



International Civil Aviation Organization

Addressing Regional Air Navigation Deficiencies

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Presentation outline

- ➔ Need for the review of Uniform Methodology
- ➔ Transition from individual regional air navigation deficiencies databases to one single consolidated HQ database
- ➔ Final integration with iSTARS

Evolving Safety Reporting Capabilities: Air Navigation Deficiencies



➔ **The Council approved methodology (Approved in 1998 and updated in 2001):**

Uniform Methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies

➔ **The information should at least include:**

- Description of the deficiency
- Risk Assessment
- Possible Solutions
- Timelines
- Responsible party
- Agreed Action to be taken / Action already taken

Identification			Deficiencies				Action Plan			
ID	Requirements	State/ Facilities and Services	Description	Reporting Date	Remarks	Priority	Description	Executing Body	Target Date	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 454S	Annex 14, Vol I, Chap. 3	Colombia/UEAC/ Bogotá. El Dorado Intl. Airport	Depression between threshold and threshold lights in both thresholds (13L/31R RWY)	10/2005	Identified during September 2005 ICAO mission	A	<i>Include Action Plan coordinated with State</i>	UEAC	<i>Include as initial date that appearing in the Action Plan</i>	ASB/xx meeting recommended that Refer to details in the meeting report.

Proposal for Revised Uniform Methodology



- **A proposal for revised uniform methodology is being considered**
 - **Focuses on quantitative approach to categorization of deficiencies through hazard identification and risk analysis**
- **GREPECAS has deployed this proposed revised methodology on test basis**
- **Based on the feedback from GREPECAS and attaining maturity, all ROs/PIRGs will be consulted in 2012 for their review**
- **On concurrence from all ROs, the proposal will be presented to ANC/Council for approval**
- **What is this proposed revised methodology?**

