



| ICAO

SKY TALKS

WORKSHOPS

NO COUNTRY LEFT BEHIND *i*MPLEMENT

Facilitating data-driven decisions for aviation

Michael DE LEON
Air Navigation Bureau

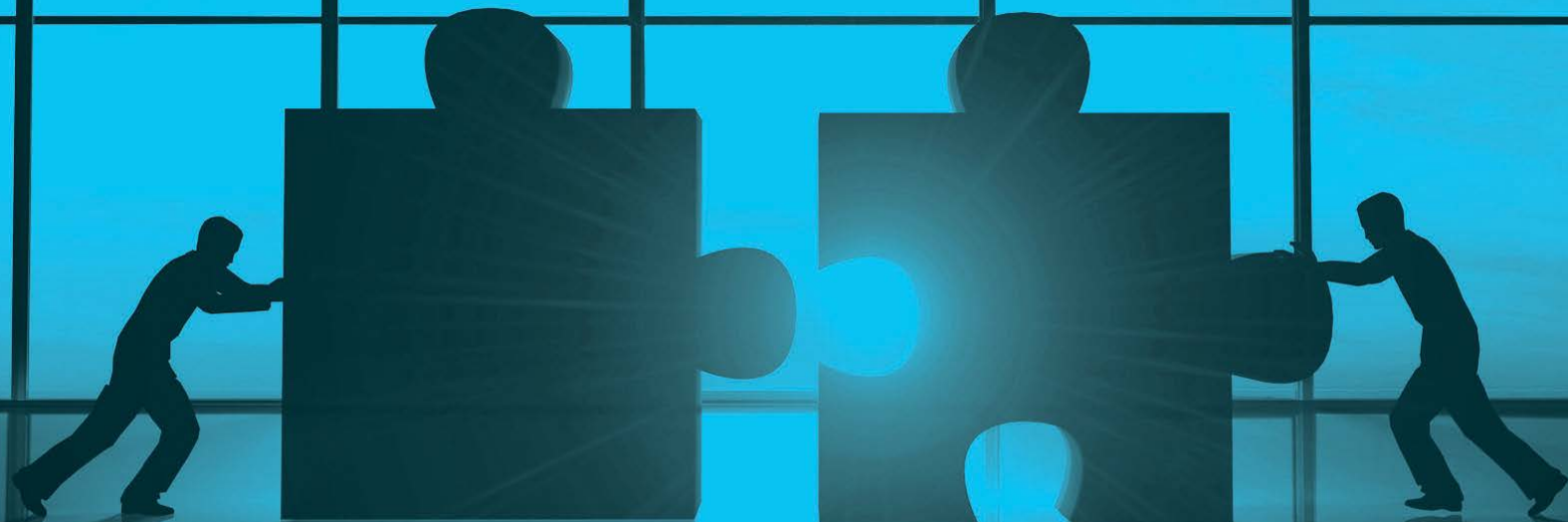
Alan FOO
Singapore Delegation



ICAO

UNITING AVIATION

39th
TRIENNIAL ASSEMBLY
27 SEP-07 OCT 2016



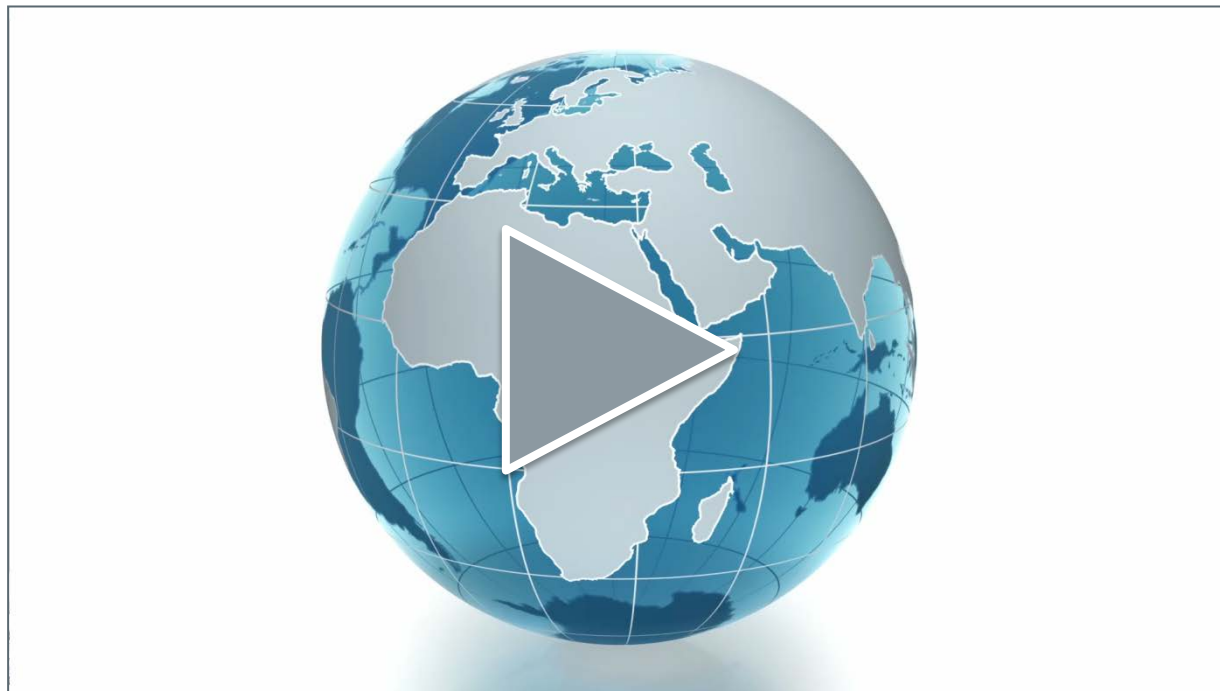
NO COUNTRY LEFT BEHIND



ICAO

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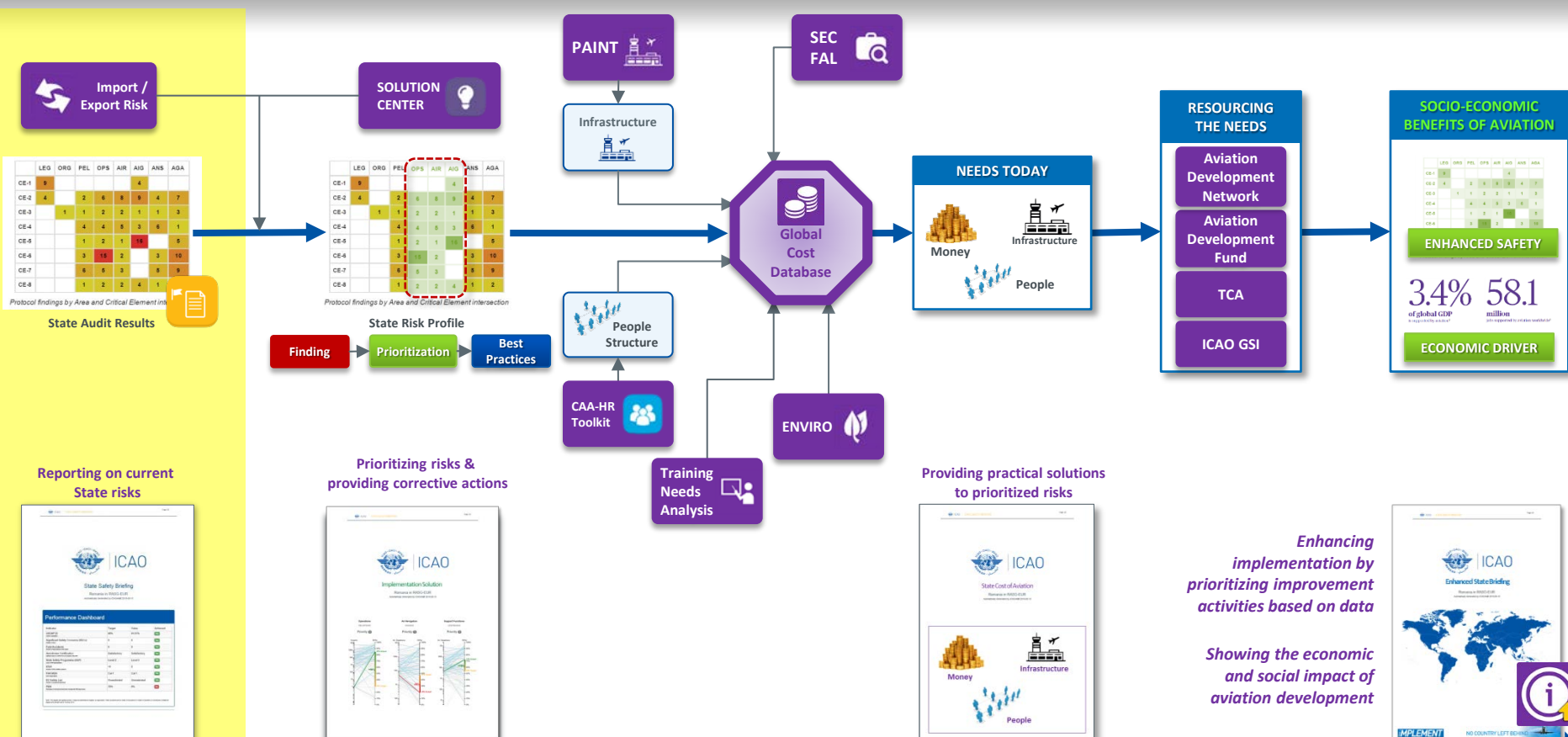


View the iMPLEMENT Video at: <https://youtu.be/U9YLVNGAgTU>

Evolving Safety Performance

- **iMPLEMENT is a data-driven decision making process that:**
 - **Assesses the current status** of aviation (**Safety Briefings**)
 - **Identifies the best solutions** in order to maintain or improve the aviation capability of the State (**Solution Center**)
 - **Evaluates the needs of the aviation system** (money, people, infrastructure) (**CAA HR Tools, PAINT, etc.**)
 - **Identifies resources** through existing national, regional, or global mechanisms (**ASIAP, SAFE Fund, etc.**)
 - **Showcases the real added value of air transport** and the socio-economic return on investment of aviation





SOCIO-ECONOMIC BENEFITS OF AVIATION

