ICAO SAFETY

State Safety Programme (SSP) Implementation

Safety Management Workshop

Kuwait, 25-27 May 2015

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Overview

- Achieving SSP implementation, HLSC/15-WP/08
- State safety briefing tool on SPACE/iSTARS 2.0
- SSP gap analysis tool on SPACE/iSTARS 2.0
- SSP detailed self-assessment using the updated USOAP protocol questions
- Developing an SSP implementation plan
- SSP commensurate with the size and complexity of a State's aviation activities

Achieving SSP implementation HLSC/15-WP/08

- Need to facilitate the timely implementation of SSPs built on the foundation of effective safety oversight systems
- ICAO's approach for monitoring and validating suggested SSP implementation strategies as well as related tools for use by States
- Actions for States:
  a) prioritizing and actively progressing the resolution of their USOAP deficiencies;
  b) performing an SSP gap analysis;
  c) after achieving an EI of 60 per cent, performing a more detailed SSP self-assessment; and
  d) developing an SSP implementation plan.

Do you know where your State stands in regards to achieving safety targets being monitored by ICAO?

State safety briefing

Note. Instructions for accessing iSTARS can be found here:
http://www.icao.int/safety/iStars

- Newest application on SPACE/iSTARS 2.0, State Safety Briefings, provides a general overview of the different safety aspects relevant to a country
- Must first have access to the ICAO Portal and then subscribe to the group – iSTARS
- Link for live demo

State safety briefing

Performance Dashboard

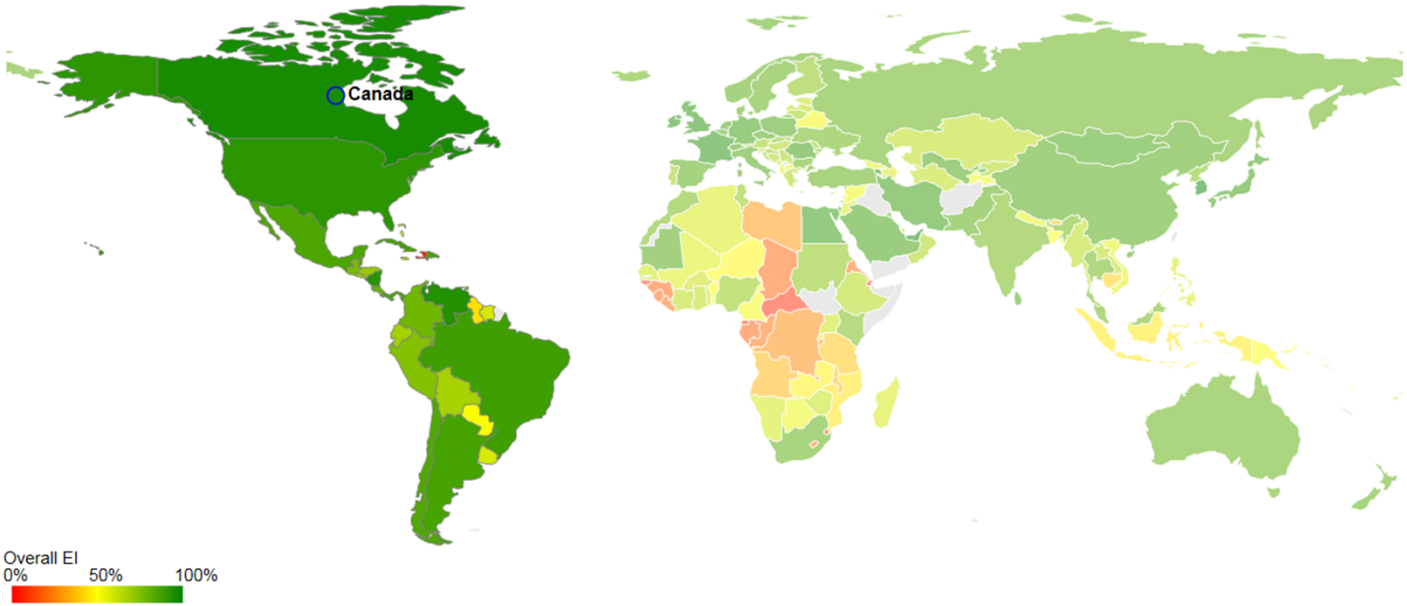
Indicator	Target	Value	Achieved
USOAP EI *USOAP overall EI(%)*	60%	95.28%	Yes
Significant Safety Concerns (SSCs) *Number of SSCs*	0	0	Yes
Fatal Accidents *Number of fatal accidents in last 5 years*	0	2	No
Aerodrome Certification *Validated status of USOAP Protocol Question (PQ) 8.081*	Satisfactory	Satisfactory	Yes
State Safety Programme (SSP) *Level of SSP implementation*	Level 2	Level 0	No
IOSA *Number of IOSA certified operators*	>0	9	Yes
FAA IASA *IASA categorisation*	Cat 1	Cat 1	Yes
EU Safety List *Number of operational restrictions*	Unrestricted	Unrestricted	Yes
PBN *Percentage of international instrument runways with PBN approaches*	70%	78.46%	Yes

