

International Civil Aviation Organization

# Implementing the changes – Seamless ATM Seminar/workshop

# Session 2: Seamless ATM Implementation Reporting Hyderabad, 21 Oct. 2013

# Reporting about Air Navigation System improvements



- Global level (A38-WP/87): performance monitoring
  - Reporting for the identified regional performance metrics is fundamental to success of the performance-based approach, will enable global correlation of status and expectations
  - ICAO website: status of implementation through dynamic and interactive charts
    - ad-hoc reports
    - transformation of the dataset into the Regional Performance Dashboard and the annual Global Air Navigation Report
    - Safety, Air Navigation, Environment
- Regional and national levels: **progress monitoring** 
  - For APANPIRG
  - Dataset: Regional Seamless ATM reporting Form
- Between global and regional levels: articulation in progress, no duplicated work for States is sought

# Reporting about Air Navigation System improvements



- Why not a single picture?
  - Global picture will allow global correlation of status and expectations, and will focus on regional performance gains: "customer oriented"
  - Regional picture will allow corrective actions by APANPIRG on implementation, and will focus on 1-level below regional implementation progress: "process oriented"
  - Different regional implementation status lead to different regional gap analysis
    - 18 items in ASBU B0
    - 42 items in Seamless ATM Phase I/Phase II
  - Both measurements should help managers to steer the Air Navigation System
    - Am I conducting my improvement process in the right way?
    - Does my improvement process yield the expected outcome performance gains - for my customers? (e.g. fuel consumption reduction)



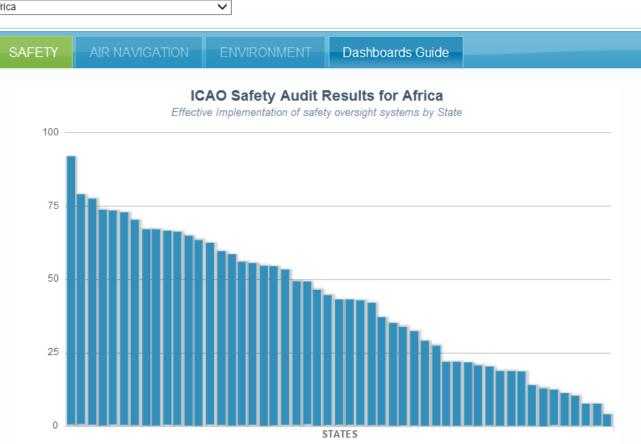
### **Regional Performance Dashboard**

ICAO > Safety > Regional Performance Dashboards - BETA -

#### **Regional Performance Dashboards - BETA -**

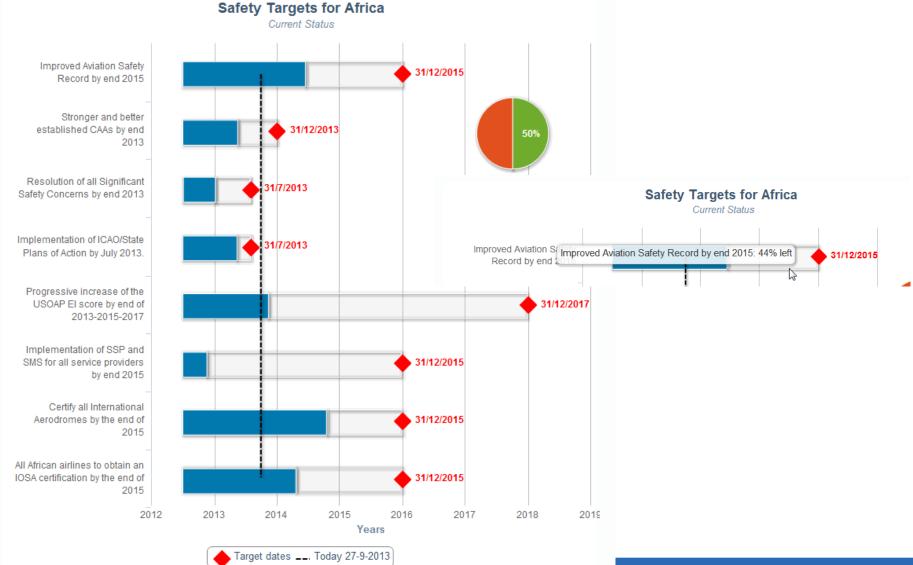
Select a Region:

