ICAO Middle East Regional Office	COSCAP-GS

Safety Management Workshop

(Kuwait, 25-27 May 2015)

SUMMARY OF DISCUSSIONS

1. GENERAL

1.1 Place and Duration

1.1.1 The Safety Management Workshop was successfully held in Kuwait from 25 to 27 May 2015. The event was organized jointly by the ICAO MID Regional Office and COSCAP-GS and gratefully hosted by DGCA Kuwait.

1.2 Attendance

1.2.1 The Workshop was attended by 108 representatives from States' regulators and Air Navigation Service Providers, airlines, airports, and Organizations. The list of participants is at **Attachment A** to this Summary.

1.3 Agenda

1.3.1 The agenda was developed around the main following topics:

Agenda Item 1: Welcome & Opening

Agenda Item 2: Global & Regional Developments related to Safety Management

Agenda Item 3: Regional and National Best Practices related to SSP/SMS Implementation

Agenda Item 4: Safety Culture & Data Sharing

Agenda Item 5: How to Expedite the SSP/SMS Implementation

Agenda Item 6: Closing

1.3.2 The work programme of the Workshop included the following subjects addressed by specific presentations and/or discussion panels:

a) Opening and introduction.
b) Evolution of Annex 19 and Global Aviation Safety Plan (GASP)
c) Regional Safety Activities
d) Regional experience and best practices in implementing SSP/SMS
e) SSP implementation
f) ICAO Safety Management Training Programme
g) SMS and IATA E-IOSA and ISSA programs
h) SMS and Accident and Incident Investigation
i) Preparedness of States to implement the Annex 19 provisions and GASP priorities
j) Safety data sharing
k) Reporting Mechanisms/Systems and safety culture
l) Conclusions and closing session

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1.3.3   A copy of the detailed Work Programme is available at: www.icao.int/mid and www.coscap-gs.org.

1.3.4   From extensive feedback it was confirmed that the Agenda/Work Programme was well balanced, informative and interesting and that it met the expectations of the participants.

1.4   **Objective**

1.4.1   The purpose of the Safety Management Workshop was to promote the RASG-MID and in particular its Safety Support Team (SST) activities related to safety management and stimulate a dynamic exchange of knowledge and experience on the development and effective implementation of SSP/SMS with an emphasis on the need to improve the reporting and sharing of safety data at national and regional levels.

2.   **SUMMARY AND OUTCOME OF DISCUSSIONS**

2.1   The Workshop provided a balance between the time allocated to presentations covering concepts and practical experiences related to safety management and a forum for open discussions, exchange of knowledge and experience. It provided valuable Panel Sessions and opportunities for networking, collaboration and coordination, as well as sharing of experiences. Much thought and effort had been put into the development of the presentations by the speakers who have been thanked for the time and effort they dedicated to the Workshop and the enthusiasm and commitment to their subjects.

2.2   All the presentations are available at: www.icao.int/mid and www.coscap-gs.org.

Evolution of Annex 19 and Global Aviation Safety Plan (GASP)

2.3   The objective of this session was to provide an overview on the development of Annex 19, the subjects being addressed in the first amendment and expected timelines, outcomes of the Second High-level Safety Conference, as well as the GASP objectives and timelines.

2.4   Elizabeth Gnehm, Technical Coordinator, Safety Management, ICAO HQ, gave an overview of the two-phase approach, the Safety Management Panel work programme, conclusions and recommendations from the Second High-level Safety Conference related to safety management.

2.5   The session provided the participants with the basis for discussions during the panel on the second day of the Workshop.

Regional Safety Activities

2.6   This session provided updated overview information on the RASG-MID activities, the MID Region Safety Strategy and the establishment of the proposed MENA RSOO.

2.7   Mashhor Alblowi, Regional Officer, Flight Safety, ICAO MID Regional Office, gave detailed information on   the RASG-MID's objectives, working arrangements, achievements and deliverables, as well as the work programme and future plans of the MID-SST with regard to SSP/SMS

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implementation in the MID Region. Participants were apprised of the MID Region Safety Strategy and the progress made to achieve its safety targets.

2.8   The Workshop was apprised of the outcome of the ACAC/ICAO Study on the establishment of an RSOO for MENA States, including the committed States to the establishment process of the MENA RSOO and the next steps.

Regional experience and best practices in implementing SSP/SMS

2.9   Three sessions took place over the first and second day supported by presentations from different organizations highlighting progress and challenges of SSP and SMS implementation from different perspectives (regulators, airline operators, ANSPs, Aerodrome Operators, etc). The following presentations were delivered during these sessions:

  a) States perspective by
     1- Faleh AL-Enezi, DGCA Kuwait;
     2- Walid Al Rahmani, GCAA UAE;
     3- Mohamed Gaafar, Sudan CAA; and
     4- Badr Alharbi, GACA Saudi Arabia

  b) Airline perspective by:
     1- Carl Holt, Emirates Airlines; and
     2- Kamil Al Awadhi, Kuwait Airways

  c) ANSP perspective by:
     1- Thamer Alsrisri, ANS, GACA, Saudi Arabia; and
     2- David Jones, Bahrain ATC/Serco

  d) Airport perspective by:
     1- Osama Al Shawaf, Kuwait International Airport (KIA), DGCA Kuwait

  e) CANSO perspective by:
     1- Khaled Arabiyat, CANSO; and
     2- Hamad M. Alaufi, CANSO

  f) FAA perspective by:
     1- Aaron Wilkins, FAA

  g) EASA perspective by:
     1- Juan de Mata Morales Lopez, EASA

SSP implementation

2.10   The objective of this session was to provide some suggested strategies and tools for progressing and monitoring SSP implementation.