Problem statement

Database not current due to delay in update process

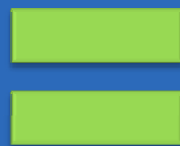


Need to support USOAP/CMA audit missions

Insufficient follow-up of deficiencies by States



Prioritization of deficiencies is qualitative in nature

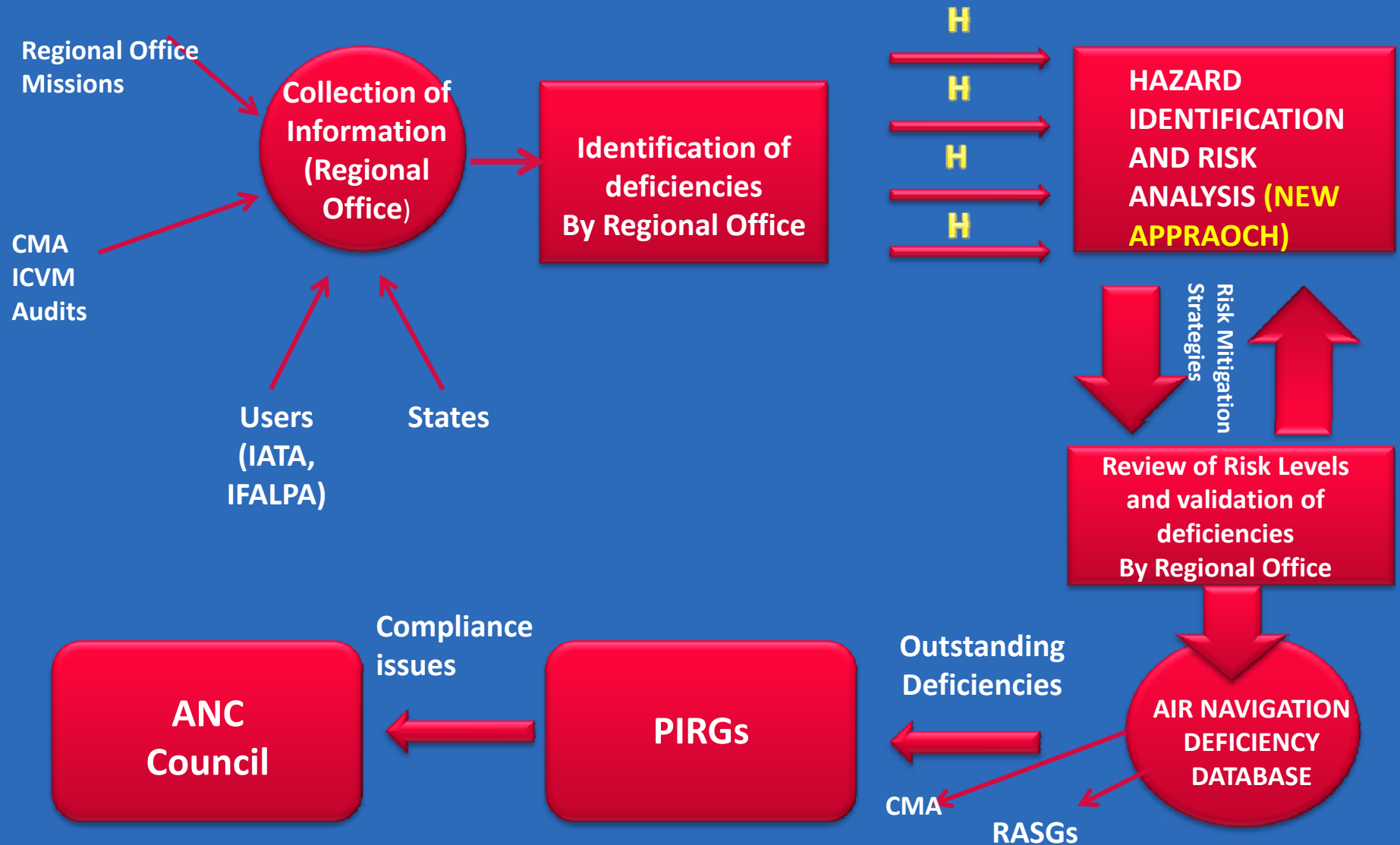


Calls for revised methodology

Hazard identification and risk analysis

		Severity				
		Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
		Probability	Frequent 5	5A	5B	5C
Occasional 4	4A	4B	4C	4D	4E	
Remote 3	3A	3B	3C	3D	3E	
Improbable 2	2A	2B	2C	2D	2E	
Extremely Improbable 1	1A	1B	1C	1D	1E	

Concept of revised methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies





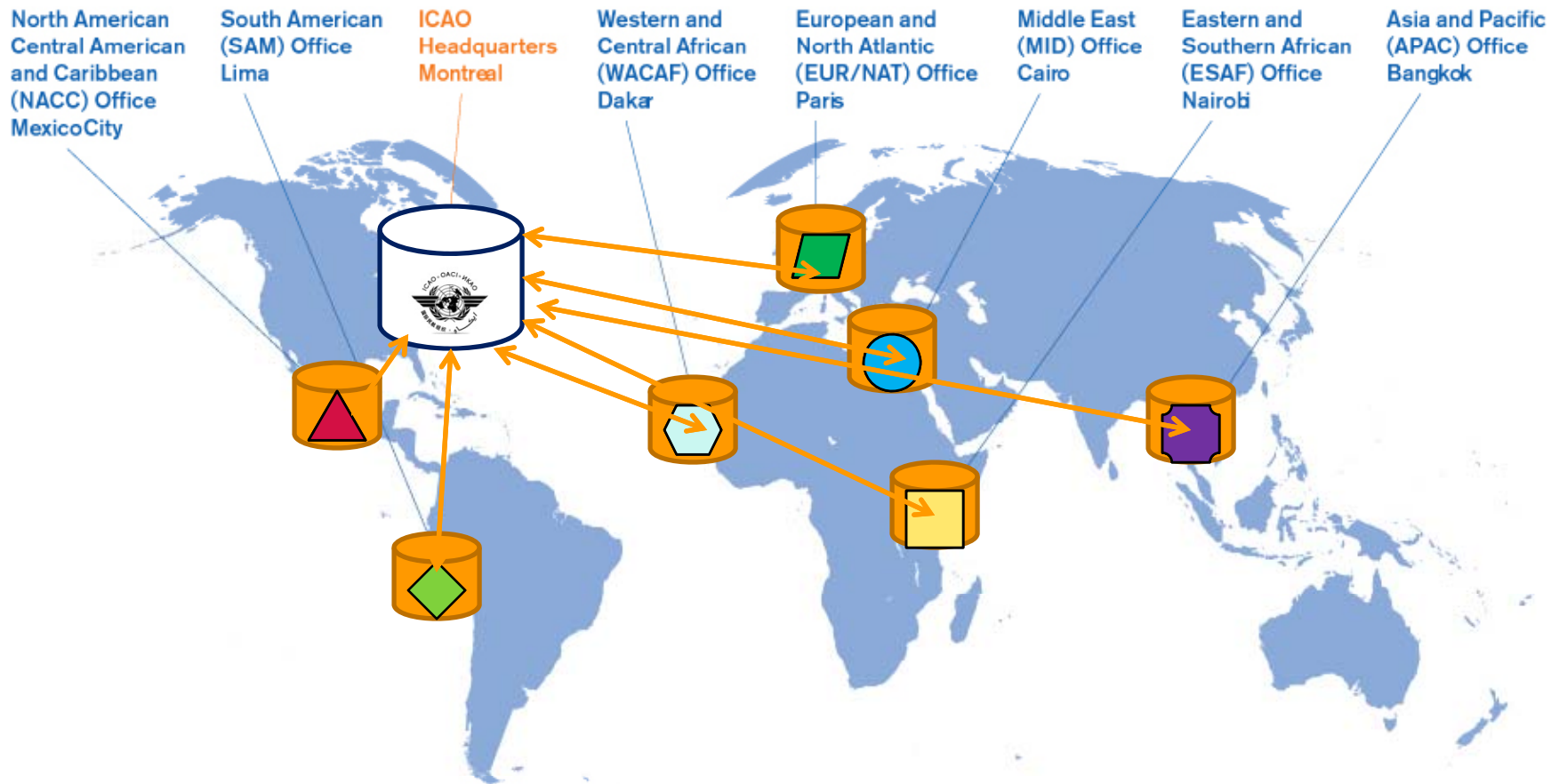
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Transition from individual regional databases to consolidated HQ database

