



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

*A United Nations Specialized Agency*

WKSH/ASBU/NAIROBI/2013-PPT01

# **ANConf/12- Outcome and Follow-up**

Air Navigation Bureau

**WORKSHOP ON ASBU FRAMEWORK: ALIGNMENT OF REGIONAL AND NATIONAL PERFORMANCE PLANS, PLANNING,  
IMPLEMENTATION, MONITORING AND REPORTING  
(NAIROBI, KENYA, 21-25 OCTOBER 2013)**

# 12<sup>th</sup> Air Navigation Conference



- **10** Days
- **232** Conference Recommendations
- **153** Working Papers (WP)
- **62** Information Papers (IP)
- **1,030** Participants
- **120** States
- **30** International Organizations
- **25+** Media Articles

# 12<sup>th</sup> Air Navigation Conference

## Summary of Discussions



- Common understanding for future air navigation system
- Harmonization of ATM modernization
- Formalize future of infrastructure & equipage
- Endorsement of revised ICAO Global Air Navigation Plan (GANP)
- Agreement of Aviation System Block Upgrades (ASBU)



# AN-Conf/12 : Outcomes

## *Item 1 Strategic Issues in Support of One Sky*



- Revised draft Fourth Edition of the Global Air Navigation Plan (Doc 9750, GANP)
- Associated technology roadmaps



# AN-Conf/12 : Outcomes

## Item 2: Improving Airport Performance



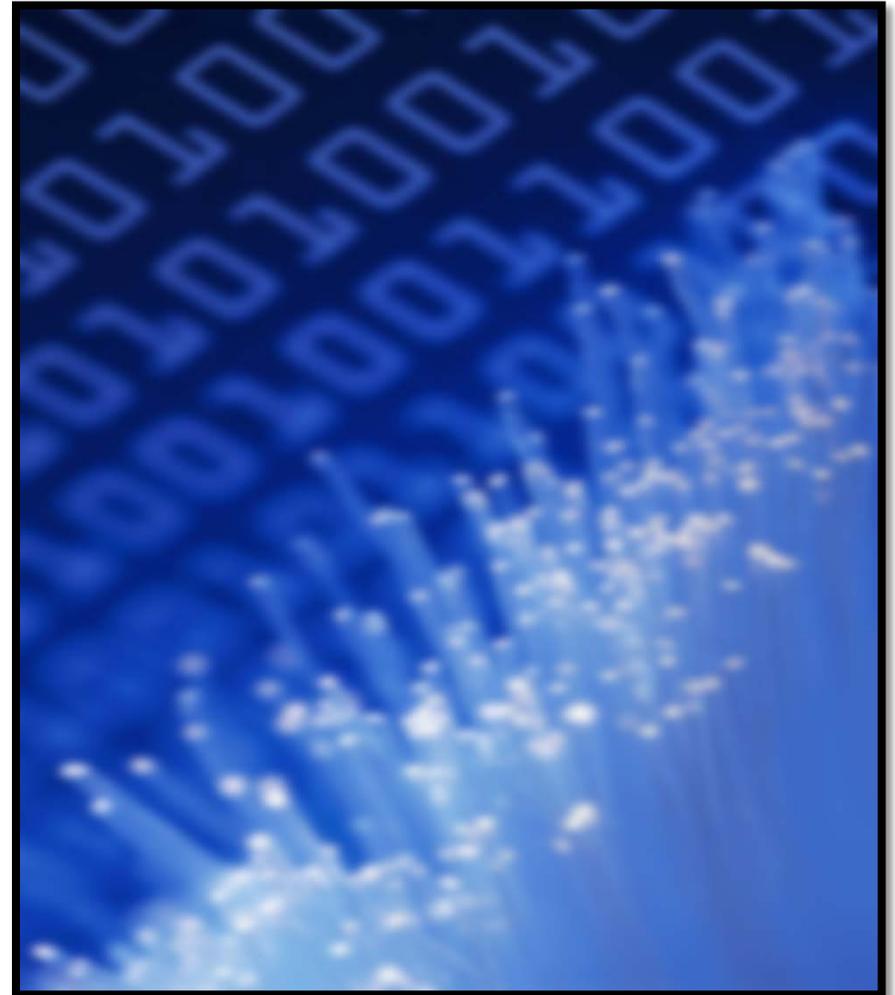
- Conference supported module on:
  - Integration of arrival/departure/surface management
  - Increasing use of PBN and GBAS based instrument procedures
  - Optimized management of wake turbulence separation
  - Enhanced surface surveillance
  - Airport collaborative decision-making