2.11   Elizabeth Gnehm, Technical Coordinator, Safety Management, ICAO HQ, gave an overview of the SSP Gap Analysis tool on iSTARS, SSP evaluation using the updated USOAP Protocol

Questions, developing an SSP implementation Plan and SSP commensurate with the size and complexity of aviation activities.

2.12   The ICAO flyers related to Annex 19, GASP, SSP Gap Analysis, iSTARS-SPACE, and Analysis Workshop at **Appendix A**, were provided.

ICAO Safety Management Training Programme

2.13   Elizabeth Gnehm, Technical Coordinator, Safety Management, ICAO HQ, provided an update on the development of the ICAO's Safety Management Training Programme, including the course's objectives, structure, content and expected benefits.

SMS and IATA E-IOSA and ISSA programs

2.14   Jehad Faqir, Head of Safety & Flight Operations, IATA MENA, provided an overview of the IOSA programme and its developments including E-IOSA and IATA's efforts to enhance flight safety and support airline SMS implementation by incorporating specific SMS provisions into the IATA IOSA Programme. He gave also a short briefing on the new IATA Standard Safety Assessment (ISSA) programme and its objectives.

Preparedness of States to implement the Annex 19 and GASP provisions

2.15   The Discussion Panel was moderated by Nadia Konzali, Project Coordinator, COSCAP-GS.

2.16   This Panel discussed the preparedness of States to implement the provisions of Annex 19 and GASP priorities including the impact of the new USOAP Protocol Questions (PQs) related to Annex 19. States and Organizations shared their experiences and ideas on the subject. The discussions covered in particular the reporting systems and associated challenges.

SMS and Accident and Incident Investigation

2.17   Adnan Mohamed Malak, Director of Investigation, AIB, Saudi Arabia, shared the experience of Saudi Arabia related to the separation of the of the Accident and Incident Investigation functions from the Civil Aviation Authority. He highlighted also the link between SSP/SMS and AIG.

Safety Data Sharing

2.18   This session provided a briefing on the main outcomes of the Third Annual Safety Report and ASRT activities as well as the available tools for safety data sharing. The following presentations were delivered:

a) MID Annual Safety Report by Adnan Takrouri, IATA, RJ; and
b) IATA tools (GADM, FDX and STEADES) by Jehad Faqir, Head of Safety & Flight Operations , IATA MENA.

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Reporting Mechanisms/Systems and safety culture

2.19   This discussion panel was moderated by Mohamed Smaoui, Deputy Regional Director, ICAO MID Regional Office.

2.20   The Panel was managed as a brain storming session dedicated to the need and feasibility of establishing a MID Region Safety Database. The discussions covered: mandatory and voluntary reporting systems, safety data sharing challenges, tools, and recommendations to enhance sharing of information at national and regional level.

2.21   To set the scene, Mashhor Alblowi, Regional Officer, Flight Safety, ICAO MID Regional Office, delivered presentation on the Annex 19 requirements related to the mandatory and voluntary reporting systems and the RASG-MID outcome related to the low level of reporting of safety data in the MID Region. It was highlighted that the RASG-MID/4 meeting, through Conclusion 4/2, invited States to enhance their mandatory reporting system, and establish, if not already done, an effective voluntary confidential and non-punitive reporting system, to enhance the collection of data on hazards and associated safety risks that may not be captured by the mandatory reporting system. The MID-SST was tasked to conduct a study on the need and feasibility of establishing a MID Region Safety Database.

2.22   The discussions led to the following Conclusions:

Near-term:

- enhance safety culture to promote reporting at national level, through:

    ➢ Management commitment and leadership
    ➢ Non-punitive approach (Safety Culture)
    ➢ Safety Promotion (training and communication)
    ➢ Motivation: Incentives and rewards
    ➢ Ownership
    ➢ Transparency
    ➢ Feedback after reporting (action taken)
    ➢ Strengthening the regulator's role in achieving effective safety reporting culture.

Mid-term:

- With regard to the MID Region safety database, it was highlighted that such a database could partially address the issue of confidentiality and protection of safety information through the de-identification of the source of safety data, which represent a barrier for an effective reporting system.
- Taking into consideration the enhancement required for the reporting system at national level and the action plan for the establishment of the MENA RSOO, it was recommended that the establishment of a regional/sub-regional safety database should be considered by the MENA RSOO, when established.
- To gain efficiency, the integration of various management systems, including quality and safety, security, environment, etc, should be considered.

