



INTERNATIONAL CIVIL AVIATION ORGANIZATION

A United Nations Specialized Agency

Keynote Address on the
**ENRI International Workshop on ATM/CNS
(EIWAC)**

Nancy Graham

Director, Air Navigation Bureau
International Civil Aviation Organization (ICAO)

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The Big Picture

Post 12th 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

The Big Picture

Post 12th 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 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**

- On the Agenda of the *Air Transport Conference (AT Conf/6)*
- Expect tasking to service providers, operators and economists



Next Steps



- 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

Next Steps



- **Intended Outcomes**

- International exposure to potential systems and technologies to support Block 0 implementation
- Identification of:
 - Business case benefits of implementing Block 0
 - 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

Next Steps



- **Standardization Roadmap**

B0-05, B1-05

B0-05: Improved Flexibility and Efficiency in Descend Profiles (CDOs)

Deployment of performance-based airspace and arrival procedures that allow the aircraft to fly their optimum aircraft profile taking account of airspace and traffic complexity with continuous descent operations (CDOs)

B1-05: Improved Flexibility and Efficiency in Descend Profiles (OPDs)

Deployment of performance-based airspace and arrival procedures that allow aircraft to fly their optimum aircraft profile taking account of airspace and traffic complexity with Optimized Profile Descents (OPDs)

Module #	Standard Title	Date of Availability	Organization	Action	Status
B0-05	DOC 4444 PANS ATM	Already available (2012)	ICAO	N/A	N/A
B1-05	Document 1234	2018	Org#1	Update	Started
B1-05	Document 5678	2018	Org#2	TBD	N/A
B1-05	DOC9931 – Continuous Descent Manual	2018	ICAO	TBD	N/A

Next Steps



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



North American
Central American
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