	LEG	ORG	PEL	OPS	AIR	ANS	AGA
CE-1	8					4	
CE-2	4		2	6	3	4	7
CE-3		1	2	2	1	1	3
CE-4			4	4	3	8	1
CE-6			1	2	1	14	8
CE-6			3	16	2	3	15
CE-7			6	6	3	8	9
CE-8			1	2	2	4	1

ENHANCED SAFETY

3.4% of global GDP
as reported by ICAO

58.1 million
as reported by ICAO

ECONOMIC DRIVER





ICAO

UNITING AVIATION

39th TRIENNIAL ASSEMBLY 27 SEP-07 OCT 2016



State Safety Briefing Romania in RASC-EUR

Performance Dashboard

Indicator	Target	Value	Achieved
USOAP EI <small>USOAP Overall EI(%)</small>	60%	91.01%	Yes
Significant Safety Concerns (SSCs) <small>Number of SSCs</small>	0	0	Yes
Fatal Accidents <small>Number of fatal accidents in last 5 years</small>	0	0	Yes
Aerodrome Certification <small>Validated status of USOAP Protocol Questions (PQ) 8.061, 8.062 and 8.066</small>	Satisfactory	Satisfactory	Yes
State Safety Programme (SSP) <small>Level of SSP implementation</small>	Level 2	Level 3	Yes
IOSA <small>Number of IOSA certified operators</small>	>0	2	Yes
FAA IASA <small>IASA categorisation</small>	Cat 1	Cat 1	Yes
EU Safety List <small>Number of operational restrictions</small>	Unrestricted	Unrestricted	Yes
PBN <small>Percentage of international instrument runways with PBN approaches</small>	70%	0%	No

