



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

*A United Nations Specialized Agency*

# **USOAP Continuous Monitoring Approach (CMA) Workshop**

## **Module 5**

### **Overview of iSTARS 2.0 SPACE**

# Objective



The objective of this module is:

- To provide an overview of iSTARS 2.0 SPACE and its functionalities.



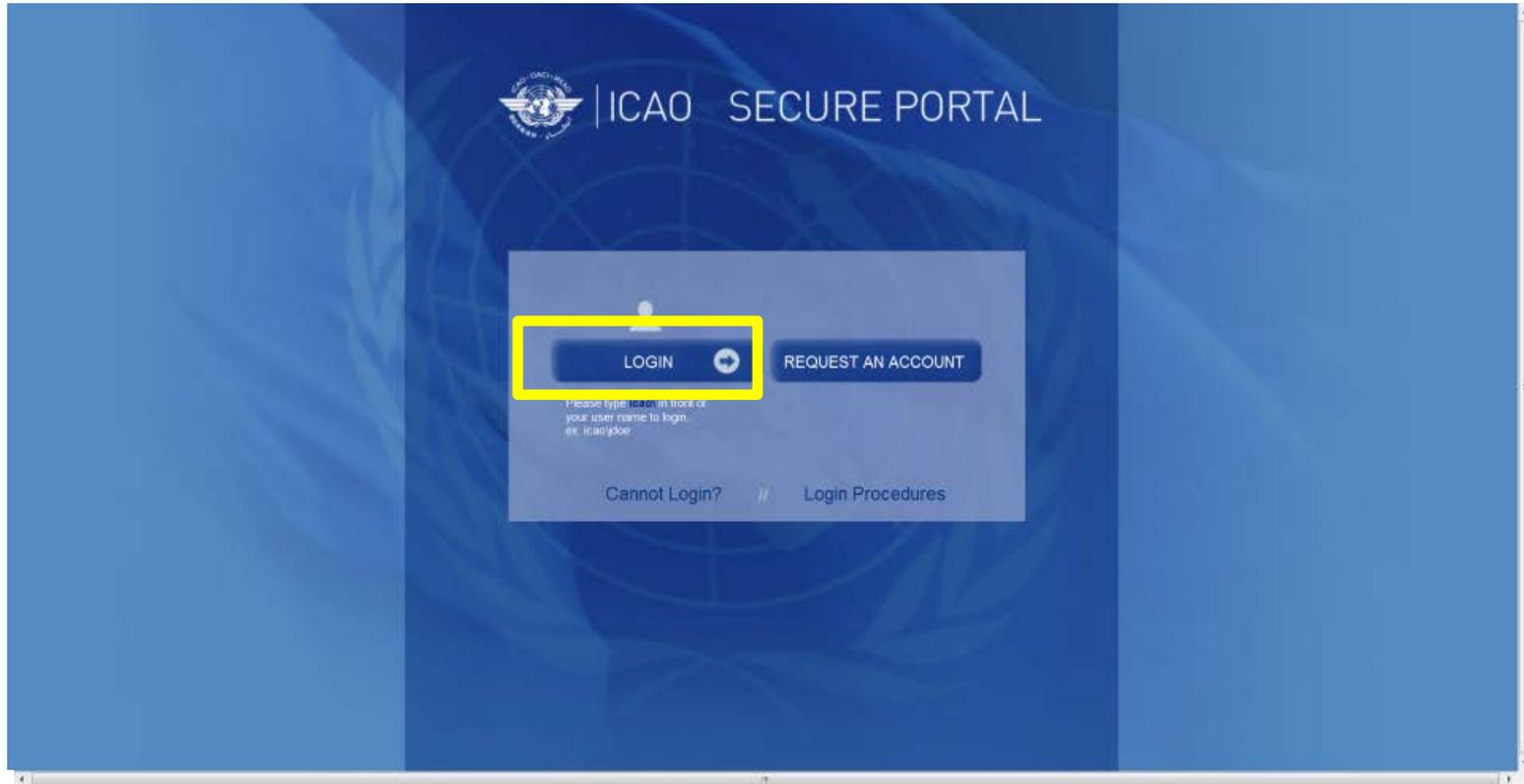
# Outline



## Introduction to iSTARS 2.0 SPACE:

- Login via ICAO Secure Portal Site
- Home Page and Various Tabs
- How to Use *MY APPS*
- Other Tabs

# LOGIN via ICAO Secure Portal Site



# LOGIN via ICAO Secure Portal Site



<https://portal.icao.int>

A screenshot of the ICAO Secure Portal website. The header includes the ICAO logo and the text 'ICAO SECURE PORTAL'. Below the header is a navigation bar with three tabs: 'ICAO Secure Portal', 'ICAO Public Site', and 'Profile'. The main content area displays a welcome message: 'Welcome to the ICAO Secure Portal. You have access to the following groups:'. Below this message is a scrollable list of access groups. The groups listed are: 'ICAO-NET ICAO-NET Secure Site', 'ARS Aircraft Registry System;', 'CMO Continuous Monitoring and Oversight;', and 'SPACE iSTARS 2.0 SPACE'. The 'SPACE iSTARS 2.0 SPACE' group is highlighted with a yellow box. On the left side of the page, there is a sidebar with links for 'Profile', 'Access Rules', and 'FAQ'.