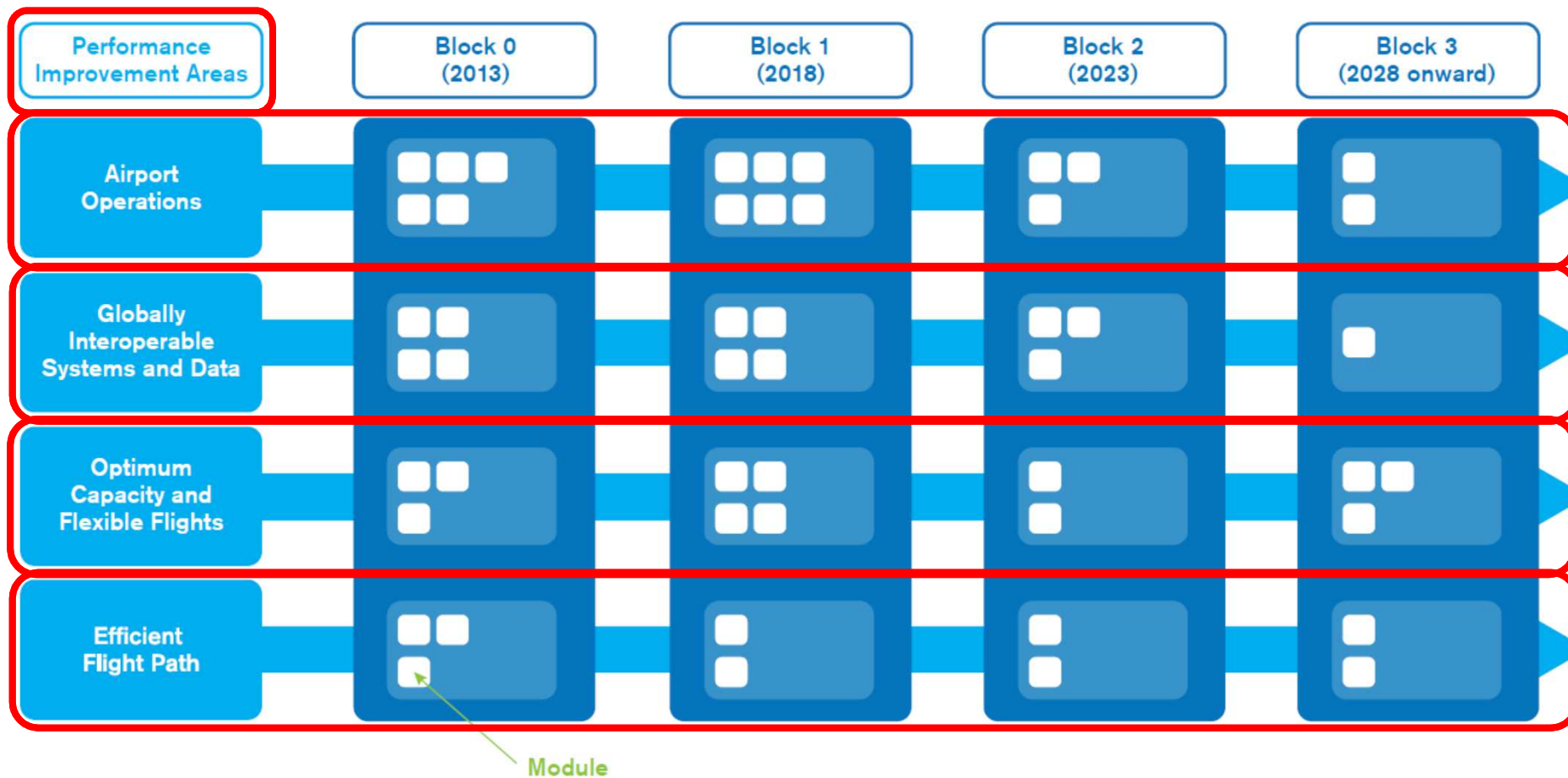
Asia and Pacific
(APAC) Office
Bangkok

Thank You



BACKUP SLIDES

Operational Improvements at the Service of States



Making the Most of What We Have Today: *Block 0*



Electronic Infor

Continuous Descent Approach Procedure

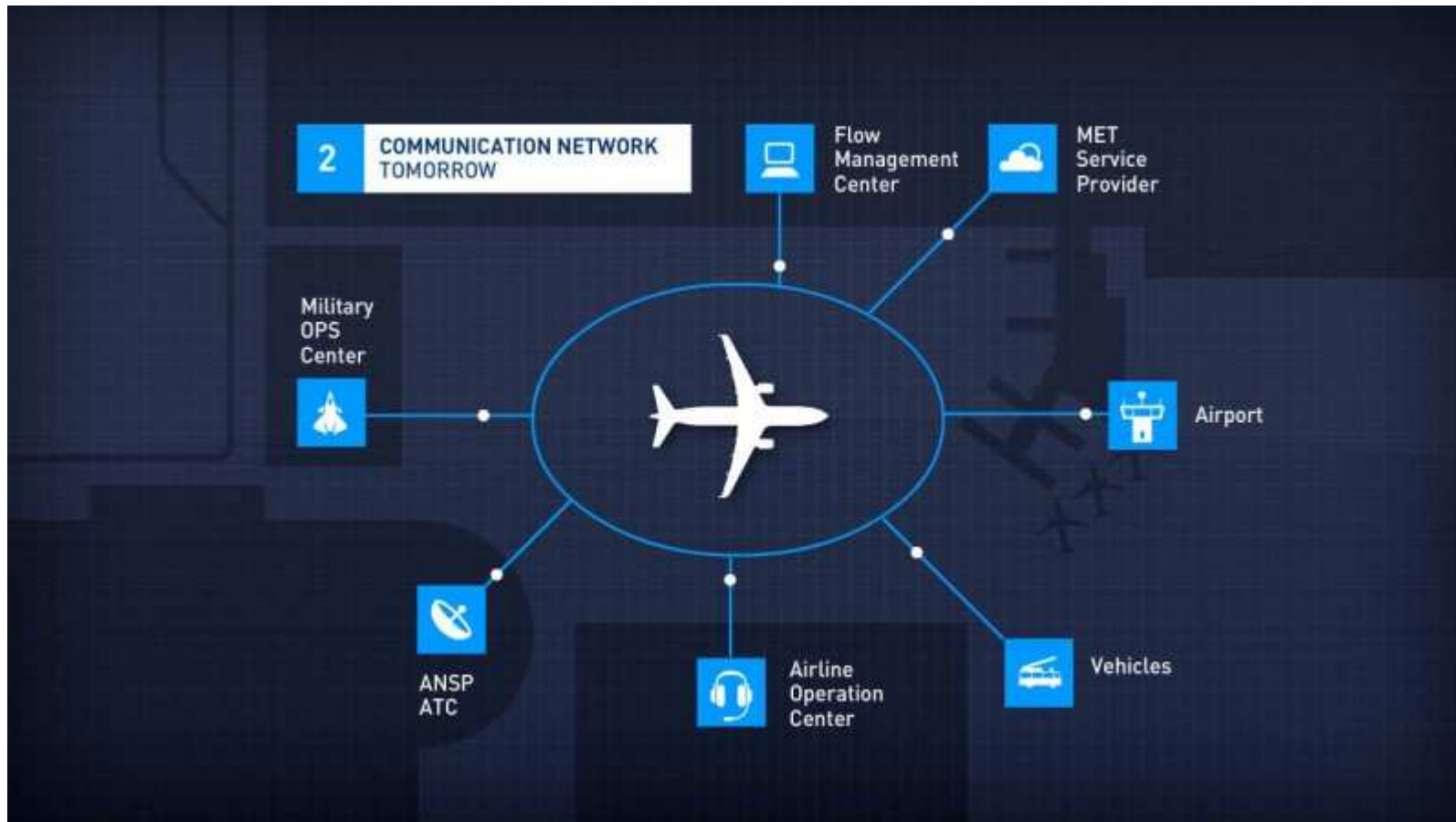
Green Illustrates Aircraft Flying Optimum Near-idle Path

15,000 ft msl

100 FT 8750 ft

Courtesy of FAA

Defining the Short-term Future: *Block 1*



Courtesy of EUROCONTROL

Defining the Medium & Long-term Future: *Blocks 2 & 3*