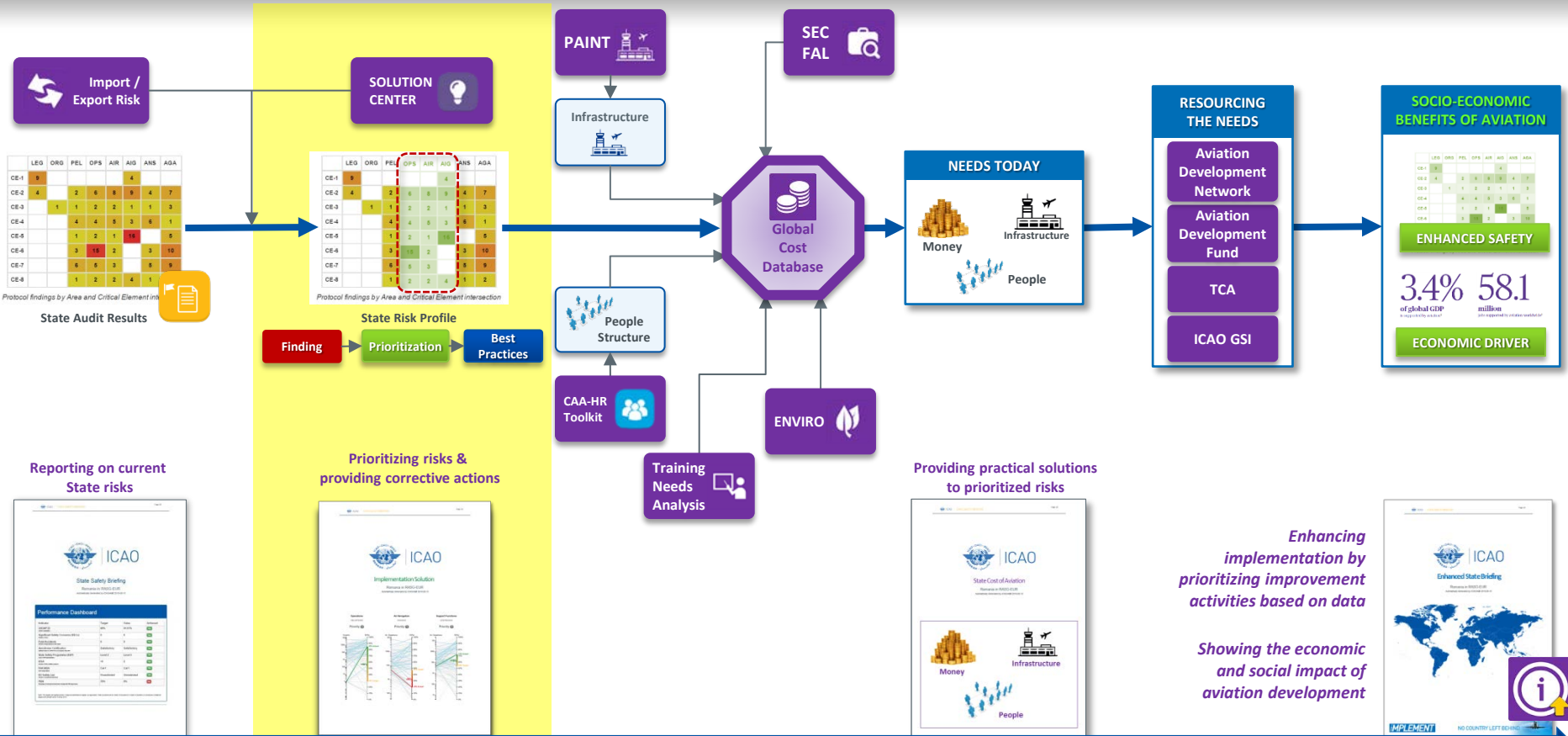
Note: The targets are agreed global or regional performance targets, as applicable. Fatal accidents flights with aircraft over 5.7t since 2010.

Performance Dashboard

Indicator	Target	Value	Achieved
USOAP EI <small>USOAP Overall EI(%)</small>	60%	90.96%	Yes
Significant Safety Concerns (SSCs) <small>Number of SSCs</small>	0	0	Yes
Fatal Accidents <small>Number of fatal accidents in last 5 years</small>		0	Yes
Aerodrome Certification <small>Validated status of USOAP Protocol Questions (PQ) 8.061, 8.062 and 8.066</small>	Satisfactory	Satisfactory	Yes
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STATE SAFETY BRIEFINGS https://goo.gl/mL64xM



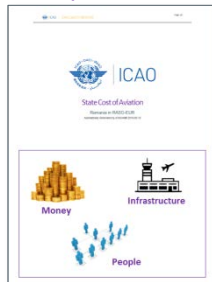
Reporting on current State risks



Prioritizing risks & providing corrective actions

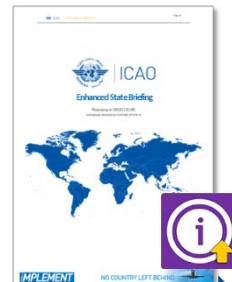


Providing practical solutions to prioritized risks



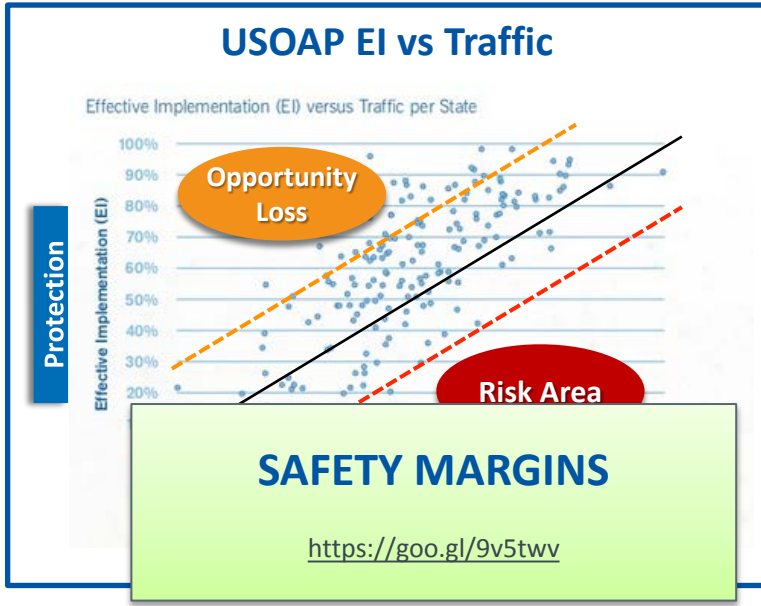
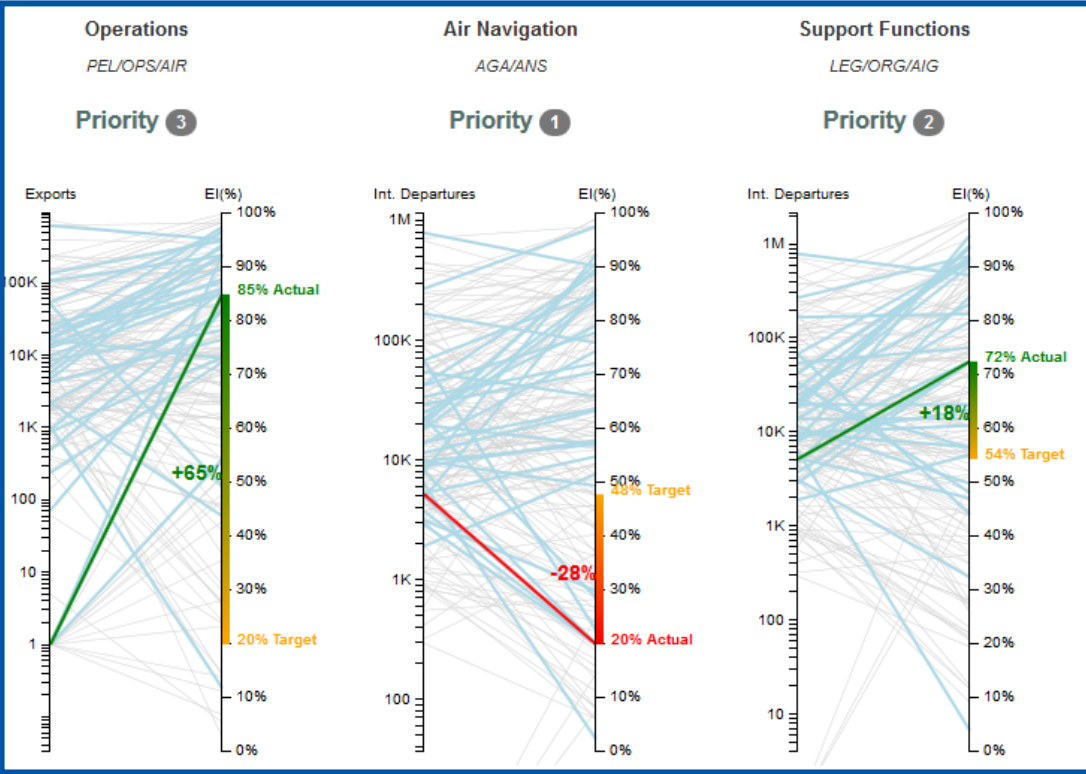
Enhancing implementation by prioritizing improvement activities based on data