Group Name	Description
ICAO-NET	ICAO-NET Secure Site
ARS	Aircraft Registry System;
CMO	Continuous Monitoring and Oversight;
SPACE	iSTARS 2.0 SPACE

# iSTARS 2.0 SPACE: Home Page





ICAO OACI ICAO  
国际民航组织

 [MY APPS](#) | [CATALOGUE](#) | [GROUP MANAGER](#) | [NEWS](#) | [SUPPORT](#) | [CONTACT US](#) | [PROFILE](#)

### Latest News

- 17 DEC** MAP Builder released [Read +](#)
- 20 SEP** iSTARS 2.0 SPACE (beta) is ready [Read +](#)
- 27 JUN** Airport traffic app enhanced [Read +](#)

## Welcome to iSTARS 2.0 SPACE

**You and 1 other user are currently online**

Hello, Wajahat! Welcome to our new website. You have installed 11 apps.

SPACE is the new version of iSTARS. The Catalogue contains all previous iSTARS apps plus some brand new ones. Apps in our new version allow more granular user access and are much faster as they are connected to our cloud based Safety Intelligence Engine (SIE).

Keep in mind that SPACE is still new, so please contact us if you experience any problems.

[Go to Catalogue...](#)

### Most Installed Apps

Total Apps installed: 4102 (+10 per day)

-  **USOAP Charts (295)**
-  **ICAO DOCs (325)**
-  **ADREP (237)**

[Go to my Apps >](#)

### New App Idea

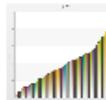
Viewing safety information online is very convenient. However, it may be useful also to have that information in a consolidated PDF report, to print, share via email or attach to a paper. We propose to **add a Print2PDF feature to all apps.**

100 users want this!

[I want!](#)

### Latest Applications

[View full catalogue >](#)

-  **MAP Builder**
-  **Airport Punctuality**
-  **Connections**
-  **Airports**
-  **USOAP Charts**
-  **ADREP**

### Contact Us

You have a request to make or a comment regarding our website or one of our application?

Please don't hesitate to contact us and share your vision and ideas with us.

[Contact Us!](#)

# iSTARS 2.0 SPACE: MY APPS



Shows all applications selected by user.

Click on icon to go to application.

My Applications Help

Desk 1

 Fleet Info	 ADREP	 Airports	 LEI by Traffic
 USOAP Charts	 USOAP Data Tables	 Safety Audit Information	 PQ Tester
 Safety DNA	 USOAP Info	 Activity Manager	

# iSTARS 2.0 SPACE: CATALOGUE



Shows all applications available by categories.

All categories available to users.

All applications available under each category.

SPACE  
iSTARS 2.0

MY APP | **CATALOGUE** | GROUP MANAGER | NEWS | SUPPORT | CONTACT US | PROFILE

### Catalogue

List of available SPACE Applications

The below list contains all applications which are available for you on SPACE based on your user permissions.

Catalogue (20) | Invitations (2) | Owners (0)

Select a category or use the search box:

All (20) | Accident Stats (3) | ACE (3) | Airlines (1) | Airports (5) | Documentation (1) | Fleet (2) | Integrated Analysis (7) | Natural Hazards (2) | SSP/SMS (1) | State Information (15) | Traffic (4) | USOAP (8)

Icon	Name/Category	Description	Installed
	<b>ADREP</b> List of Accidents and Incidents	A global repository of accidents and incidents including official (ADREP) and unofficial (Aviation Safety Network, etc.) sources since 2000	Open
	<b>Airport Punctuality</b> Airport punctuality based on departure data	Departure punctuality on a daily basis for all major airports	To My Apps
	<b>Airports</b> Airport specific characteristics	Information about airports with scheduled commercial traffic including number of flights in 2013, number of runways and layout for airports selectable by State of region	Open

# iSTARS 2.0 SPACE: CATALOGUE



Click “To My Apps” to add selected application into personal platform = MY APPS page.

“Open” = Application is already part of personal platform or in MY APPS page.