3. **CLOSING SESSION**

3.1   The importance of gathering all stakeholders and providing forum for discussion of safety management issues was highlighted. In this respect, the participants expressed their gratitude to ICAO MID Regional Office, COSCAP-GS for organizing the Safety Management Workshop and to Kuwait DGCA for hosting the Workshop in Kuwait.

ICAO

Annex 19: Safety Management

Modern safety management principles lead to safety risks being addressed more strategically by regulators and aviation service providers. Since air traffic is projected to double in the next 15 years, safety risks must be addressed proactively to ensure that this significant capacity expansion is carefully managed and supported through strategic regulatory and infrastructure developments.

With the development of its new Safety Management Annex, updated guidance material and dedicated website, ICAO aims to enhance its strategic regulatory and infrastructure developments and stress the importance of overall safety performance in all aspects of air transport operations. Annex 19 reinforces the role played by States in managing aviation safety, stressing the concept of overall safety performance in all domains in coordination with service providers.

Working in close collaboration with States and international organizations, the Air Navigation Bureau has coordinated development of Annex 19, which was adopted by the ICAO Council in February 2013. The Safety Management Annex, representing the first new ICAO Annex to be adopted in over 30 years, became applicable on 14 November 2013. Annex 19 consolidates safety management provisions previously contained in six other ICAO Annexes and will now serve as a resource for overarching safety management responsibilities.

Annex 1 - **Personnel licensing**

Annex 6 - **Operation of aircraft**

Annex 8 - **Airworthiness of Aircraft**

Annex 11 - **Air Traffic Services**

Annex 13 - **Aircraft Accident and Incident Investigation**

Annex 14 - **Aerodromes**

Annex 19
Safety Management

Proactive safety management strategies must be built on a sound foundation of State safety oversight systems. The successful implementation of Annex 19 Standards and Recommended Practices (SARPs) is therefore contingent upon compliance with existing provisions in other Annexes which remain fundamental to aviation safety.

Complement to the GASP

Safety management has historically been considered an add-on, something that regulatory authorities, airlines, air navigation service providers or airports would undertake as an additional activity. At this point the community recognizes safety management as a system that is integrated into their everyday work.

Safety management Standards and Recommended Practices (SARPs) were originally contained in the relevant Annex for each sector – for example, Annex 6 and Annex 14 had separate safety management requirements for air operators and aerodromes, respectively.

To harmonize these requirements and ultimately facilitate implementation of State Safety Programmes (SSPs) and Safety Management Systems (SMS), the aviation safety community felt that it was necessary to develop a new Annex dedicated to safety management.

Annex 19 provisions complement the Global Aviation Safety Plan (GASP) and are supported by a revised Third Edition of the Safety Management Manual (SMM).

Safety Management Manual (Doc 9859)

The Third Edition of Doc 9859 has been restructured according to the SSP and SMS frameworks. Its objective is to provide States and product and service providers with:

- An overview of accepted safety management fundamentals.
- A summary of ICAO SARPs.
- Guidance on the ICAO harmonized SSP framework and its implementation and operation.
- Guidance for product and service providers on SMS framework and its implementation and operation.
- Guidance for product and service providers on SMS development, implementation and maintenance.

Safety Management Website

In anticipation of the significant growth of global air transport over the coming decades, ICAO has announced the launch of a new Safety Management web site supporting improved aviation safety worldwide. The applicable URL may be found below.

Safety Management Implementation Kit (iKit)

To support States and service providers in implementing SSP and SMS, ICAO has developed an iKIT that contains valuable information that can be downloaded as a package. The iKit can be found at:
www.icao.int/safety/Implementation/Pages/iKITs.aspx

Regional Aviation Safety Groups (RASGs)

States and industry alike are encouraged to actively participate in their respective ICAO RASG to promote the continuing implementation of SMS and SSP provisions and to report on progress made at the regional level, which is essential to guide the future development of safety management provisions.

Global Aviation Safety Plan

To ensure that continuous Safety improvement and Air Navigation modernization advance hand-in-hand, ICAO has developed a strategic systems approach linking progress in both areas under complementary Global Plans for Safety and Air Navigation.

These documents support States and stakeholders as they seek to realize the safe, sustained growth, increased efficiency and responsible environmental stewardship that global societies and economies now require.

This represents aviation's core challenge, both today and over the ensuing decades, and this is why ICAO has worked so closely in recent years with partner organizations such as IATA, ACI, CANSO, the FSF, IFALPA, IFATCA, IBAC, IAOPA and the ICCAIA, among many other key stakeholders, as the Organization has developed its new strategic course.

A Strategy for Success in Global Aviation Safety

The Global Aviation Safety Plan (GASP) establishes targeted safety objectives and initiatives while ensuring efficient coordination of complementary safety activities between all stakeholders. It reflects the understanding that today's aviation system comprises multiple and inter-related systems that are geopolitically diverse, technologically complex and highly multidisciplinary. The GASP has been updated to reflect progress in the implementation of proactive safety management practices in both States and industry and to be aligned with ICAO's strategic planning process.

A key priority of the GASP is to continually reduce the global accident rate through a structured and progressive approach comprising near-, mid- and long-term objectives. These are supported through specific safety initiatives that are categorized according to distinct Safety Performance Enablers.