# AN-Conf/12 : Outcomes

## Item 3: Interoperability & Data – SWIM



- Conference supported module on:
  - Application of SWIM
  - FF-ICE
  - Integration of aeronautical and ATM information



# AN-Conf/12 : Outcomes

## Item 4: Optimum Capacity & Efficiency



- Conference supported module on:
  - Network Operations
  - Airborne separation
  - Airborne collision avoidance systems & ground-based safety nets
  - The integration of remotely piloted aircraft into non-segregated airspace
  - Meteorological information supporting enhanced operational safety and efficiency



- Conference supported module on:
  - Improved flexibility and efficiency in descent profiles
  - Improved flexibility and efficiency in climb profiles
  - Data link surveillance and communications supporting TBO
  - TBO– 4D TRAD



# AN-Conf/12 : Outcomes

## Item 6: Future Direction



- *Conference recommendations on:*
  - Way forward in implementing updated GANP by PIRGs and States
  - Development of Regional eANP
  - In human performance context, determined where there may be need for global standardization or future emphasis
  - Multi-party approaches to standards development that take advantage of coordination and collaboration within the ICAO/State relationship, and between ICAO and standards bodies



# The Big Picture

## 12<sup>th</sup> Air Navigation Conference



### Important Developments

- **4** ICAO Milestones
  - Global Air Navigation Plan (GANP)
  - 2012 Safety Report
  - ASBU Block 0 iKit
  - Air Operator Certificates (AOC) iKIT
  
- **8** Agreements Signed



ICAO-FSF MoC	Singapore- MITRE MoU	Singapore- Airbus Prosky MoC	ASECNA - France AFI FPP
Singapore-FAA Sol	Singapore- SESAR JU MoC	India - MITRE MoU	ASECNA, ICAO, Thales, INEO



# Next Steps



- **Environmental & Operational Assessments**

- *Committee on Aviation Environmental Protection (CAEP)* modeling environmental benefits of ASBU Block 0 modules. More information by the end of 2013
- *IATA* assessing the operational benefits

- **Technical Work**

- Air Navigation Information Management (IM) Divisional Meeting (2015)
- Aviation Data Link Symposium: Now and Tomorrow (2015)



# Next Steps

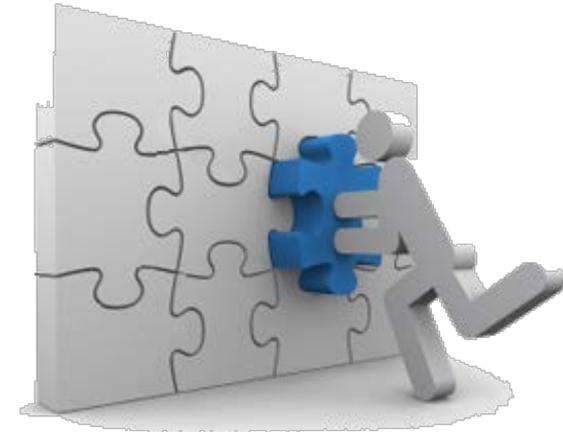


- **Operational Policies**

- Incentives to allow early benefits of new technologies and procedures (including economic incentives)