ICAO OACI ICAO  
SPACE  
iSTARS 2.0

MY APPS | CATALOGUE | GROUP MANAGER | NEWS | SUPPORT | CONTACT US | PROFILE

### Catalogue

List of available SPACE Applications

The below list contains all applications which are available for you on SPACE based on your user permissions.

Applications (2) Owners (0)

All (20) Accidents (1) Airports (5) Documentation (1) Fleet (2) Integrated Analysis (7) Natural Hazards (2) SSP/SMS (1)  
State Information (15) Traffic (4)

Search:

Icon	Name/Category	Description	Installed
	ADREP	A global repository of accidents and incidents (ADREP) and unofficial (Aviation Safety Network) and official (Aviation Safety Network) reports.	Open
	Airport Punctuality	Airport punctuality based on departure data. Departure punctuality on a daily basis for all major airports	To My Apps
	Airports	Airport specific characteristics. Information about airports with scheduled commercial traffic including number of flights in 2013, number of runways and layout for airports selectable by State of region	Open

# iSTARS 2.0 SPACE: CATALOGUE



**“Invitations”** =  
Allows users to  
access  
applications by  
permission.

**“To Desktop”**  
indicates that  
application is not  
part of personal  
platform (**MY  
APPS**). Click to add  
into **MY APPS** page.

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国际民航组织

## SPACE

iSTARS 2.0

Home | MY APPS | CATALOGUE | GROUP MANAGER | NEWS | SUPPORT | CONTACT US | PROFILE

### Catalogue

List of available SPACE Applications

Below list contains all applications which are available for you on SPACE based on your user permissions.

Catalogue (20) **Invitations (3)** Owners (0)

Icon	Name/Category	Description	Installed
	<b>USOAP Info</b> Administrative Information	Administrative information about States and their USOAP CMA (name of NCMC etc.)	Open
	<b>SAFA</b> SAFA Inspection Results	Results and indicators of the European Safety Assessment of Foreign Aircraft (SAFA) Program	ToDesktop

# How to Use MY APPS



How to use the [My Applications](#) page.

## EXAMPLE 1:

### LEI by Traffic

Click to explore this application in depth.

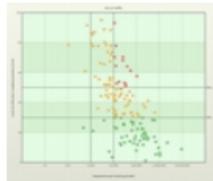
# Example 1: LEI by Traffic

## LEI by Traffic

Measures LEI of individual States by the number of their scheduled departures.

Displays regional/global trend.

States shown above the trendline (highlighted) are of concern to ICAO as they represent States with LEI higher than the trendline. This is one of the factors used in prioritizing USOAP activities in the regions.



Choose your predictor(s)

Choose between one of the predicting indicators below.

Overall LEI

Build a priority list

## LEI by Traffic

### Safety risk analysis

The below chart shows USOAP LEI versus commercial scheduled departures in 2013 per State for a defined group of States.

You can select a group of States from the drop-down menu. If a specific group of States does not exist, you can create that group through the "Manage my groups" section on the left. you can also view the composition of a selected group.

The LEI values may differ slightly from those published in the USOAP audit reports that were published from the period 2006 to 2010 due to changes in the LEI calculation algorithm as well as changes in the protocol question grouping structure performed since the State's audit.

World Show State Names

View group composition

Generate graph



# Example 1: LEI by Traffic



Click **“Generate graph”** to view graphs according to groupings, i.e. world, regions, sub-regions and other compositions.

Tick box to show **“State names”**.



# Example 2: USOAP Data Tables



How to use the **My Applications** page.

## EXAMPLE 2:

### USOAP Data Tables

This is another very useful application for States to measure their performances versus other States.

My Applications [Help](#)

Desk 1

- Fleet Info
- ADREP
- Airports
- LEI by Traffic
- USOAP Charts
- USOAP Data Tables**
- Safety Audit Information
- PQ Tester
- Safety DNA
- USOAP Info
- Activity Manager
- SAFA

© International Civil Aviation Organization (ICAO)

# Example 2: USOAP Data Tables



## USOAP Data Tables

Allows States to measure their Effective Implementation (EI) or Lack Of Effective Implementation (LEI) by **Audit areas** or by **Critical Elements**.



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ISTARS 2.0

MY APPS | CATALOGUE | GROUP MANAGER | NEWS | SUPPORT | CONTACT US | PROFILE



Export Data

Export the data (csv format).