Africa





# **Regional Performance Dashboard**

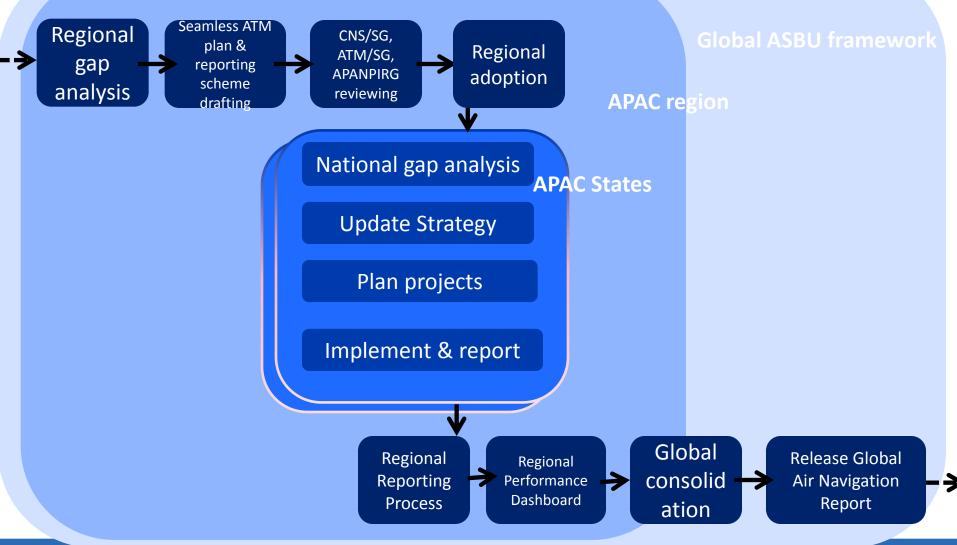




- Dataset: a combination of
  - Data collected from States
  - External data (example: Jeppesen data to derive information on PBN/CCO/CDO implementation)

### **Process overview**





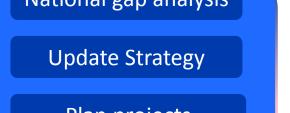


# **Regional Seamless Reporting Form**

		Seamless Plan reference	National gap analysis	Collection of current progress	Reaching the objective Phase I			Reaching the objective Phase II			Remarks (e.g. project scope, FIRs or routes concerned implementation, etc)	
٠	Para	ltem	Regional/ ASBU reference	Selected or not ( in the national plan)	through_	Date o impleme				Date of full implementation		
80		Air Traffic Flov Management/Collaborative Decision-Making (ATFM/CDM)	B0-NOPS	Selected	This file	June	2016	40%	June	2018	0%	virtual ATFM nodes commissioned in the ATFM netwo
90	7.3	Continuous Descent Operations (CDO)	B0-CDO	Selected	This file	February	2015	30%	December	2017	10%	
100	7.3	Continuous Climb Operations (CCO)	B0-CCO	Selected	This file	June	2015	80%	January	2018	30%	
110	7.5 ; 7.14 ; 7.16	Performance-based Navigation (PBN) Approach	B0-APTA	Selected	This file	Not yet planified			Not yet planified			
120		Standard Instrument Departures/Standard Terminal Arrivals (SID/STAR)	ΑΡΑ	C State	S This file	April	2008	100%				
130		Performance-based Navigation (PBN) Visual and Arrival Procedures	Regional	Selected	This file	January	January 2016					On our international airport

#### Projects planned for phase I and/or phase II

- Regional Seamless Reporting Form updated with planned dates and current progress for phase I and/or phase II
- Project Management
  Plans, etc (as per national standards/procedures)
- Seamless Implementation guidance



Plan projects

Implement & report

- Projects planned/conducted/terminat ed for phase I and/or phase II
- Regional Seamless Reporting Form updated with planned dates and current progress for phase I and/or phase II