Note: The targets are agreed global or regional performance targets, as applicable. Fatal accidents are by State of Occurrence or State of Operator on scheduled commercial flights with aircraft over 5.7t since 2010.

State safety briefing

Universal Safety Oversight Audit Programme (USOAP)

Global USOAP Results



Canada was audited in 2005.

The current overall result for Canada is 95.28 % EI which is above the world average of 62.81%.

Canada has achieved the target of 60% EI, as suggested by the Global Aviation Safety Plan (GASP).

SSP gap analysis tool

- Chapter 4 of ICAO Doc 9859, Safety Management Manual (SMM)
- ICAO has provided an application on SPACE/iSTARS 2.0 to assist States:
  - Questionnaire
  - Graphical Results
  - High-level Statistics
- Information entered is considered **CONFIDENTIAL**
- Link for live demo

SSP gap analysis tool - Questionnaire

- Manage my Projects

Add projects or modify their properties.

New Edit

- Print
- Export

SSP Gap Analysis

State Safety Programmes

The initial gap analysis questions checklist (Table 4-A7-1 of Appendix 7 to Chapter 4 of SMM) that follows can be used as a template to conduct the first step of a gap analysis. This format will provide an initial indication of the broad scope of gaps and hence overall workload to be expected. This initial information should be useful to senior management in anticipating the scale of the SSP implementation effort and hence the resources to be provided.

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.

The **SSP statistics** release highlevel 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 reveiwed all GAQs 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. The Percentage of States in each level are given on regional levels also. Level-up % indicate completion within a level. The Regional Aviation Safety groups (RASGS) will use those metrics in their dashboards

Success Stories

If you have a success story to share, send it to us at SPACE@icao.int and we will add it to the list below.

Click to view a successful Austrian SSP Project

OTHER/NONE - SAMPLE GAP ANALYSIS (by Merens Marco)