CSV

## USOAP Data Tables

### Implementation Indicators

View or download the Lack of Effective Implementation (LEI) data in table format for each State evaluated by USOAP and LEI by area and critical element

Select an Indicator: **Effective Implementation (EI)**

By Area

By CE

Search:

Name	Overall	LEG	ORG	PEL	OPS	AIR	AIG	ANS	AGA
Albania	53.92	46.43	45.45	47.06	51.16	50.96	28.57	74.51	52.78
Algeria	58.19	42.86	50	62.5	66.13	68.38	38.14	55.61	60.54
Andorra	26.33	71.43	54.55	66.67	35.71	51.28	12.36	15.38	13.25
Angola	34.8	76.19	72.73	36.71	60	85.32	6.32	9.09	17.78
Antigua and Barbuda	53.92	71.43	75	86.49	92.62	74.17	68.75	16.32	22.92
Argentina	86.25	90.48	92.31	91.78	90.63	92.66	96.84	72.82	81.88
Armenia	96.22	100	83.33	93.51	91.34	99.15	90.72	99.49	99.32
Australia	82.67	77.27	100	82.72	71.31	76.8	96.97	81.31	91.03
Austria	72.99	68.18	64.29	98.78	85.46	95.71	59.38	67.51	44.22
Azerbaijan	58.25	31.82	41.67	68.42	61.9	86.96	44.79	47.72	55.77
Bahamas	45.76	47.37	27.27	73.02	76.42	77.88	65.63	23.23	2.14
Bahrain	66.62	52.38	54.55	75.95	50	86.92	72.16	56.41	73.79
Bangladesh	50.45	33.33	53.85	65.82	81.15	72.97	3.09	34.67	54.68
Barbados	54.3	71.43	72.73	65.71	45.16	52.38	46.39	55.79	57.66
Belarus	53.39	66.67	41.67	57.5	63.41	54.05	59.79	43.81	49.65
Belgium	67.03	72.73	50	82.05	78.4	82.52	37.23	48.48	78.21
Belize	63.99	60.87	78.57	75	56	69.03	32.99	73.85	68.03
Benin	42.26	57.14	57.14	53.16	56.67	72.38	1.03	28.26	44.37
Bhutan	38.26	40.91	36.36	58.73	51.22	53.98	1.03	11.23	68.99
Bolivia (Plurinational State of)	72.08	80.95	50	93.75	79.84	83.93	74.74	46.88	76.67
Bosnia and Herzegovina	67.57	66.67	61.54	88	69.05	76.42	48.96	61.03	71.22
Botswana	53.37	71.43	41.67	55	41.73	63.89	70.53	51.56	43.8
Brazil	85.75	80.95	93.33	91.46	80.95	83.8	95.83	95.41	69.59
Brunei Darussalam	84.84	78.19	100	83.81	49.58	85.96	37.11	55.15	79.73

# Example 3: USOAP Charts



How to use the **My Applications** page.

## EXAMPLE 3:

### USOAP Charts

Another very useful application for States to measure their performances versus other States and regions and to help States conduct a detailed analysis, all the way down to individual PQs.

My Applications [Help](#)

Desk 1

Fleet Info

ADREP

Airports

LEI by Traffic

USOAP Charts

USOAP DataTables

Safety Audit Information

PQ Tester

Safety DNA

USOAP Info

Activity Manager

SAFA

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# Example 3: USOAP Charts



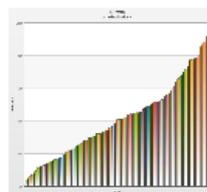
## USOAP Charts

By selecting the regional or global average, States can measure their **overall** Effective Implementation (EI) against the selection.



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Options

Show statistical lines and bands on the chart

Numbers as   
 EI (100-LEI)

Help

## USOAP Charts

### State USOAP data

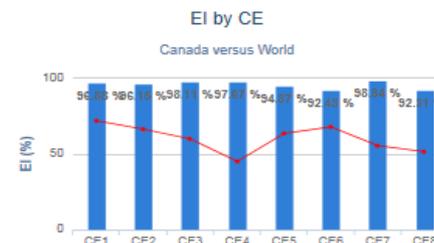
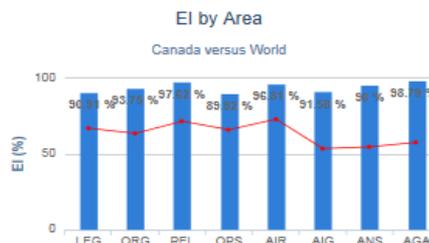
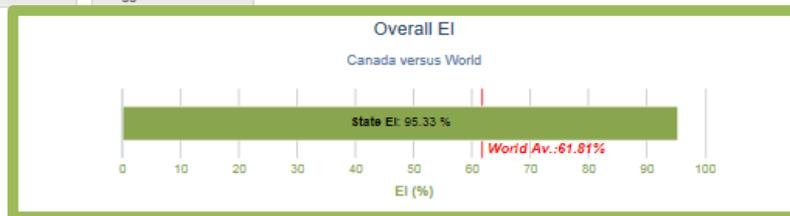
These two column charts display the lack of effective implementation for the selected group of States. Clicking on a column on the upper graph will generate the view for that area on the lower graph.