Showing the economic and social impact of aviation development





Import / Export Risk





| ICAO

SKY TALKS

WORKSHOPS

SOLUTION CENTER



NO COUNTRY LEFT BEHIND

IMPLEMENT



Catalogue

List of Available iSTARS Applications

The list below contains all applications available to you on iSTARS, based on your user permissions.


Catalogue (29) | Invitations | Owners (3)

Select a category or use the search box

All (29) | Accident Stats (1) | ACE (4) | Airlines (1) | Airports (9) | Documentation (5) | **iMPLEMENT (9)** | Integrated Analysis (12) | Natural Hazards (2) | SSP/SMS (3)

State Information (21) | Traffic (5) | USOAP (10)

Search:

Icon	Name/Category	Description	Installed
	Solution Center Report on Protocol Questions Findings and Guidance for Resolutions	Guidance to support the drafting of corrective action plans for protocol questions findings. This beta version is continuing to be developed (preview version).	To My Apps



ICAO

iSTARS 3.0

integrated Safety Trend Analysis and Reporting System

MY APPS | CATALOGUE | GROUP MANAGER | SPACE-EXCHANGE | WORKSHOP | NEWS | MY ACCOUNT | CONTACT US | PROFILE



Solution Center

Report on Protocol Questions Findings and Guidance for Resolutions

Beta Version: **The Solution Center continues to evolve so consider this version a preview or beta version.**

Create and view Protocol Question Findings, priorities, and related guidance by State. An example using Canada is shown below.

Click [here](#) to view the data sources and update frequency for this app.

1. Select the State from the drop down menu.

Afghanistan, Kiribati, Iraq and Somalia are not available at this time.

2. Click on the language icons to have iSTARS send the documents to your registered email address.

Please email istars@icao.int with suggestions for additional information to include in the Solution Center.

Select a State

Solutions for Canada

Departures (2015)

1068504

Overall EI

95.28%

Flag-Carrier Flights (2015)

1036770

ALL	LEG	ORG	AIG	PEL	OPS	AIR	ANS	AGA
CE-1	1							
CE-2	1			2	2			



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Select a State

Solutions for Peru

Departures (2015)

130775

Overall EI

74.34%

Flag-Carrier Flights (2015)

130673

ALL	LEG	ORG	AIG	PEL	OPS	AIR	ANS	AGA
CE-1	6		5					
CE-2	5		9	1	3	12	3	11

Solutions for Peru

Departures (2015)

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Overall EI

74.34%

Flag-Carrier Flights (2015)

130673

ALL	LEG	ORG	AIG	PEL	OPS	AIR	ANS	AGA
CE-1	6		5					
CE-2	5		9	1	3	12	3	11
CE-3		3	5				2	
CE-4		1	4			5	8	3
CE-5	1	1	3	1	1	4	2	5
CE-6					2	3	11	22
CE-7						1	10	11
CE-8			12			2	6	4
Safety Margin			-25.21%			+10.75%		+0.74%

Filter the questions by keywords or number:

Showing 223 of 223 Questions

Technical Guidance, Tools and the Provision of Safety-Critical Information (CE-5) in Accident Investigation (AIG) 35

6.202 - Are appropriate facilities and office equipment available to the entity in charge of aircraft accident and incident investigations?

CE-5 | Accident Investigation | Facilities, equipment and documentation

Moderate | 75% EI in RASG-PA

- Assess adequacy of facilities for the investigators and other personnel involved in investigation tasks. - Verify the availability of: - 1. Telephones/cellphones - 2. Fax - 3. Printer - 4. Photocopier - 5. Computer/laptops/notebooks - 6. Internet/intranet.

Refs: GM Doc 9734 Part A C 3

CAP partially addresses the finding.

6.211 - Has the State established and implemented procedures to ensure the availability of hangars/storage facilities when needed in order to protect the evidence and maintain safe custody of the aircraft for such a period as may be necessary for the

Solutions for Canada

Departures (2015)

1068504

Overall EI

95.28%

Flag-Carrier Flights (2015)

1036770

ALL	LEG	ORG	AIG	PEL	OPS	AIR	ANS	AGA
CE-1	1							
CE-2	1			2	2			
CE-3		1	1					
CE-4					1	1		
CE-5			3		1	3	1	
CE-6					9	2	6	2
CE-7							1	
CE-8			4					
Safety Margin		+5.76%			+9.51%		+9.33%	

Filter the questions by keywords or number:

Showing 223 of 223 Questions

Licensing, Certification, Authorization and Approval Obligations (CE-6) in Operations (OPS) 9

4.203 - Does the aircraft operations organization ensure that the air operator has established and maintained a flight data analysis programme as part of its SMS?

CE-6 | Operations | Air operator SMS

Moderate | 64.52% EI in RASG-PA

1) Verify implementation of operations inspectors' procedures to ensure that, as part of their SMS, air operators have established and maintain a flight data analysis programme. 2) Review effective implementation by air operators.