ICAO's GASP objectives and corresponding target dates are applicable to the global aviation community as a whole. Each of these objectives, however, includes specific initiatives and milestones which can be implemented by States incrementally according to their distinct operational profiles and priorities. It's in this way that the GASP helps to drive tailored progress in each Member State's safety oversight capabilities, State safety programmes (SSPs) and the safety processes necessary to support the air navigation systems of the future.

Safety Performance Enablers

Four Safety Performance Enablers form the structure for the implementation of the GASP initiatives and related safety objectives established by regions, States or industry. They are:

- Standardization
- Collaboration
- Resources
- Safety information exchange

The Safety Performance Enablers are intended to facilitate the achievement of aviation's near-, mid- and long-term objectives.

Near-term Objective: 2017

Implementation of ICAO Standards and Recommended Practices (SARPs) relating to State approvals, authorizations, certifications and licensing processes. In the near term, Member States lacking these capabilities will ensure that they have the resources as well as the legal, regulatory and organizational structures necessary to fulfil their fundamental safety oversight obligations. Those States having mature safety oversight systems should focus on the continued implementation of safety management in the near-term.

Mid-term Objective: 2022

The mid-term objective calls for all States to achieve full implementation of SSPs and safety management systems (SMS) globally. Through implementation of the SSP and SMS frameworks, States complement fundamental safety oversight functions with risk management and analytic processes that can proactively identify and mitigate safety issues. The mid-term objective therefore represents the evolution from a purely compliance-based oversight approach to one which proactively manages risks globally through the identification and control of existing or emerging safety issues.

Long-term Objective: 2027

The focus of the long-term objective is the implementation of predictive systems that will become integral to aviation systems of the future. The long-term objective is intended to support an operational environment characterized by increased automation and the integration of advanced capabilities on the ground and in the air, as contained in ICAO's Aviation System Block Upgrades (ASBUs).

SSP Gap Analysis

Before developing an SSP (State Safety Programme) implementation plan, a gap analysis of existing State structures and processes against the ICAO SSP framework is needed to assess the existence and maturity of the respective SSP elements. The elements or processes identified as requiring action as a result of the gap analysis will form the basis of the SSP implementation plan.

In this regard, to assist States in conducting an SSP gap analysis, ICAO has developed an online application, which can be found on SPACE/iSTARS 2.0 (see URL and contact details au verso).

## SPACE/iSTARS 2.0 SSP Gap Analysis Application Tool

The initial gap analysis questions checklist (Table 4-A7-1 of Appendix 7 to Chapter 4 of SMM – Safety Management Manual) that follows can be used as a template to conduct the first step of a gap analysis.

The status column indicates whether there is a gap or not in the existing system with respect to the question's expectation. The "Implemented" status indicates that the State meets or exceeds the expectation of the question concerned.

SMM references within [ ] brackets contain guidance materials relevant to the Gap analysis question.

Number	Question	References	Component	Element	Status
1.1-01	Has [State] promulgated a national safety legislative framework and specific regulations that define the management of safety in the State?	[4.2.1, Element 1.1; 4.3.2; 4.4.4]	STATE SAFETY POLICIES AND OBJECTIVES	State safety legislative framework	Action to be defined
1.1-02	Are the legislative framework and specific regulations periodically reviewed to ensure that they remain relevant to the State?	[4.2.1, Element 1.1; 4.4.4 b)]	STATE SAFETY POLICIES AND OBJECTIVES	State safety legislative framework	Action in progress
1.2-01	Has [State] identified a SSP placeholder organization and an Accountable Executive for the implementation, and coordination of the SSP?	[4.2.1, Element 1.2; 4.4.3 a)]	STATE SAFETY POLICIES AND OBJECTIVES	State safety responsibilities and accountabilities	Action in progress
1.2-02	Has the [State] established an SSP implementation team?	[4.2.1, Element 1.2; 4.4.3 b)]	STATE SAFETY POLICIES AND OBJECTIVES	State safety responsibilities and accountabilities	Action to be defined
1.2-03	Has [State] defined the State requirements, responsibilities and accountabilities regarding the establishment and maintenance of the SSP?	[4.2.1, Element 1.2; 4.4.3 a); 4.4.3 b); 4.4.3 c); 4.4.3 d); 4.4.3 e); 4.4.3 f)]	STATE SAFETY POLICIES AND OBJECTIVES	State safety responsibilities and accountabilities	Action defined but not started

This guidance provides, in checklist format, information to assist in the evaluation of the components and elements that comprise the ICAO SSP framework and to identify the components and elements that will need to be developed.

