondees from ICAO Member States and international organizations.

Among the 112 active auditors and SMEs on the USOAP roster are five extraordinary women from different parts of the world, all with rich, varied and extensive experience as aviation professionals in their respective civil aviation authorities and systems. We are very proud to introduce them to you here.

Muriel Belzunce (FRANCE)



Muriel with USOAP Comoros audit team colleagues.

Muriel is one of our most experienced USOAP auditors, with 10 audits and 2 ICVMs under her belt, the latest being the December 2019 audit in the Comoros Islands. Her areas are PEL and OPS.

Having started her career as an aviation professional with the French civil aviation authority (DGAC) in 1983, Muriel is

today head of the Flight Crew Licensing Office under the DGAC's Civil Aviation Safety Director (Central Office).

For relaxation, Muriel enjoys visiting museums in Paris, travelling to other countries, flying as a pilot and most recently, tap dancing which "cleans the mind after a tough week in the Office!"

Hye Jeong Kang (REPUBLIC OF KOREA)



Hye Jeong, or Grace to us all at MO, has been with OAS since December 2017, as a secondee from the Republic of Korea (ROK). Grace started her career in aviation as an air traffic controller in 2000 and was a deputy director of the ATM division in Korea before joining ICAO. She comes with a wealth of knowledge and experience about USOAP, as she was the deputy team leader of the ROK team which prepared for and received the USOAP audit in 2008 and also the technical officer in charge of State Safety Programme (SSP).

Since joining OAS, Grace has undertaken four on-site missions, including an SSP Implementation Assessment (SSPIA), become a core member of the SSPIA planning team, and taken part in the first-ever desk audit conducted for Afghanistan. As part of the ANS team in OAS, she worked on the GEUSR PQ revision project, completed numerous validation assignments, and regularly stepped in for the Continuous Monitoring Coordinator or the SPO for ANS.

To Grace, one of the benefits of being part of USOAP is the chance to meet and share experiences with woman aviation professionals around the world (see pictures below). Noting the increase in women's participation in aviation since 1996, the year she entered aviation university, she is confident that women in aviation will continue to contribute to an exciting future in aviation.



This February, Grace marks an important career milestone — her 20th year with the civil aviation authority of the Republic of Korea. Congratulations, Grace!

Sereya C. Mostert-Schotborgh (Netherlands — Curaçao)



Sereya as part of the first all-female flight at ALM in 1999.

Sereya is a self-professed aviation fanatic, who, in her own words, is “very passionate about all things aviation, whether it is travelling as a passenger, flying as a pilot, trying out skydiving, doing inspections as an aviation safety instructor or working as an ICAO auditor”.

Still in high school when she earned her private pilot’s licence, Sereya went on to fly for the Curaçao national carrier, Antillean Airlines (ALM), in 1998. It was while at ALM that she became part of the “very first all-female flight”, still her “most important flight” to this day.



Sereya at work

Ten years later, in 2008, she joined the Curaçao Civil Aviation Authority where she is presently an aviation safety inspector in OPS and also head of PEL.

To Sereya, a fond dream would be to help promote women in aviation. Even though women have come a long way in aviation, she believes that there is still a need to raise awareness about this and promote more women in the aviation sector.

Tuhinanshu Sharma (INDIA)

Tuhinanshu has more than 15 years of experience in the Directorate General of Civil Aviation (DGCA) in India as an airworthiness inspector and is currently the Director of Airworthiness in the Office of the DGCA. She has also taken part in several USOAP missions as the AIR auditor and is currently also a member of ICAO’s Safety Management Panel.

Outside work, Tuhinanshu enjoys going on cruises and visiting places around the world, where she is also able to indulge in her love of good food.

Zhou Ying (CHINA)

Zhou Ying (seen here with the Zimbabwe audit team, August 2019), is one of the newest members of the USOAP auditors' team, with ANS as her audit area.

Joining the Chinese civil aviation authority right after graduating from university in 1991, she worked her way to

becoming an AIS inspector and an instructor of AIS/ATC training courses. She holds both AIS and ATC licences and also taught at the Civil Aviation University of China.



Zhou Ying with colleagues of ICAO APAC Office

Since 2016, Zhou Ying has been seconded by China to the ICAO APAC Office in Bangkok where she is an Associate Officer for ATM/AIM, responsible for AIM issues and also taking part in corrective action team mission for States.

In her spare time, Zhou Ying enjoys swimming, travelling and learning about different cultures and peoples. The best form of relaxation for her is listening to her daughter play the piano from the cozy comfort of her sofa.