Refs: STD A6 Part I 3.3 Part III 1.3

Solutions for Canada

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95.28%

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CE-1	1							
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CE-3		1	1					
CE-4					1	1		
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CE-6					9	2	6	2
CE-7							1	
CE-8			4					
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PQ and Guidance

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Available Documentation

- **Annex 6: Operation of Aircraft Part I - International Commercial Air Transport - Aeroplanes Current edition (consolidated)**

Email as [en](#) [ar](#) [zh](#) [ru](#) [es](#) [fr](#)

Best Practices shared by States and international Organizations

- **IMPLEMENTATION OF THE SMS** shared by CAA of Venezuela (Bolivarian Republic of)
Lessons learnt from supporting the implementation of the safety management system (SMS) in the Bolivarian Republic of Venezuela
- **GLOBAL MANAGEMENT OF AVIATION SAFETY AND ENABLERS FOR RISK-BASED SAFETY OVERSIGHT** shared by CAA of United Kingdom
The United Kingdom Civil Aviation Authority (CAA) has developed its own interpretation of a management system, known as the Regulatory Safety Management System (RSMS) to satisfy State Safety Programme and European Aviation Safety Agency (EASA) Authority Requirements
- **Agreement between the European Union and the Government of the Federative Republic of Brazil on civil aviation safety** shared by EU - Brazil
The Bilateral Aviation Safety Agreement was signed in Brasilia on 14 July 2010 has entered into force on 27 August 2013.
- **Agreement between the United States of America and the European Community on cooperation in the regulation of civil aviation safety** shared by EU- USA
On 1 May 2011 entered into force the Agreement between the USA and the EU on cooperation in the regulation of civil aviation safety.
- **Agreement on civil aviation safety between the EU and Canada** shared by EU - Canada
On 26 July 2011 entered into force the Agreement on civil aviation safety between the EU and Canada. Despite the fact that Iceland, Norway and Switzerland are not part of the Agreement on civil aviation safety between the EU and Canada, the following Working Arrangements for the promotion of aviation safety between TCCA and the Civil Aviation Authorities of Iceland, Norway and Switzerland, reflect the technical elements related to aviation safety contained in the Agreement on civil aviation safety between the EU and Canada and facilitate the recognition and acceptance of approvals and testing in the areas established by Article 1(2) of the arrangements.
- **Ramp Inspection Programmes (SAFA/SACA)** shared by EASA
European programme regarding the performance of ramp inspections on aircraft used by third country operators (SAFA) or used by operators under the regulatory oversight of another EU Member State (SACA). Regulated by Commission Regulation (EU) No 965/2012 and provides for the inspection of aircraft suspected of non-compliance with the applicable requirements.
- **New Zealand Aviation State Safety Programme** shared by New Zealand
Roadmap for maintaining and improving aviation safety and security in New Zealand, through: - the legislative framework and responsible Authorities - formalised safety management practices - assurance of safety through effective intelligence and analysis, and - education, training, promotion and communication of safety issues.
- **Safety Management System Tool** shared by SM ICG
Assesses an organisation's SMS. It can be used for initial assessment or ongoing surveillance and oversight.

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- **New Zealand Aviation State Safety Programme** shared by New Zealand

Roadmap for maintaining and improving aviation safety and security in New Zealand, through: - the legislative framework and responsible management practices - assurance of safety through effective intelligence and analysis, and - education, training, promotion and communication
- **Safety Management System Tool** shared by SM ICG

Assesses an organisation's SMS. It can be used for initial assessment or ongoing surveillance and oversight

SARPs and Guidance

International Standards and Recommended Practices



Annex 6
to the Convention on
International Civil Aviation

Operation of Aircraft

Part I
International Commercial
Air Transport — Aeroplanes

This edition incorporates all amendments adopted by the Council prior to 27 February 2010 and supersedes, on 18 November 2010, all previous editions of Part I of Annex 6.

For information regarding the applicability of the Standards and Recommended Practices, see Foreword.

Ninth Edition
July 2010

International Civil Aviation Organization

Licensing, Certification, Authorization and Approval Obligations (CE-6) in Operations (OPS) 9

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Available Documentation

- **Annex 6: Operation of Aircraft Part I** - In Email as [en](#) [ar](#) [zh](#) [ru](#) [es](#) [fr](#)

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The screenshot shows the EASA website interface. The main heading is "Ramp Inspection Programmes (SAFA/SACA)". Below the heading, there is a summary of the program and a list of documents. The list includes:

1. Commission Regulation (EU) No 965/2012 of 5 October 2012;
2. Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Part-ARO, consolidated version, issue 3, 28 July 2014; and
3. Inspection Instructions on the Categorisation of Ramp Inspection (SAFA/SACA) Findings – INST.RI.01/002 approved on 18 November 2015.

The page also features a sidebar with navigation options like "Aerodromes", "Aircraft & products", "Aircrew & Medical", and "Air Operations". A pink arrow points to the "Ramp Inspection Programmes (SAFA/SACA)" section in the sidebar.

Best Practices
(Templates, Other
State's, Industry)

Regional/ Global Initiatives

Programs available in your region

• IATA Operational Safety Audit (IOSA) by IATA for States in World

The IATA Operational Safety Audit (IOSA) program is an internationally recognized and accepted evaluation system designed to assess the operational management and control systems of an airline. All IATA members are IOSA registered and must remain registered to maintain IATA membership.

• Next Generation Air Transportation System (NextGen) by FAA for States in Northern America

New National Airspace System due for implementation across the United States in stages between 2012 and 2025. NextGen proposes to transform America's air traffic control system from a radar-based system with radio communication to a satellite-based one.

• AIRE - Atlantic Interoperability Initiative to Reduce Em

Coordinate to major programmes on Air Traffic Management (ATM) infrastructure from both sides of the Atlantic. So far, three AIRE cycles have been successful.

• Civil Aviation Security (CASE) project by European Commission

Aims at organising capacity building in the field of civil aviation and security in (2016-2020) by providing targeted technical assistance to the beneficiary States.

• Aireon by Iridium Communications, NAV CANADA, the ICAO and the IATA for States in World

The purpose of Aireon is to expand air traffic surveillance to the entire planet.

Available Training

• Safety management Training Programme by Trainair Plus

• IOSA Airline Auditor Training (Classroom, 5 days) by IATA

• ISAGO for Auditors (Classroom, 4 days) by IATA

• Regulatory Standards Training by FAA

• Air Traffic Services - Operations by Singapore Aviation Authority

• Aviation Safety & Security - Safety Management by Singapore

• Aviation Management - Airport Operations & Management by IATA

• Aerodromes, Ground Operations (AGO) by JAA Training Organisation

• Airport Planning, Operations and Management Training by IATA

• Aviation Safety Training Courses by IATA

• Cargo Training Courses by IATA

• Airline Operations, Quality and Audit Training Courses by IATA

• Auditing, Inspection, Investigation (All) by JAA Training Organisation

• Operations (Ops) by JAA Training Organisation

• EASA Learning Getaway (ELG) by EASA

• Aviation Training Courses by CAA International

• HOPI-TRAINING by ICARE

• FlightSafety Academy by FlightSafety International

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Home > Programs > Safety > Audits > IOSA

Back to Programs

Safety Audits

IOSA Registry

Audit Organizations

- ISAGO
- IATA Standard Safety Asses...
- Drinking-Water Quality Poo...
- De-icing/Anti-icing Quality ...
- IATA Fuel Quality Pool (BQP)
- Safety Data Management a...
- Safety Management Systems
- Integrated Management Sol...
- Cabin Safety
- Health and Safety
- Runway Safety
- Loss of Control In-flight (LOC-)
- Drones & Remotely Piloted ...