SSP GAP Analysis
OTHER/NONE - SAMPLE GAP ANALYSIS (by Merens Marco)
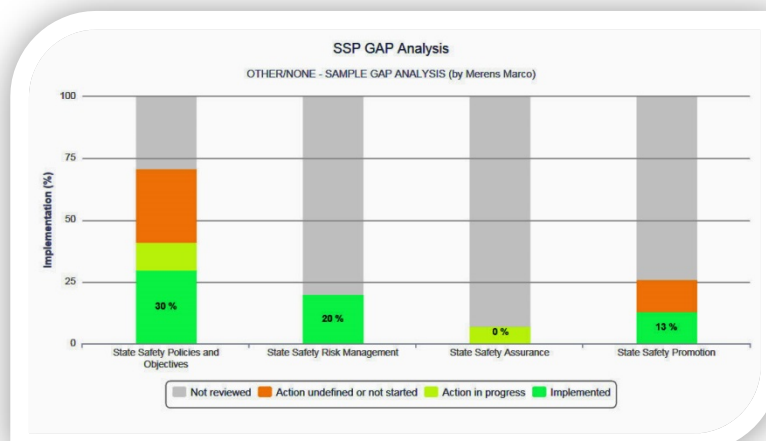
## SSP Implementation - States with an EI below 60 per cent

Once a State is actively making progress to address the prioritized actions in its USOAP CAP (corrective action plan), an SSP gap analysis, using ICAO's SSP gap analysis tool, should be conducted. Once a State achieves a rate of effective implementation of its safety oversight system of 60 per cent, it should then proceed with the steps outlined for States with an EI above 60 per cent.

SSP Implementation - States with an EI above 60 per cent

States having achieved a mature safety oversight system should perform an SSP gap analysis using the tool on SPACE/iSTARS 2.0, if they have not done so already. The results of the SSP gap analysis and PQ self-assessment should then be used to plan the remaining tasks required to implement an SSP.

Statistics

The SSP statistics release high level information about each gap analysis project. SSP implementation progress has been measured for each State using simple milestones as per the entered data. A State having reviewed all GAQs (Gap Analysis Questions) has reached Level 2. A State having reviewed and defined actions for all GAQs has reached Level 3. A State having completed all actions has Level 4.
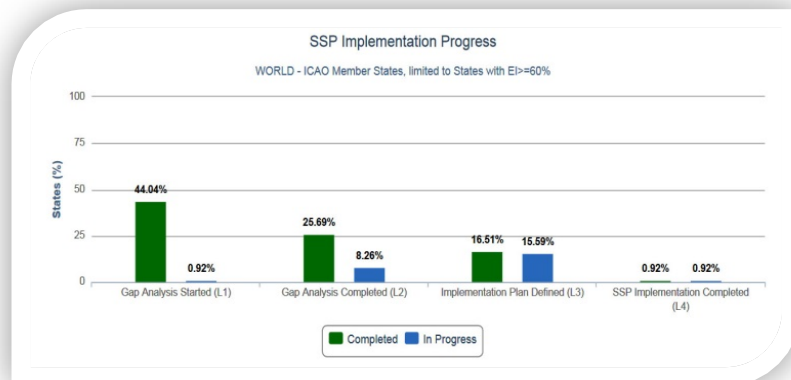
Detailed SSP self-assessment

After performing an SSP gap analysis, States can use the USOAP continuous monitoring approach (CMA) protocol questions (PQs) to conduct a more detailed self-assessment in preparation for an appropriate USOAP CMA activity.

States with an EI (Effective Implementation) of over 60 per cent will have to complete their self-assessments and to submit related evidence through the CMA Online Framework until the end of 2015.

Starting on 1 January 2016, ICAO will determine the status of the new safety management PQs through appropriate USOAP CMA activities.

iSTARS/SPACE Integrated Safety Trend Analysis and Reporting System

The integrated Safety Trend Analysis and Reporting System (iSTARS) is an online portal featuring a collection of applications to perform online safety, efficiency and risk analysis.

SPACE is the second iteration of the iSTARS portal and currently has over 2000 registered users.

How it Works

iSTARS combines multiple domain-specific analysis tools into a single portal environment. The site features a catalogue of available analytical applications ("apps") which can be access by the user. Customization features in the portal allow users to create virtual desktops on which they can place their most commonly used apps for easy access.

Information sources available through apps on iSTARS include:

- Universal Safety Oversight Audit Programme (USOAP);
- Accident Data Reporting (ADREP);
- Traffic (departure/arrival) data by state;
- And much more…

iSTARS apps frequently employ interactive charts and maps to display information in a more user-friendly and intuitive manner. As such, a wide variety of users can take advantage of these resources to support their safety analysis activities.

Pricing

All ICAO Member States have free access to iSTARS. Other users may request a trial account which provides access for 30 days, following which an eTools PIN Code from the ICAO Online Store must be purchased.

ICAO

For more information on iSTARS/SPACE services and activities, please visit:
www.icao.int/safety/istars/pages/intro.aspx

Or contact ICAO's Integrated Aviation Analysis (IAA) Section via:
IAA@icao.int

Coordinating Global Assistance for Aviation's High-priority Safety Targets

Financial support or in-kind resources are essential to driving continued improvement on global aviation safety targets – especially in developing nations. ICAO coordinates this assistance through a special global Safety Fund (SAFE) that then manages support for related initiatives through the Organization's Regional Aviation Safety Groups.

If you are a State or donor organization looking to help ICAO and its Member States address serious safety deficiencies in countries which lack the financial means to do so, please visit the SAFE website today or contact ICAO Safety representatives via the information provided below. It's never too late to make safety your priority.