Questionnaire | Result | SSP Statistics

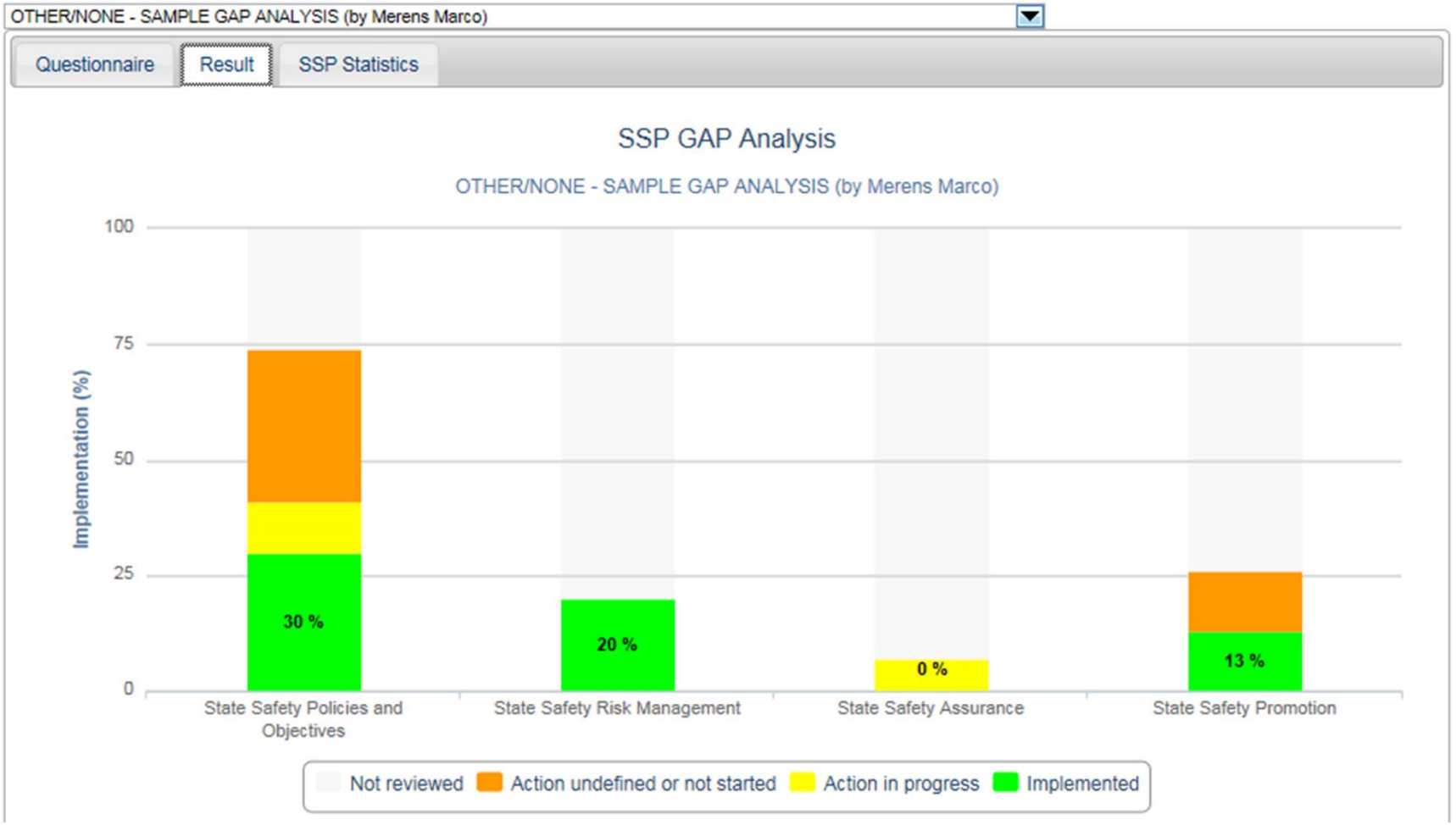
Click on a component button to display its elements and related questions.

All Components | Safety Policies and Objectives | Safety Risk Management | Safety Assurance | Safety Promotion