IATA Operational Safety Audit (IOSA)

GENERAL | VISION | ELIGIBILITY | SCHEDULE YOUR AUDIT | DOCUMENTATION

The IATA Operational Safety Audit (IOSA) program is an internationally recognized and accepted evaluation system designed to assess the operational management and control systems of an airline. All IATA members are IOSA registered and must remain registered to maintain IATA membership. See who is already on the [IOSA Registry](#)

IATA is now offering [IOSA Airline Auditor Training](#)

Benefits for airlines and regulators

- Quality audit program under stewardship of IATA
- Continuous updating of standards to reflect regulatory revisions and best practices
- Elimination of audit redundancy, reducing costs and audit resource requirements
- Accredited audit organizations with formally trained and qualified auditors
- Accredited training organizations with auditor training courses
- Structured audit methodology, standardized checklists

The total accident rate for IOSA carriers between 2011 and 2015 was 3.3 times lower than the rate for non-IOSA operators. As such, IOSA has become a global standard, recognized well beyond IATA membership. As of March 2015, 145 (36%) of the 405 airlines on the [IOSA registry](#) were non-IATA member airlines. Should you have any questions, please do not hesitate to [contact us](#).

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Contact us

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Safety Audits.
Long-term success for your business.

Aviation Quality Services

Related Links

Private Sites
IOSA Audit Organizations (AO)
IOSA Oversight Council (IOC)
IATA Operational Safety Audit Task Forces

Programs available in your region

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Aims at organising capacity building in the field of civil aviation and security in Africa and the Arabian Peninsula. The European Civil Aviation Conference (ECAC) is in charge of its implementation over the course of four years (2016-2020) by providing targeted technical assistance to the beneficiary States.

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- **Aviation Management - Airport Operations & Management** by Singapore Aviation Academy
- **Aerodromes, Ground Operations (AGO)** by JAA Training Organisation
- **Airport Planning, Operations and Management Training Course** by IATA
- **Aviation Safety Training Courses** by IATA
- **Cargo Training Courses** by IATA
- **Airline Operations, Quality and Audit Training Courses** by IATA
- **Auditing, Inspection, Investigation (All)** by JAA Training Organisation
- **Operations (Ops)** by JAA Training Organisation
- **EASA Learning Getaway (ELG)** by EASA
- **Aviation Training Courses** by CAA International
- **HOP!-TRAINING** by ICARE
- **FlightSafety Academy** by FlightSafety International

Training

The screenshot shows the ICAO Global Aviation Training website. The header includes the ICAO logo and the text "GLOBAL AVIATION TRAINING". There are navigation links for "English", "Français", and "ICAO Store". A search bar is present with the text "Search...". A yellow button labeled "CONFLICT ZONE UPDATES" is visible. The main navigation menu includes "About ICAO", "Global Priorities", "Meetings and Events", "Information Resources", "Careers", and "Subscribe". The breadcrumb trail reads "ICAO / Global Aviation Training / TRAINAIR PLUS / STP Standardized Training Packages / List of STPs". The "News and Events" section is active, showing "Latest News", "Events", and "Membership". The "Membership" section includes "About TRAINAIR PLUS", "Operations Manual (TPOM)", "Procedure", "Membership requirements", "Applying to the TRAINAIR PLUS Programme", "TPP Current Members", and "Assessment". The "Assessment" section includes "Training Assessment Guidelines", "Assessment Schedule", and "Budget". The "STP Standardized Training Packages" section is active, showing a "List of STPs" table. The table has columns for "State", "Training Center", "Language", "Code", "Title", and "Icon". The table lists one STP: "Singapore", "Singapore Aviation Academy (SAA)", "English", "201/146/SMS HIRM", "Operational Hazard Identification and Risk Mitigation". There are social media sharing icons for Facebook, Twitter, LinkedIn, and Email.

State	Training Center	Language	Code	Title	Icon
Singapore	Singapore Aviation Academy (SAA)	English	201/146/SMS HIRM	Operational Hazard Identification and Risk Mitigation	

Software tools available

Available Tools

- **RISK INDEX – ALGORITHM TO ASSESS PROBABILITY** by CAA of Argentina

A computing tool that allows objectively determining the probability of occurrence of an identified hazard and its possible consequences

- **PROACTIVE RISK MANAGEMENT IN RPAS OPERATIONS** by Venezuela

A tool that could be useful for RPAS operators is the proactive assessment of risks associated with its operation

- **Aircraft Performance Database** by EUROCONTROL

The Aircraft Performance Database allows users performance data for all stages of flight and other

- **M&S Suite 15** by PRESAGIS

Provides an open-standard simulation development real-world situations for training and decision making

- **ATM systems** by Indra

IT systems for terminals, taxi areas and runways at

- **The European ATM Portal** by SESAR

Provides a centralised online platform for strategy restrictions and the working portal covers the spe

- **Solutions Portal** by SESAR

The interactive map presents a number of solution

- **World Air Transport Statistics (WATS)** by IATA

Complete statistical picture of the airline industry.

- **Ground Damage Database (GDDB)** by IATA

Through the compilation of Participants' data and mitigation actions. In addition, a baseline for global individual basis. This information is shared with th

- **Automatic Dependent Surveillance-Broadcast**

Precise satellite-based surveillance system, using ground stations, which relays the data to air traffic

- **System Wide Information Management (SWIM)**

Advanced technology program designed to facilitate flight data, status of special use airspace, and Na

- **ELISE - Exact Landing Interference Simulation**

Software offered air navigation service providers when compared to existing predicting tools.

- **AirN@v** by Airbus

Tool aimed at significantly reducing the time need and reducing costs for operators of Airbus aircraft

- **Onboard Performance Tool (OPT)** by Boeing

Provides self-planning capability through fast and precise calculations and allows flight crews to calculate the takeoff analysis, landing analysis, and weight and balance information.