ICAO

SAFETY

www.icao.int/safety/scan/Pages/Safety-Fund-SAFE   safefund@icao.int

Analysis Workshop

Focus

The advanced use of the integrated analysis capabilities of iSTARS, EXCEL and other tools to generate actionable safety information in the form of statistics, graphs, maps, dashboards and presentations.

Target Audience

- Safety Analysts
- Safety Managers
- SSP/SMS Analysts
- Accident Data Analysts

Description

Safety data collection, analysis and exchange is an integral part of a State Safety Programme (SSP) and is also addressed by the Universal Safety Oversight Audit Programme (USOAP). Attachment A to ICAO Annex 19 – Safety Management introduces the SSP framework with Element 3.2 as follows:

1) The State has established mechanisms to ensure the capture and storage of data on hazards and safety risks at both an individual and aggregate State level.
2) The State has also established mechanisms to develop information from the stored data, and to actively exchange safety information with service providers and/ or other States as appropriate.

USOAP addresses the above subject in PQs 6.501, 6.503, 6.507, 6.509 and 6.511 with regard to the resolution of safety concerns (CE-8) in the area of accident investigation (AIG). As of January 2015, the effective implementation of the related PQs is only 41.18%. In particular, only 43.18% (2 out of 5) of all audited States have effectively established an accident and incident database (PQ 6.507).

The goal of this workshop is therefor to:

1) Gain a better understanding of what is expected with regard to the implementation of PQs 6.5xx as well as the capture and storage of safety data as per SSP element 3.2 and the related Gap Analysis question 3.2-01, and;

2) Gain hands-on experience in actually manipulating real data, integrating multiple datasets as well as building statistics, graphs as well as maps to develop information from the stored information as per SSP element 3.2 and the related Gap Analysis question 3.2-03.
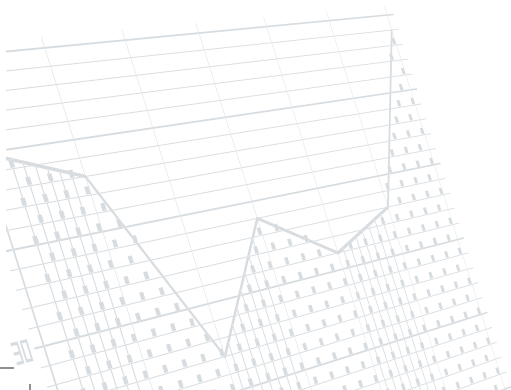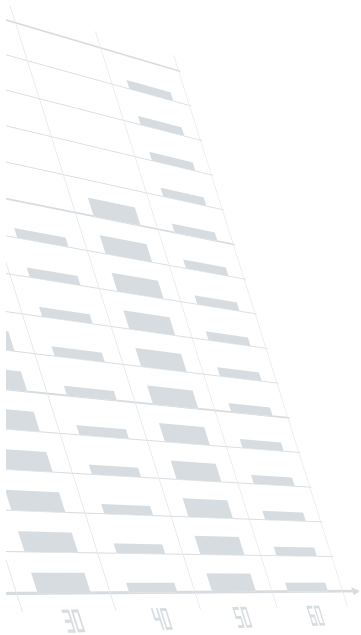
Prerequisites

- EXCEL advanced skills
  (filtering/sorting tables with 1000+ rows, writing formulas, using VLOOKUP)

- State USOAP Overall Effective Implementation (EI) result of at least 60%.

Agenda

	09:00	10:30 Coffee break	12:00–13:00 Lunch break	14:30 Coffee break	16:00
Day 1	Opening	USOAP and SSP	SPI Review	SPI Review	Collection
Day 2	Management		Query and Filtering	Metrics Development	Basic Statistics
Day 3	Advanced Statistics		Trending	Probabilities	Visualizations
Day 4	Basic Statistics			Safety Briefing	Close

Cost

US$ 5000.00 for the conduct of the workshop plus airfare and daily allowance for the facilitator(s) per ICAO travel rules. Facilities and internet access to be provided by the organizer.

ICAO

For more on ICAO's Safety-related programmes and objectives, please visit:
www.icao.int/safety/Pages/default.aspx

To propose an Analysis Workshop in your State,
please e-mail your preferred dates to:
IAA@icao.int

SAFETY MANAGEMENT WORKSHOP

(Kuwait, 25-27 May 2015)

LIST OF PARTICIPANTS

NAME	TITLE
STATES	
BAHRAIN Mr. Mohamed Ali Saleh	Chief Aeronautical Telecommunication Civil Aviation Affairs KINGDOM OF BAHRAIN
Mr. David Geoffrey Jones	Manager Aviation Safety Management System KINGDOM OF BAHRAIN
Mr. Vinesh Dulabh	General Manager Bahrain ACC KINGDOM OF BAHRAIN
KUWAIT Eng. Emad F. Al-Jelwi	Deputy Director General for Aviation Safety and Air Transport Affairs Directorate General of Civil Aviation KUWAIT
Mr. Peter Kesterton	Aerodrome Certification Expert ICAO TCB Kuwait Project KUWAIT
Mr. Osama Al Shawaf	Directorate General of Civil Aviation, Aviation Safety Department, DGCA KUWAIT
Eng. Faleh H. AL-Enezi	Aviation Safety Director Aviation Safety Department, DGCA KUWAIT
Eng. Bader Y. Abdullah	Directorate General of Civil Aviation KUWAIT
Eng. Abdulaziz Ali Johar	Directorate General of Civil Aviation KUWAIT