Evolving Safety Reporting Capabilities: Air Navigation Deficiencies



Integrating AN Deficiencies



Evolving Safety Reporting Capabilities: Air Navigation Deficiencies



✈ Objective:

- **Consolidate** the AN Deficiencies reporting system
 - Have all regions reporting in single database
 - Will provide **consistent** reporting across all regions
 - Improve information **sharing**
- Allow for improved deficiency **categorizations** and **identification**



AN Deficiency Database Analysis

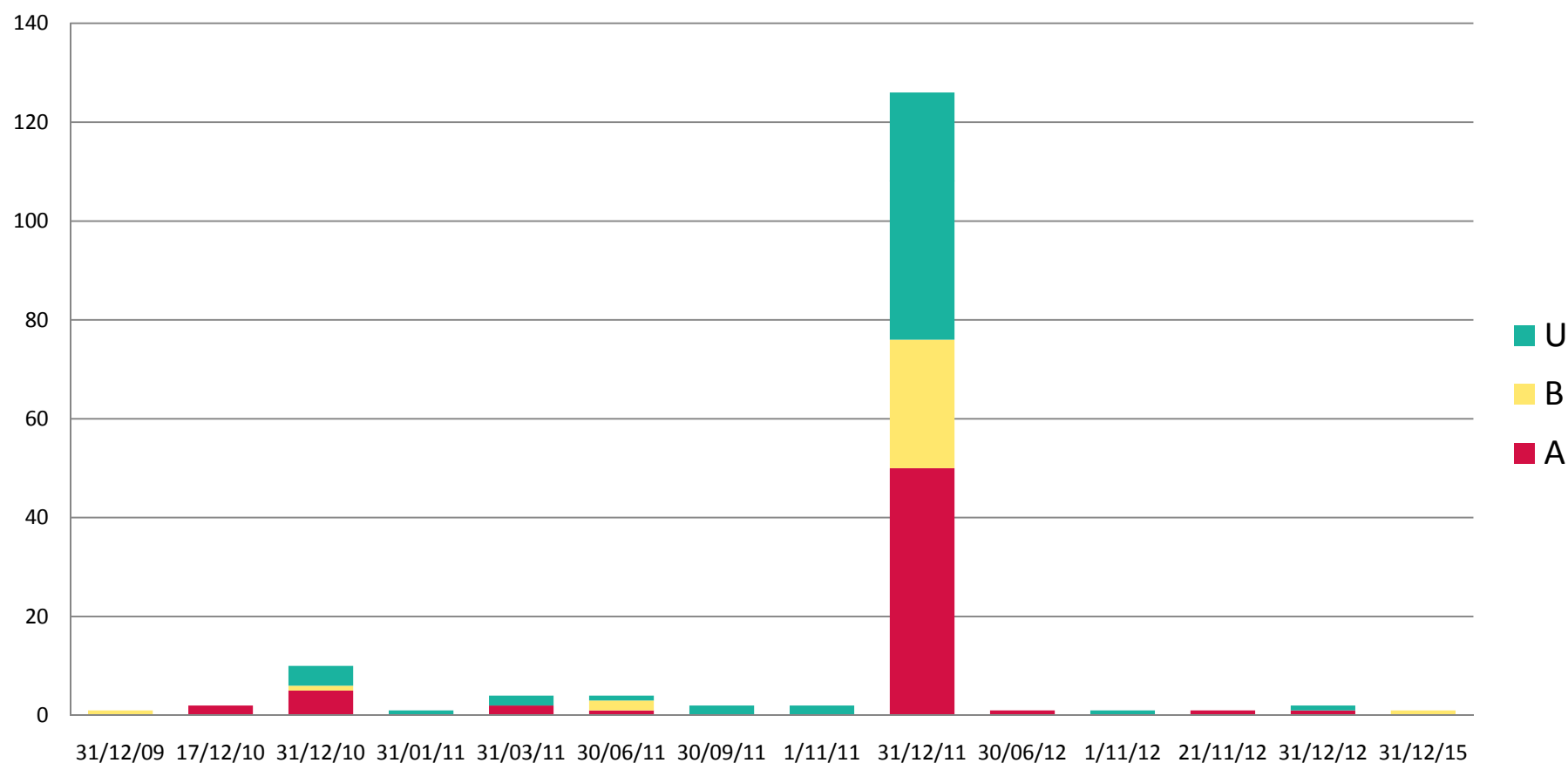
- ✈ MID AN Deficiency database extract analyzed
- ✈ Contents and structure
 - 158 Records
 - 16 fields