- **CMS - Corporate Management System Lease and Asset Management Software** by AerData

The screenshot shows the Airbus website's 'Innovation' section. The main heading is 'Innovation' with a sub-heading 'In design | In manufacturing | In operations | In fleet support'. The page is titled 'ELISE' and describes it as 'Exact Landing Interference Simulation'. The text highlights that ELISE is an advanced software for air navigation service providers and airport operators, designed to facilitate safer aircraft landings by eliminating disturbances to the Instrument Landing System (ILS) signal. It mentions that ELISE has been validated by more than 100 ground and flight measurements at several airports. The page also lists 'ADDITIONAL BENEFITS FOR AIRPORT OPERATIONS', such as enabling higher safety levels during landings and allowing for 'stealth' buildings near runways. The ELISE logo, featuring a stylized aircraft and the text 'eLISE Advanced ILS simulation', is shown on the right.

• **Network Operations Portal (NOP)** by EUROCONTROL

The NOP Portal is a Collaboration application enabling operational stakeholders to interact and collaborate with the Network Manager Operations Centre, enabling a common view of the European ATM network to be shared with the aviation community.

• **Regulations** by EASA

Lists EU civil aviation-related regulations, acceptable means of compliance and certification specifications according to area of implementation.

• **POLARIS** by Flight Data Services

Web & mobile flight data analysis software.

• **Wide Area Augmentation System (WAAS)** by FAA

Extremely accurate navigation system developed for civil aviation.

• **National Flight Data Center (NFDC)** by FAA

Part of FAA's Aeronautical Information Services group (AJV-5). This web portal is intended to service the aviation community providing the ability to browse for aeronautical data, submit data to the FAA for airport or chart updates, or communicate with FAA specialists.

• **Global Positioning System (GPS)** by FAA

Space-based radio-navigation system consisting of a constellation of satellites and network of ground stations used for monitoring and control.

• **Instrument Landing System (ILS)** by FAA

The modernized versions used by the FAA provide aircraft with precision vertical and horizontal navigation guidance information during approach and landing.

• **Lower Power Distance Measuring Equipment (LPDME)** by FAA

Low Power Distance Measuring Equipment (LPDME) is a component of instrument landing capability for precision and nonprecision approaches that measures the distance from the aircraft to the runway.

• **Very High Frequency Omni-Directional Range (VOR)** by FAA

The Very High Frequency Omni-Directional Range (VOR) is a ground-based electronic system that provides azimuth information for high and low altitude routes and airport approaches.

• **Congressional Approach Lighting System Improvement Program (ALSIP)** by FAA

The Congressional Approach Lighting System Improvement Program (C-ALSIP) implements a variety of different visual guidance lighting systems.

• **Precision Approach Path Indicators (PAPI)** by FAA

PAPI (Precision Approach Path Indicators) primarily assists by providing visual glide slope guidance in non-precision approaches environment.

• **Approach Lighting System with Sequence Flashing Lights(ALSF-2)** by FAA

There are 153 commissioned facilities in the NAS manufactured by Airflo, Godfrey, NBP, GE, Heavy Duty Substation, and Westinghouse Substation, Hollingsworth are among others.

Partners

In RASG-PA, the following States have solved this question. The States in **bold** have a comparable aviation activity.

Ecuador, **Brazil**, Bahamas, Saint Vincent and the Grenadines, Costa Rica, Chile, Cuba, Uruguay, **Mexico**, Saint Lucia, Nicaragua, Saint Kitts and Nevis, Venezuela (Bolivarian Republic of), Panama, Trinidad and Tobago, Peru, Jamaica, Grenada, Argentina, Antigua and Barbuda

Contact information for Mexico

Mr. Miguel Peláez Lira

Director General Adjunto de Seguridad Aérea

mpelaez@sct.gob.mx

States that
have resolved
the PQ



Solution Center

Report on Protocol Questions Findings and Guidance for Resolutions

Beta Version: **The Solution Center continues to evolve so consider this version a preview or beta version.**

Create and view Protocol Question Findings, priorities, and related guidance by State. An example using Canada is shown below.

Click [here](#) to view the data sources and update frequency for this app.

1. Select the State from the drop down menu.

Afghanistan, Kiribati, Iraq and Somalia are not available at this time.

2. Click on the language icons to have iSTARS send the documents to your registered email address.

Please email istars@icao.int with suggestions for additional information to include in the Solution Center.

Select a State

Solutions for Canada

Departures (2015)

1068504

Overall EI

95.28%

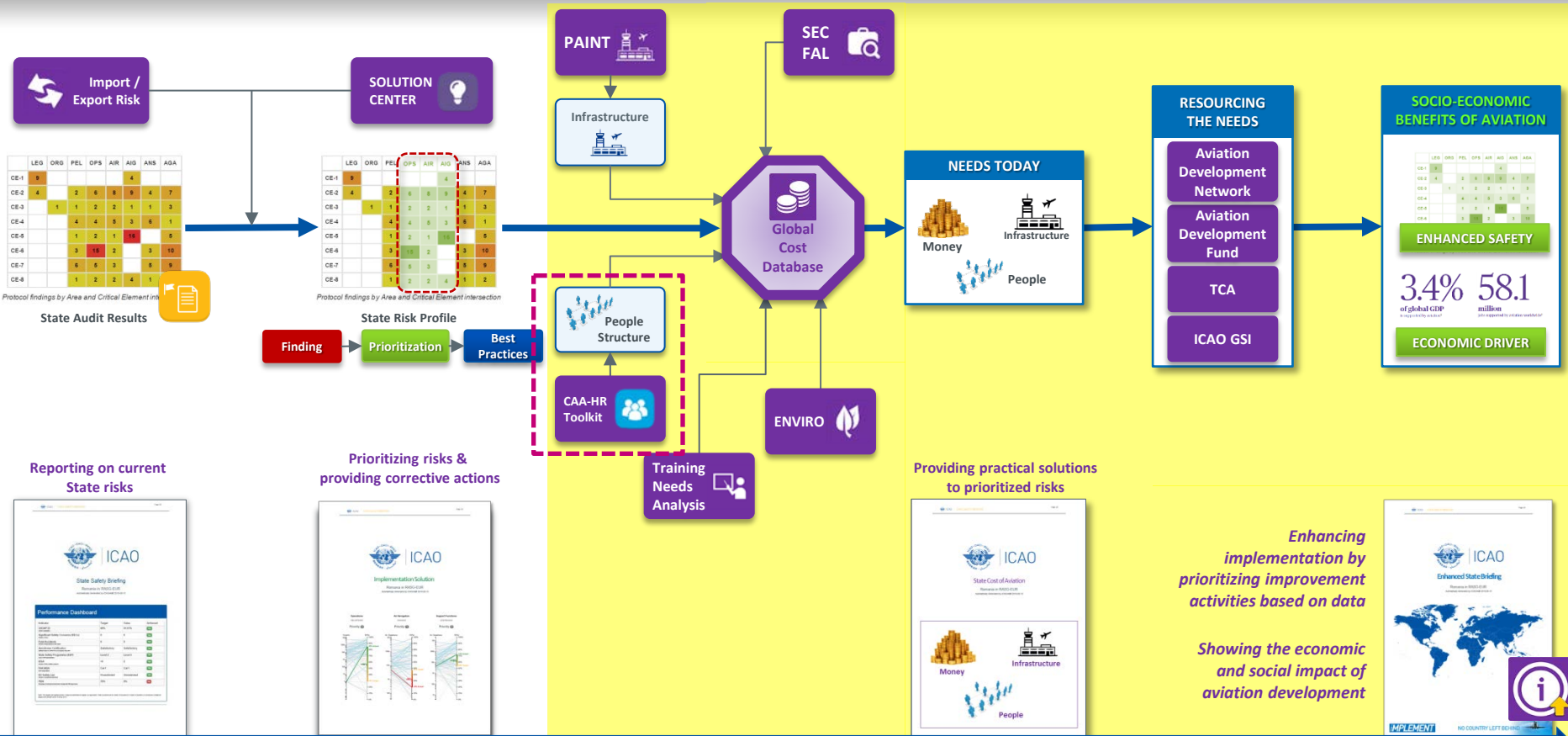
Flag-Carrier Flights (2015)