NAME	TITLE
Mr. Maitham Shaaban Ahmad	Directorate General of Civil Aviation KUWAIT
Mr. Ali Khoder Yousef	Directorate General of Civil Aviation KUWAIT
Mr. Duaij Al-Otaibi	Directorate General of Civil Aviation KUWAIT
Mr. Hani Jassem Al-Amiri	Directorate General of Civil Aviation KUWAIT
Mr. Abdullah Mubrak Al-Kandari	Directorate General of Civil Aviation KUWAIT
Mr. Ahmad Jamal Al Jabi	Directorate General of Civil Aviation KUWAIT
Mr. Jamal Hamadi	Directorate General of Civil Aviation KUWAIT
Mr. Abdulrahman Bu Haimed	Directorate General of Civil Aviation KUWAIT
Mr. Issa J. Al-Sairafi	Directorate General of Civil Aviation KUWAIT
Mr. Salah Al Faresi	Directorate General of Civil Aviation KUWAIT
Mr. Mohammad A. Al-Kandari	Directorate General of Civil Aviation KUWAIT
Mr. Ahmad GH. Al-Shammari	Directorate General of Civil Aviation KUWAIT
Mr. Hisham Bu-Abass	Directorate General of Civil Aviation KUWAIT
Mr. Ahmad S. A. Al-khalaf	Directorate General of Civil Aviation KUWAIT
Mrs. Mish'al Saad Dowaisan	Directorate General of Civil Aviation KUWAIT
Mr. Maher Abdulla Ali	Directorate General of Civil Aviation KUWAIT
Mr. Bader Nasser Al-Sedra	Directorate General of Civil Aviation KUWAIT

NAME	TITLE
Mr. Soud Anbar	Directorate General of Civil Aviation KUWAIT
Mr. Ahmed Al-Beloushi	Directorate General of Civil Aviation KUWAIT
Mr. Ahmad Q. Al-Beloushi	Directorate General of Civil Aviation KUWAIT
Mr. Yaser Ahmed Hassan Ali	Directorate General of Civil Aviation KUWAIT
Mr. Talal Al-Hajri	Directorate General of Civil Aviation KUWAIT
Mr. Mohammed AL Darwish	Directorate General of Civil Aviation KUWAIT
Mr. Fahad Sh. Al Anzi	Directorate General of Civil Aviation KUWAIT
Mr. Hussam Al Rasheed	Directorate General of Civil Aviation KUWAIT
Mr. Seraj AL Ajmi	Directorate General of Civil Aviation KUWAIT
Mr. Abdullah Al Jarisi	Directorate General of Civil Aviation KUWAIT
Eng. Rashed S. Al Anzi	Directorate General of Civil Aviation KUWAIT
Mrs. Dana Al Khabbaz	Directorate General of Civil Aviation KUWAIT
Mr. Qais Nasser Al Beshr	Directorate General of Civil Aviation KUWAIT
Mr. Eisa Dubais Al-Rashidi	Kuwait Air Force KUWAIT
Mr. Mohammad S. Al-Hameli	Kuwait Air Force KUWAIT
Mr. Husain A. Al-Rashidi	Kuwait Air Force KUWAIT
Mr. Dhari H. Al-Nasrallah	Kuwait Air Force KUWAIT

NAME	TITLE
Mr. Sulaiman D. Al Sahli	Higher Institution of Communication & Navigation (HINT) KUWAIT
Mr. Fadala Hassan Al-Fadala	Higher Institution of Communication & Navigation (HINT) KUWAIT
Mr. Osama M. Al Methen	Higher Institution of Communication & Navigation (HINT) KUWAIT
Mr. Hussain Al Khaldi	KUWAIT
Mr. Jassem Al Matar	KUWAIT
Mr. Ismail A. Al Hashemi	KUWAIT
Mr. Michael De Torres	Australian College of Kuwait KUWAIT
Mr. Mohammad Ibrahem Hamad	National Aviation Services KUWAIT
Mr. Leju Joseph John	National Aviation Services KUWAIT
Mr. Abdullatif Ahmad Al Failakawi	Al Ali Institute for Telecommunication and Navigation KUWAIT
Mr. A. V. D. K. Ravishankar	National Aviation Services KUWAIT
Mr. Abdullah Sulaiman AL Asfoor	Ministry of Interior KUWAIT
Mr. Yousuf Al Oraifan	Kuwait Air Sport Committee KUWAIT
Mr. Taleb Ali Al-Attar	Kuwait Air Sport Committee KUWAIT
Mr. Essa F. Al Qlaaf	Kuwait Air Sport Committee KUWAIT
Mr. Alec Trevett	CAA International KUWAIT
Mr. Ali Mahmoud Al-Balhan	CAA International KUWAIT