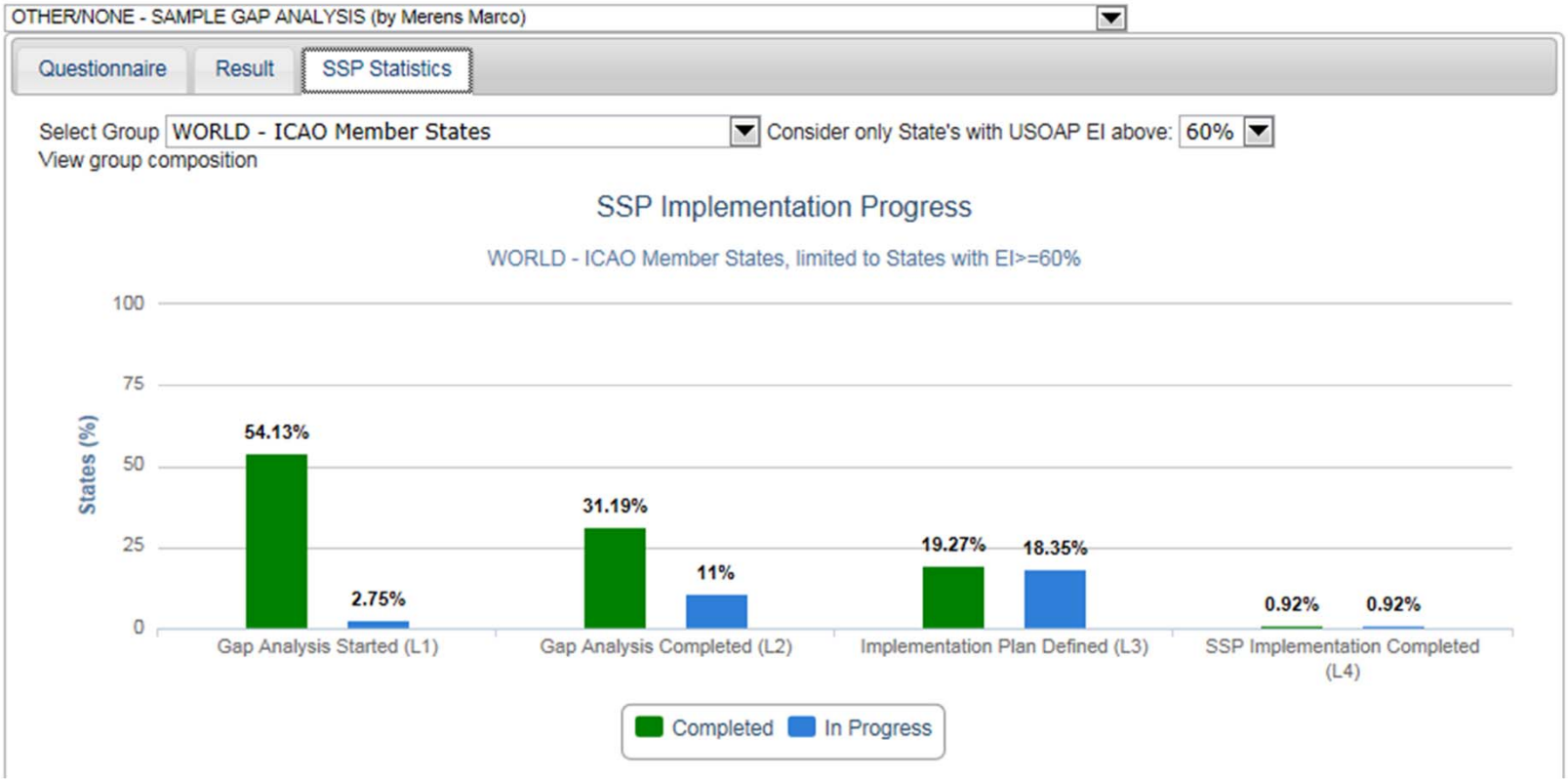
Search:

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

SSP gap analysis tool - Result



SSP gap analysis - Statistics



ICAO will monitor the information provided and a summary of the gap analysis reports should be presented to the next Assembly to support any proposed adjustments to the GASP as well as the need for additional implementation assistance or guidance.

SSP detailed self-assessment

- After performing an SSP gap analysis, States can use the comprehensive set of safety management protocol questions on the CMA Online Framework
- This will facilitate a detailed self-assessment based on Annex 19 and ICAO Doc 9859, *Safety Management Manual,* and allows States to submit supporting evidence
- ICAO will not begin monitoring the new safety management PQs before 1 January 2016.

Developing an SSP implementation plan

States with an **EI below 60%**

1. Develop an acceptable USOAP corrective action plan (CAP);
2. Prioritize the actions to be implemented based on areas of greater risk given the types and levels of aviation activity in the State;
3. Once the State is actively making progress to implement the CAP, an SSP gap analysis should be conducted; and
4. Once an EI > 60% is achieved, follow the steps for States with an EI above 60%.

Developing an SSP implementation plan

States with an **EI above 60%**

1. If the State has not already done so, conduct an SSP gap analysis;
2. Conduct a more detailed self-assessment using the USOAP safety management-related protocol questions;
3. Use the SSP gap analysis and self-assessment results, use the four-phased approach outlined in the Safety Management Manual.