You can select a group of States from the drop-down menu. If a specific group of States does not exist, you can create that group through the "Manage my groups" section on the left. You can also view the composition of a selected group. By clicking or hovering over the bars in the graph, a bubble tooltip appears with the name of the State. Clicking on that name brings you to the detailed USOAP results for that State (not implemented on iPads).

The LEI values may differ slightly from those published in the USOAP audit reports that were published from the period 2006 to 2010 due to changes in the LEI calculation algorithm as well as changes in the protocol question grouping structure performed since the State's audit.

Select Group  and State

Toggle Distribution Chart  Toggle Timeline Chart



# Example 3: USOAP Charts

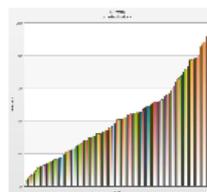


This analysis can be done in further details by audit areas and by CEs.



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ISTARS 2.0

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Options

Show statistical lines and bands on the chart

Numbers as  
EI (100-LEI)

Help

## USOAP Charts

### State USOAP data

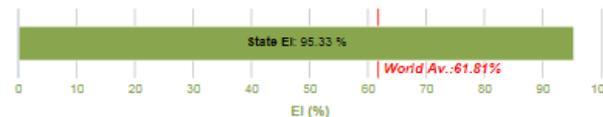
These two column charts display the lack of effective implementation for the selected group of States. Clicking on a column on the upper graph will generate the view for that area on the lower graph.

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The LEI values may differ slightly from those published in the USOAP audit reports that were published from the period 2006 to 2010 due to changes in the LEI calculation algorithm as well as changes in the protocol question grouping structure performed since the State's audit.

Select Group  and State

### Overall EI Canada versus World



### EI by Area



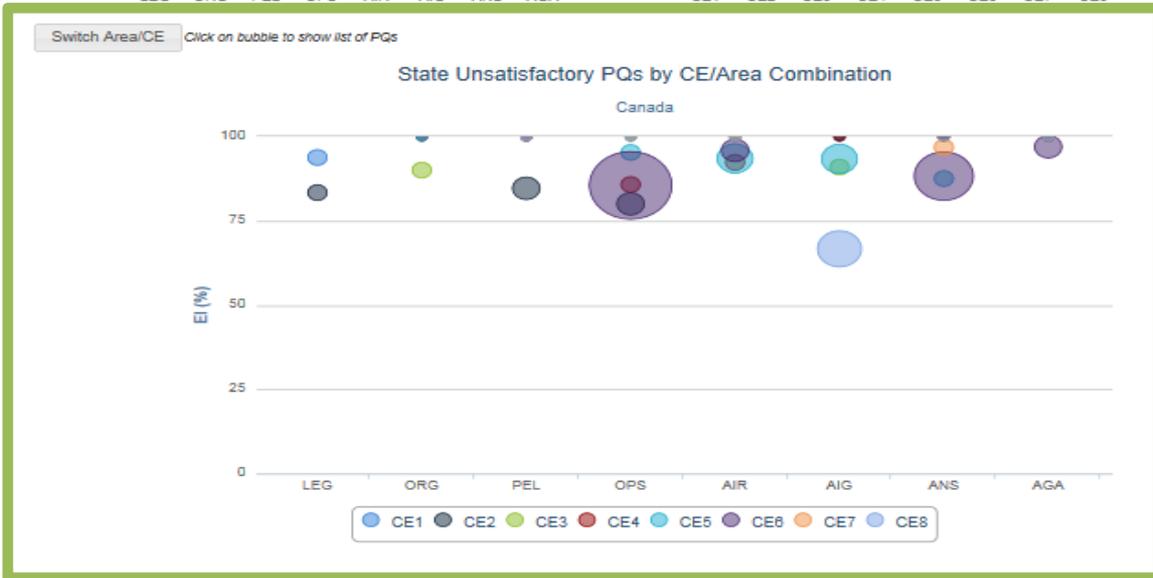
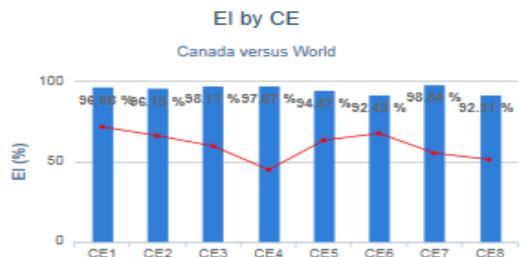
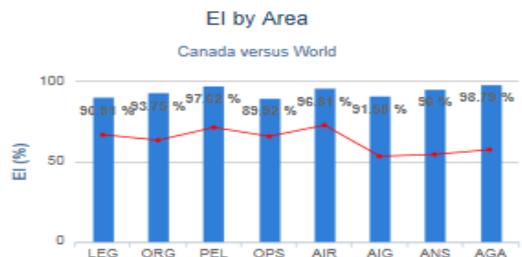
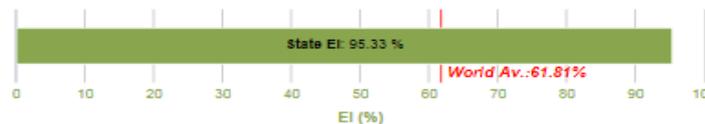
### EI by CE