1036770

ALL	LEG	ORG	AIG	PEL	OPS	AIR	ANS	AGA
CE-1	1							
CE-2	1			2	2			
CE-3		1	1					
CE-4					1	1		
CE-5			3		1	3	1	
CE-6					9	2	6	2
CE-7							1	
CE-8			4					
Safety Margin	+5.76%			+9.51%			+9.33%	

SOLUTION CENTER

<https://goo.gl/MshlsI>



Reporting on current State risks



Prioritizing risks & providing corrective actions

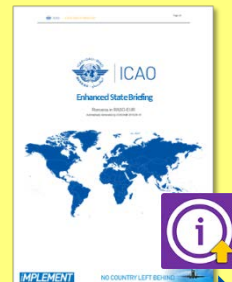


Providing practical solutions to prioritized risks



Enhancing implementation by prioritizing improvement activities based on data

Showing the economic and social impact of aviation development




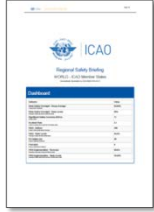








Aviation Tools to Support Implementation

A 'NO COUNTRY LEFT BEHIND' Initiative:

iMPLEMENT

Facilitating Data-Driven Decisions for Aviation

			
State Safety Briefing	Regional Safety Briefing	Aerodrome Briefing	Solution Center
			



			
State Safety Briefing	Solution Center	CAA HR Benchmark	Economic Dev. Indicators
			

iSTARS Analysis Workshops

<http://www.icao.int/safety/iStars/Pages/Analysis-Workshop.aspx>



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SKY TALKS

WORKSHOPS

CAA HR TOOLS



NO COUNTRY LEFT BEHIND

IMPLEMENT



Guidance



CASI Manual

How to train your
civil aviation safety
inspectors

Tool



Benchmarking

Compare your
manpower resource
with other States

Tool



Manpower Planning

Calculate how many
CASIs you need

Information



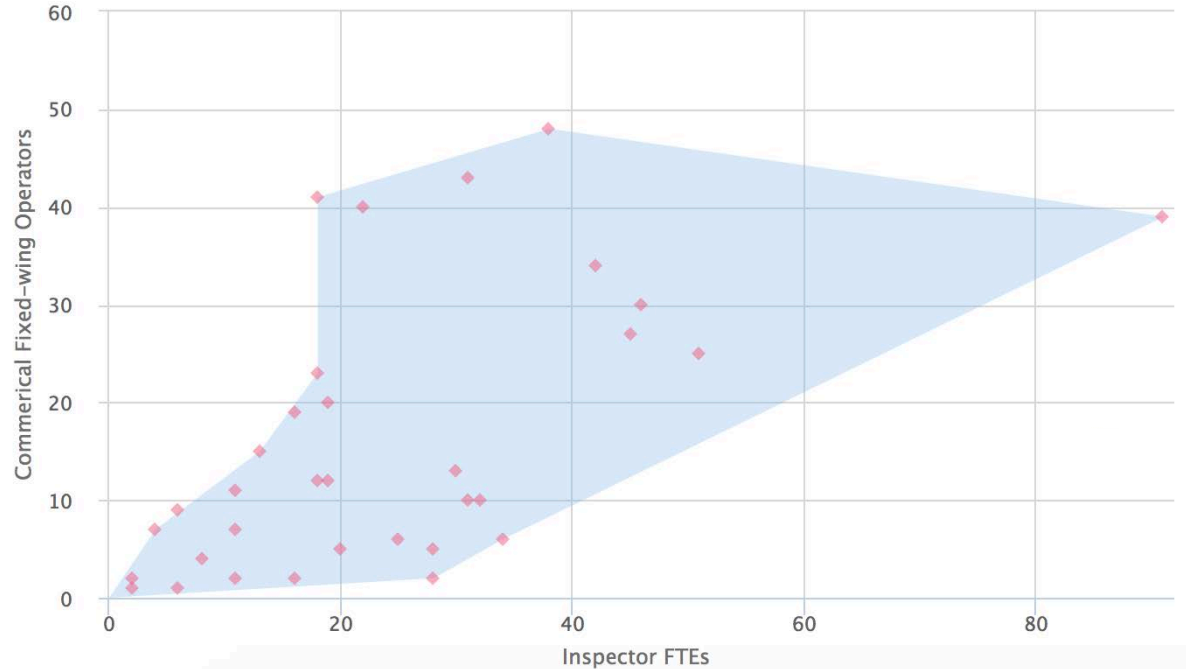
Organizational Structure Guidance

Determine the org
structure that fits
you best



Benchmarking Tool

- 33 States with EI > 70% selected
- Provides estimated number of inspectors needed
- A way to benchmark with other States; provides a starting point



Manpower Planning Tool

- To calculate man-hours and number of inspectors (OPS, AIR, PEL, AGA, ANS) needed
- Currently covers organisation certification and surveillance, as well as oversight of aircraft
- Includes a basic risk-based approach to surveillance
- ICAO will collect the man-hour data over time to improve the tool





| ICAO

SKY TALKS

WORKSHOPS

THANK YOU

NO COUNTRY LEFT BEHIND

IMPLEMENT