Developing an SSP implementation plan

Phase 1 (12 months)	*Phase 2 (12 months)*	*Phase 3 (24 months)*	*Phase 4 (24 months)*
1. SSP Element 1.2 (i): a) identify the SSP place holder organization and the accountable executive; b) establish the SSP implementation team; c) perform an SSP gap analysis; d) develop an SSP implementation plan; e) establish an SSP coordination mechanism; f) develop the required SSP documentation including the State's SSP framework, its components and elements.	1. SSP Element 1.1: Establish a national safety legislative framework. 2. SSP Element 1.2 (ii): a) identify, define and document the safety management responsibilities and accountabilities; b) define and document the State safety policy and objectives. 3. SSP Element 1.3: Establish an accident and serious incident investigation process. 4. SSP Element 1.4 (i): Establish basic enforcement (penalty) legislation. 5. SSP Element 3.1 (i): Provide for effective State safety oversight and surveillance of its service providers. 6. SSP Element 2.1 (i): Facilitate and promote SMS education for service providers.	1. SSP Element 1.4 (ii): Promulgate enforcement policy/legislation that includes: a) provisions for service providers operating under an SMS to deal with and resolve safety and quality deviations internally; b) conditions and circumstances under which the State may intervene with safety deviations; c) provisions to prevent use or disclosure of safety data for purposes other than safety improvement; d) provisions to protect the sources of information obtained from voluntary/ confidential reporting systems. 2. SSP Element 2.1 (ii): Develop harmonized regulations requiring SMS implementation. 3. SSP Element 3.2 (i): a) establish safety data collection and exchange systems; b) establish high-consequence State safety performance indicators and target/alert levels.	1. SSP Element 2.2: Review and agree upon the service provider's safety performance indicators. 2. SSP Element 3.1 (ii): Incorporate the service provider's SMS and safety performance indicators into the routine surveillance programme. 3. SSP Element 3.2 (ii): a) implement voluntary/confidential safety reporting systems; b) establish lower-consequence safety/quality indicators with target/alert level monitoring as appropriate; c) promote safety information exchange with and amongst service providers and other States. 4. SSP Element 3.3: Prioritize inspections and audits based on the analysis of safety risk or quality data where applicable. 5. SSP Element 3.1 (iii) Establish an internal review mechanism covering the SSP to assure continuing effectiveness and improvement.

Example of four phases of SSP Implementation - Table 4-1 of DOC 9859, SMM, 3rd edition

Developing an SSP implementation plan

As an alternative to the four phase approach:

3. The State may take a similar approach as used for the USOAP CAP by identifying the following for each missing element:
   a) actions to be performed
   b) responsible parties
   c) proposed completion date*

** Note: Actions which are required for the expeditious mitigation of safety risks should be taken as a matter of priority. Actions which inherently take some time to complete (i.e. amendments to regulations or legislation) should also be initiated as soon as possible in order to have them completed in due time.*

SSP commensurate with the size and complexity of a State's aviation activities

3.1 State safety programme (SSP)

3.1.1 Each State shall establish an SSP for the management of safety in the State, in order to achieve an acceptable level of safety performance in civil aviation. The SSP shall include the following components:

a) State safety policy and objectives;

b) State safety risk management;

c) State safety assurance; and

d) State safety promotion.

Note 1.— The SSP established by the State is commensurate with the size and the complexity of its aviation activities.

Note 2.— A framework for the implementation and maintenance of an SSP is contained in Attachment A, and guidance on a State safety programme is contained in the Safety Management Manual (SMM) *(Doc 9859).*

But what does that really mean?

SSP "scalability"

- Can a State consider any elements of the SSP framework to be not applicable?
- Is there a formula to determine how many staff should be assigned to implement SSP or the amount of financial resources that should be spent?
- Can one State copy the SSP of another State with the same number of aircraft registered? the same number of airports? the same number of departures per year?
- How does a State measure complexity?

SSP “scalability”

- Safety management does not have to be complicated to be effective
- The SSP should be customized for each State
- An understanding of your operating environment is essential.
- Safety management is performance-based - the focus should be on achieving the objective

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THANK YOU