- **Financing Policies**

- Reviewed by the *Air Transport Conference (AT Conf/6) held in March 2013*
- Task assigned to service providers, operators and economists



# Next Steps: Advanced ATM Symposium

*Today's Opportunities for Saving Fuel and Reducing Emissions*



*4-6 November 2013, ICAO Headquarters, Montréal*

*Focus on*

- Measurable improvements
- Fuel savings & reducing emissions
- Global efficiency
- Cost effectiveness

# Next Steps: Advanced ATM Symposium

*Today's Opportunities for Saving Fuel and Reducing Emissions*



- Showcase of achievements in ATM since 11<sup>th</sup> Air Navigation Conference
  - Experience sharing
  - Learning and training
- Environmental impact
  - Measure it
  - Publicize it
- Four priority areas
  - CDM/ATFM
  - Continuous Operations (CCO) / Continuous Descent Operations (CDO)
- Use of the ICAO Fuel Savings Estimation Tool (IFSET)

# Next Steps: BUDDS



- An end-to-end system demonstration of new air traffic management concepts
- States and Industry are invited to play a part in this event by showing their latest developments and best practices in the field of air traffic management
- Planned in 2014

# Next Steps: BUDDS



- Intended Outcomes
  - International exposure to potential systems and technologies to support Block 0 implementation
  - Identification of: Business case benefits of implementing Block 0 and Economic opportunity cost of not implementing Block 0
  - Reinforcement of Block 0 implementation strategies (ASBU iKITS)
  - Agreed concept of Operations (CONOPS) for Block 1 to enable the appropriate standards and procedures to be developed
  - Demonstration of intended performance scenarios for Blocks 1, 2 and 3

## AN-CONF/12 Recommendation: 6.12

- **Development of SARPs, procedures and guidance material**
  - a) Improve its project management and coordination of contributing ICAO panels, study groups and other groups tasked with the development of ICAO provisions

# Next Steps by PIRGs and States



## Recommendation 6/1 – Regional performance framework – planning methodologies and tools

That States and PIRGs:

- a) finalize the alignment of regional air navigation plans with the Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP) by May 2014;
- b) focus on implementing aviation system block upgrade Block 0 Modules according to their operational needs, recognizing that these modules are ready for deployment;

# Next Steps by PIRGs and States



## Recommendation 6/1 – Regional performance framework – planning methodologies and tools

That States and PIRGs:

- c) use the eANPs as the primary tool to assist in the implementation of the agreed regional planning framework for air navigation services and facilities;
- d) involve regulatory and industry personnel during all stages of planning and implementation of aviation system block upgrade modules;
- e) develop action plans to address the identified impediments to air traffic management modernization as part of aviation system block upgrade planning and implementation activities;

# AN-Conf/12 : Follow-up action



- **Follow-up by PIRGs**
  - Every PIRG meeting in 2013 will be presented with an action plan to implement relevant Recommendations
- **Follow-up by States**
  - A State letter by the SG will be issued in May 2013 with an action plan to implement relevant Recommendations
- **Follow-up by Secretariat**
  - The ANC will be reviewing and allocating in May 2013 the relevant Recommendations to Expert Groups or the Secretariat for developing SARPs and guidance material



North American  
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and Caribbean  
(NACC) Office  
Mexico City

South American  
(SAM) Office  
Lima

ICAO  
Headquarters  
Montreal

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) Office  
Bangkok

Thank You

A world map is shown in a light blue color. Eight colored dots are placed on the map, each connected by a thin line to a text label describing an ICAO office. The dots are: a blue dot in North America (Mexico City), a blue dot in South America (Lima), an orange dot in North America (Montreal), a blue dot in West Africa (Dakar), a blue dot in Europe (Paris), a blue dot in the Middle East (Cairo), a blue dot in East Africa (Nairobi), and a blue dot in Southeast Asia (Bangkok). The Montreal dot is highlighted with an orange color, matching the text label.