# Example 3: USOAP Charts



This analysis can be done even further by separating each audit area by CE (each combination represented by a circle).

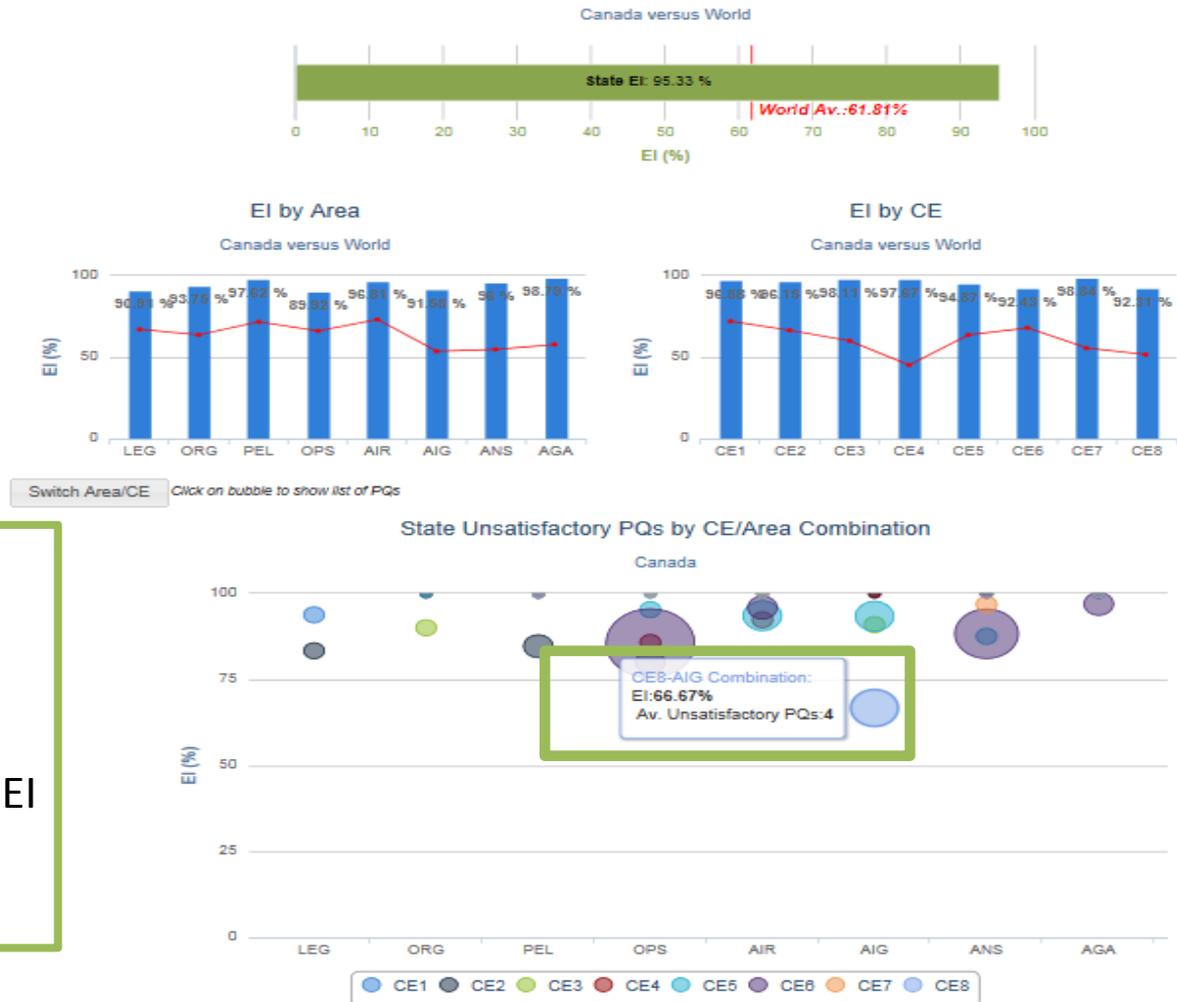


# Example 3: USOAP Charts



By scrolling over any one of the circles (each representing a CE), users can determine what the EI and LEI are, broken down by CE under each audit area.