Some Conclusions

- ➔ Each deficiency can only be assigned one State and one action
- ➔ The status of action (25%, 50%, etc.) is not tracked
- ➔ Deficiency categorization needs improvement
- ➔ Action completion dates seem unrelated to the assigned priority (U,A or B) → see chart on next slide

Some Conclusions

Distribution of Estimated Completion Dates





Recommendations

- ➔ **Centralize and standardize** all regional databases and integrate with iSTARS
- ➔ Separate deficiencies and actions
- ➔ Better follow up on action status
- ➔ Include a **risk analysis** for each deficiency
- ➔ Improve deficiency description categories
 - ➔ To allow better analysis and identification of problematic areas
- ➔ Allow multiple State/region to be associated with a single deficiency



What is iSTARS

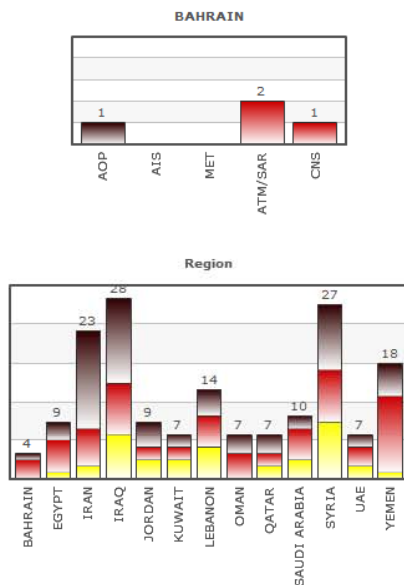
- Integrated safety trend analysis and reporting systems (iSTARS) is a web based system which groups together different safety related databases
- Distributed on three platforms: ICAO public website (<http://www.icao.int/istars>); ICAO secure portal; and ICAO Secretariat website
- Data includes;
 - Detailed USOAP audit results
 - Traffic data
 - All accidents and incidents
 - Regional Air Navigation deficiencies (planned)

iSTARS: Air Navigation Deficiencies Page



Dataset: AN Deficiencies
Last updated: 11/08/2011
Items: 158

Deficiency summary



Priority U(black), Priority A(red), Priority B(yellow)

AN Deficiencies

Ref	State	Subject	Status
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Priority : A (3)

Priority : U (1)

Air Navigation

Air Navigation Deficiencies

Description

The below list contains all action plans filed for a particular state. Edit a specific action by clicking on the reference number. You may add an action plan using the buttons on the left.

Select a State

BAHRAIN

AN Actions

Deficiency	Area	Action	Executing_body	EID	State	Status	Update	Edit
Count = 4								
Area : AOP (1)								
Area : ATM (2)								
Count = 2								
ATM/SAR/195-MID	ATM	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Bahrain	31/12/2011	BAHRAIN	Not determined		
ATM/SAR/198-MID	ATM	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Bahrain	31/12/2011	BAHRAIN	Not determined		

Area : CNS (1)

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