#### National gap analysis



## **Regional Seamless Reporting Form**

#### **Regional Seamless Reporting Form**

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State/Administration:								General co	mment (optic	onal)			
Date of report:													
		Seamless Plan reference		National gap analysis	Collection of current progress	Reaching	the objective					Remarks (e.g. project scope, FIRs or routes concerned by implementation, etc)	Issues encountered/expected
*	Para	Item	Regional/ ASBU reference	Selected or not ( in the national plan)	through	Date o impleme		Current progress (in %)	Date of full Current progress (in %)		Current progress (in %)		
10	7.1	Apron Management	Regional	Selected	This file	June	2016	0%					
20	7.1	ATM-Aerodrome Coordination	Regional	Not selected	This file								
30	7.1;7.13	Aerodrome capacity	Regional		This file								
40	7.1	Safety and Efficiency of Surface Operations	B0-SURF		This file								
50	7.25 ; 7.45	Arrival Manager/Departure Management (AMAN/DMAN)	BO-RSEQ		This file								
60	7.44 ; 7.50	ATC Sector Capacity	Regional		This file								
70	7.2	Airport Collaborative Decision-Making (ACDM)	B0-ACDM	Not selected	This file								
80	7.27 ; 7.47	Air Traffic Flow Management/Collaborative Decision-Making (ATFM/CDM)	B0-NOPS	Selected	This file	June	2016	40%	June	2018	0%	virtual ATFM nodes commissioned in the ATFM network	
90	7.3	Continuous Descent Operations (CDO)	80-CDO	Selected	This file	February	2015	30%	December	2017	10%		
100	7.3	Continuous Climb Operations (CCO)	80-000	Selected	This file	June	2015	80%	January	2018	30%		
110	7.5;7.14;7.16	Performance-based Navigation (PBN) Approach	BO-APTA	Selected	This file	Not yet planified			Not yet planified				
120	7.4;7.15	Standard Instrument Departures/Standard Terminal Arrivals (SID/STAR)	80-000	Selected	This file	April	2008	100%					
130	7.19	Performance-based Navigation (PBN) Visual and Arrival Procedures	Regional	Selected	This file	January	2016	20%				On our international airport	
140	7.9 ; 7.22	Performance-based Navigation (PBN) Routes	BO-FRTO		This file								
150	7.8	Performance-based Navigation (PBN) Airspace	Regional		This file								
160	7.52 ; 7.54	Safety Nets	BO-SNET		This file								
170	7.7;7.21	Airborne Safety Systems	BO-ACAS		This file								
180	7.6 ; 7.23 ; 7.24	ADS-B OUT	BD-ASUR		This file								
190	7.28	Airspace classification	Regional		This file								
200	7.1	Flight Level Orientation Schemes (FLOS)	Regional		This file								
210	7.36 ; 7.40	Flight Level Allocation Schemes (FLAS)	Regional		This file								
220	7.35	ATS Inter-facility Data-link Communications (AIDC)	BO-FICE		This file								
230	7.29 ; 7.46	Automated Transfer of Control in an ATSU	Regional		This file								
240	7.34 ; 7.48	ATS Surveillance data sharing	Regional		This file								
250	7.37;7.43;7.53	ATM systems enabling optimal PBN operations	BO-APTA		This file								
260	7.3	ATC Horizontal separation	Regional		This file								
270	7.32	Multi-sensor integrated surveillance (ADS-B, MLAT, radar)	BD-ASUR		This file								
280	7.33	ADS-C, CPDLC	80-TBO		This file								
290	7.33	UPR and DARP	80-FRTO		This file								
300	7.38 ; 7.51	Aeronautical Information Management	B0-DATM		State AIS AIM Transition Table								
310	7.26 ; 7.39	Meteorological Information	BO-AMET		This file								
320	7.41;7.55	ATM Managers' Performance	Regional		This file								
330	7.41	ATC simulators performance	Regional		This file								
340	7.41	Safety assessment of changes	Regional		This file								
350	7.41	ATM Operators' performance	Regional		This file								
360	7.11	Civil Military use of SUA	BO-FRTO		This file								
370	7.42	Strategic Civil Military coordination	Regional		This file								
380	7.42	Tactical Civil Military coordination	Regional		This file								
390	7.42	Civil Military system integration	Regional		This file								
400	7.42	Civil Military navaids joint provision	Regional		This file								
410	7.42	Civil Military common training	Regional		This file								
420	7.42	Civil Military common procedures	Regional		This file								

Areas with white background : provided for identification/ information

Areas with yellow background: active, to be filled in by States, some fields come with data control

Design not finalized



# **Regional Seamless Reporting Form**

	Seamless Plan reference										
#	Para	Regional/ ASBU reference									
70	7.2	Airport Collaborative Decision-Making (ACDM)	B0-ACDM								
80	80 7.27 ; 7.47 Air Traffic Flow Management/Collaborative Decision-Making (ATFM/CDM)										

National gap analysis Collection of current progres		Reaching	the objective	e Phase I	Reaching the objective Phase II			
Selected or not ( in the national plan)	through	Date of full implementation		Current progress (in %)	Date o impleme	Current progress (in %)		
Not selected	This file							
Selected	This file	June	2016	40%	June	2018	0%	

#### Identification

#### Reporting

Date of full implementation may be in the past also

Current progress ranks from 0% to 100% by steps of 10%

Remarks (e.g. project scope, FIRs or routes concerned by implementation, etc)	Issues encountered/expected	
		Rer
		rep
		Free t
virtual ATFM nodes commissioned in the ATFM network		

#### marks/issues porting

text

		Priorities and Targets				
Regional Priority	Objective Nov. 2015	In Objective Nov. 2018		In	Progress	e e
2	Operate an A-CDM system serving the MTF and busiest city pairs	All high density aerodromes of your State				(Expandable area)
	all high density FIRs supporting the busiest Asia/Pacific traffic flows and high density aerodromes	State	all FIRs supporting Major Traffic Flows in the Region		Percentage of your FI ACCs utilise AT	



### **Progress monitoring**

- Design not finalized
  - Workshops/seminars inputs
  - Ongoing alignment with performance monitoring
  - Automation possibilities
- Regional picture still to be defined
- Dataset: a combination of data collected from States
- Some progress measurements may be computed by ICAO RO, in which case reporting would still be made through current process
  - Example: DATM Imp. progress, based on State AIS AIM Transition table
- Reporting cycle should be 6 months



• Any questions?