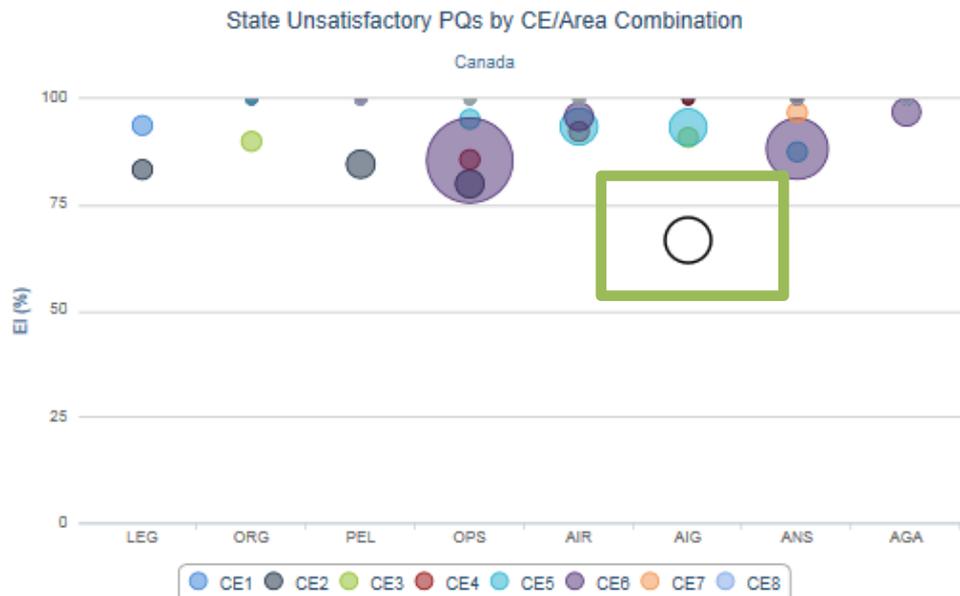
For example: Going over the BLUE circle, we find out that there are 4 not satisfactory PQs in the AIG audit area representing CE-8 and the total EI of this AIG-CE 8 combination is 66.67%.



# Example 3: USOAP Charts



By clicking on the circle, users can determine which are the PQs that were identified as “not satisfactory” in the circle for the combination selected in the previous slide (AIG – CE-8).



Unsatisfactory PQs (4) for CAN in CE8 related to AIG

Search:

PQNumber	Question	Area	CE
6.431	Has the State, as the State conducting the investigation, developed and implemented procedures to ensure that it sends preliminary reports, when the aircraft involved in an accident is of a maximum mass of over 2 250 kg, to all involved States and ICAO?	AIG	8
6.435	Has the State, as the State conducting the investigation, developed and implemented procedures to ensure that it sends accident data reports involving aircraft of a maximum mass of over 2 250 kg to ICAO, as soon as practicable after the investigation?	AIG	8
6.437	Has the State, as the State conducting the investigation, developed and implemented procedures to ensure that it sends incident data reports to ICAO for investigations into incidents to aircraft of a maximum mass of over 5 700 kg?	AIG	8
6.509	Is the database created in a standardized format to facilitate data exchange?	AIG	8

Showing 1 to 4 of 4 entries

# More on MY APPS



Many other interesting applications are available for measuring States' performances versus regional or global averages.

# iSTARS 2.0 SPACE: Group Manager



Users can create their own group/s for analysis.

1. Click **"Add"** box under **"Create a new group"**.

2. Fill in required fields in **"Create a new group"** message box.

3. Click to **select States** of interest and click **"Create"** box at bottom to complete action.

The screenshot shows the 'Group Manager' interface in the iSTARS 2.0 SPACE application. The main heading is 'Group Manager' with the subtitle 'Manage Groups of States and Territories'. A 'Create a new group' modal is open, displaying the following fields and options:

- Custom group name \***: A text input field.
- Description \***: A text area.
- Is iSTARS Group**: A checkbox (unchecked).
- Share my group**: A checkbox (checked).
- States \***: A dropdown menu with 'no selected option' and '253 available options'. The dropdown is expanded, showing a list of countries and regions: Afghanistan, Armenia, Azerbaijan, Bahrain, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, China, Macao Special Administrative Region, Cyprus, and Democratic People's.

At the bottom of the modal, there are 'Create' and 'Cancel' buttons. The 'GROUP MANAGER' tab is highlighted in the top navigation bar.