NAME	TITLE
Mr. Ayed Abdulhadi Al-Ajmi	CAA International KUWAIT
Mr. Yousif Al-Kandari	ALAFCO
Mr. Jarrah Al-Fadhli	EMS KUWAIT
Mr. Fayez Al Kendari	EMS KUWAIT
Eng. Kamil Al Awadhi	Chief Operating Officer, COO Kuwait Airways
Mr. Saad Sheikh	Jazeera Airways
Mr. Abdullah H. Al-Hudaid	Jazeera Airways
Mr. Mohammed AL Shakhs	Jazeera Airways
Mr. Halil Ibrahim Kizilay	Jazeera Airways
Mr. Suresh M. Shankarvarayana	Kuwait Airways
Mr. Shabber Asghar Ali	Kuwait Airways
Mrs. Tina Shankar	Kuwait Airways
Mr. Ali A. A. Husain	Kuwait Airways
Mrs. Divya Passi	Kuwait Airways
Mr. Meshari Al-Mulla	Kuwait Airways
Mr. Yousef Al-Ali	Kuwait Airways
Mrs. Shihab Al-Zaid	Kuwait Airways
Mr. Zouheir Beidonn	Kuwait Airways
Mr. Tareq Al Mutawa	Kuwait Airways
Mr. Saleh Sami AL Qallaf	Kuwait Flying Wing
Mr. Fareed Khalil Al Qattan	KAC
Mrs. Imane Belkziz	KAC
Mr. Ahmad Saleh Taher	KAC
Mr. Muhannad A. Al-Nafeesi	KAC

NAME	TITLE
Capt. Meqda Mallah	Kuwait Airways-SMS
SAUDI ARABIA Mr. Adnan Mohamed Abdullatif Malak	Director of Investigation Aviation Investigation Bureau KINGDOM OF SAUDI ARABIA
Mr. Turki Talal Abulshamat	Manager of Certification and Licensing General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Mr. Majed Merza	Manager, Aviation Navigation Services General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Eng. Shehabaldeen Mohealdeen	Aviation Safety Specialist General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Mr. Hussam Abdulaziz Abumansoor	Aviation Safety Specialist General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Mr. Hussain Mahdi Alghubari	Aviation Safety Specialist General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Mr. Badr Abdulhakeem Alharbi	Aviation Safety Specialist General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Mr. Yaser Ahmed Alqahtani	Aviation Safety Specialist General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Mr. Bandar Khalid Sayyad	Airport Safety Inspector General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Mr. Ibrahim Abdullah Al Makran	Chief of ANS Operational Safety Section General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA
Mr. Thamer . Al-Srisri	Director of Safety & Quality Department General Authority of Civil Aviation KINGDOM OF SAUDI ARABIA

NAME	TITLE
Mr. Mohammed Musaad Almatrafi	Airport Safety Inspector General Authority of Civil Aviation Safety and Air Transport KINGDOM OF SAUDI ARABIA
SUDAN Mr. Hanei Mohamed Abdelgader	Safety Inspector Sudan Civil Aviation Authority Khartoum - SUDAN
Mr. Mohamed Gaafar Elamin	Safety Assurance Head Section Sudan Civil Aviation Authority Khartoum - SUDAN
UNITED ARAB EMIRATES Mr. Faisal Ibrahim Al Khajeh	Senior Specialist Unit Operations General Civil Aviation Authority Abu Dhabi- UNITED ARAB EMIRATES
Mr. Walid Ibrahim Al Rahmani	Director Policy Regulation and Planning General Civil Aviation Authority UNITED ARAB EMIRATES
UNITED STATES Mr. Aaron Wilkins	Federal Aviation Administration Senior Foreign Affairs Spec Abu Dhabi- UNITED ARAB EMIRATES
ORGANIZATIONS/INDUSTRIES	
CANSO Mr. Hamad Mohammed Alaufi	Director Middle East Affairs CANSO KINGDOM OF SAUDI ARABIA
Mr. Khaled Ahmed Arabiyat	Chair of ME Safety Workgroup Civil Aviation Regulatory Commission CANSO AMMAN - JORDAN
EASA Mr. Juan de Mata Morales Lopez	International Cooperation Officer Regional Manager of Latin America and Middle East

NAME	TITLE
IATA	
Mr. Jehad Faqir	Head of Safety & Flight Operations International Air Transport Association (IATA) Amman11194 JORDAN
Capt. Adnan H. Takrouri	ASRT Rapporteur Royal Jordanian (IATA)
Capt. Carl Holt	Manager **-** Safety Management System Emirates Airlines (IATA)
ICAO	
Mr. Mohamed Smaoui	Deputy Regional Director ICAO Middle East Office Cairo - EGYPT
Mr. Mashhor Alblowi	Regional Officer, Flight Safety ICAO Middle East Office Cairo - EGYPT
Mrs. Elizabeth Gnehm	Technical Coordinator ICAO Headquarters Montreal, Quebec, CANADA
Mrs. Nadia Konzali	COSCAP-GS Project Coordinator
Mrs. Rania M. Bashir Gangari	COSCAP-GS Project Administrative Assistant

-END-