# iSTARS 2.0 SPACE: News



Any modifications or introduction of new applications will be announced in the “**NEWS**” page.

 **SPACE**  
iSTARS 2.0

[MY APPS](#) | [CATALOGUE](#) | [GROUP MANAGER](#) | **NEWS** | [SUPPORT](#) | [CONTACT US](#) | [PROFILE](#)

## News & Updates

**17 DEC** [MAP Builder released](#)

It is now possible to build choropleth, country colored maps online directly on iSTARS SPACE. You can use any metric available to color the countries and even choose the colors. Give the MAP Builder app a try.

**20 SEP** [iSTARS 2.0 SPACE \(beta\) is ready](#)

Dear iSTARS user,

You may have seen on the <https://portal.icao.int> welcome page that you have been added to a group called “**iSTARS 2.0 SPACE (beta)**” which can be accessed directly via <https://portal.icao.int/space>. This is the new version of iSTARS, with a lot of new features including:

- a **Catalogue** of apps you can search and filter to find what you need
- a **personalized desktop** where you can manage and layout your apps like on a mobile tablet
- **Faster response times** through extensive use of our cloud based **Safety Intelligence Engine (SIE)**

All apps which are currently under Occurrences, Compliance and Risk are present in the **SPACE catalogue**. Some of them have already be upgraded to 2.0, others still point to the current version. We expect that all apps will be upgraded to 2.0 SPACE before end of Octobre 2013.

You can start using SPACE right away and experience its enhanced usability and check out the **terrain, weather and PBN apps**. SPACE is still in beta test mode until all apps are upgraded, so do not hesitate to contact us if you experience any problems.

The iSTARS Team

# iSTARS 2.0 SPACE: *Support*



Questions and answers (Q&A) service can be obtained in the “**SUPPORT**” page.

**SPACE**  
iSTARS 2.0

MY APPS | CATALOGUE | GROUP MANAGER | NEWS | **SUPPORT** | CONTACT US | PROFILE

### Technical Support

Here are some of the problems you might be experiencing, please click on the links and find their causes and solutions below.

- [The page layout seems strange, some parts of the pages seem squeezed \(1\)](#)
- [Pages, graphs or tables do not load and some button clicks have no effect \(5\)](#)
- [I want to update information \(action plans, accidents etc.\) but the system does not allow me to do that \(1\)](#)
- [I want to fill-in forms offline but it does not work \(1\)](#)
- [I get an error when I want to upload some files \(2\)](#)

---

- [The page layout seems strange, some parts of the pages seem squeezed \(1\)](#)
  - Browser is not iSTARS friendly**
  - Try to install and use Internet Explorer 8 or higher. If you are not working in a Microsoft Windows environment, install and use the latest version of Firefox. Other Browsers like Safari, Opera or Chrome may cause problems. Be aware that the best layout and iSTARS experience will be achieved using Internet Explorer.

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- [Pages, graphs or tables do not load and some button clicks have no effect \(5\)](#)
  - Javascript is not enabled in your Browser**
  - iSTARS heavily relies on the use of Javascript which is executed inside your browser. Javascript must be enabled. How to enable Javascript depends from your browser. Check the help section of your browser to learn how to enable Javascript.
  - Flash is not installed**

# iSTARS 2.0 SPACE: *Contact Us*



Contact iSTARS 2.0 SPACE administrator by clicking “**CONTACT US**” tab for assistance.



**SPACE**  
iSTARS 2.0

[HOME](#) | [MY APPS](#) | [CATALOGUE](#) | [GROUP MANAGER](#) | [NEWS](#) | [SUPPORT](#) | **[CONTACT US](#)** | [PROFILE](#)

## Contact Us

Feel free to provide us with your feedback such as general comments, bugs found or specific requests for SPACE by contacting us through the information below. The SPACE team reads every submission and replies to it in due time.



**Mr. Marco Merens**

Tel.: +1 514-954-8219 ext. 7138



Fax: +1 514-954-8759

Email: [SPACE@icao.int](mailto:SPACE@icao.int)

**Mailing Address:**



**SPACE- ANB**

International Civil Aviation Organization (ICAO)

999 University Street,

Montréal, Quebec H3C 5H7, Canada

# Review



## Introduction to iSTARS 2.0 SPACE:

- Login via ICAO Secure Portal Site
- Home Page and Various Tabs
- How to Use *MY APPS*
- Other Tabs



# ICAO

North American  
Central American  
and Caribbean  
(NACC) Office  
Mexico City

South American  
(SAM) Office  
Lima

ICAO  
Headquarters  
Montréal

Western and  
Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
(APAC) Office  
Bangkok



THANK YOU