



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**APAC REGIONAL OFFICE
ICAO SPECIAL IMPLEMENTATION PROJECT (SIP)**

**WORKSHOP ON PREPARATIONS FOR AN-CONF/12 – ASBU METHODOLOGY
(BANGKOK, THAILAND, 14-18 May 2012)**

PERFORMANCE REPORT

OBJECTIVE	<ul style="list-style-type: none"> Enhance the knowledge base of civil aviation professionals from States of the ICAO APAC Region in planning and implementation of air navigation systems on the basis of Aviation System Block Upgrades (ASBU) methodology and also support States in their preparations for participation in the upcoming An-Conf/12.
MECHANISM	<ul style="list-style-type: none"> Conducted a workshop in Bangkok from 14 to 18 May 2012; and Resources comprised of two professionals from the Air Navigation Bureau, ICAO HQ, supported by professionals of the ICAO APAC Regional Office.
SCOPE	<ul style="list-style-type: none"> Workshop comprised of three modules: <ol style="list-style-type: none"> Strategic issues - ASBU initiative and Performance Framework ASBU methodology - Planning and Implementation; and Hands-on exercises - Development of National ASBU Planning Framework and use of ICAO Fuel Savings Estimation Tool (IFSET) for estimating fuel savings and corresponding environmental benefits as a result of operational improvements.
PARTICIPANTS	<ul style="list-style-type: none"> 64 participants, representing 12 Administrations of the ICAO APAC Region and two international organizations (CANSO & IATA) participated in the workshop. The list of participants is contained in the Attachment 1.
OUTPUT	<ul style="list-style-type: none"> Understanding of the ASBU methodology in planning and implementation of air navigation systems and its relationship with regional and national planning; and The participants, as a part of hands-on exercise, developed sample national performance framework containing Air Navigation Report Forms for a number of ASBU Block 0 Modules and using IFSET estimated fuel efficiency and environmental benefits for the operational improvements.

<p>OUTCOME</p>	<ul style="list-style-type: none">• The participants gained a better understanding of ASBU methodology for planning and implementation of air navigation systems and use of IFSET for estimating fuel efficiency and environmental benefits for the operational improvements;• The current ongoing regional and national air navigation planning is consistent with 18 Modules of ASBU Block 0;• As a part of transition to ASBU methodology, the APAC Regional Performance-based Air Navigation Plan and the National Air Navigation Plans will be modified to reflect this methodology; and• Recommendations developed by the workshop are provided in the Attachment 2 to this Report.
-----------------------	---

— END —

SPECIAL IMPLEMENTATION PROJECT (SIP)
WORKSHOP ON PREPARATION FOR AN-CONF/12 – ASBU METHODOLOGY
Bangkok, Thailand
14 – 18 May 2012

Attachment 1 to the Report

LIST OF PARTICIPANTS

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
AUSTRALIA (2)		
Mr. Ed Williams	Airservices Australia GPO Box 367 Canberra, ACT 2601 <u>AUSTRALIA</u>	Tel: +61 (2) 6268 5442 MB: +61 411 251 461 Fax: +61 (2) 6268 5709 E-mail: Ed.Williams@airservicesaustralia.com
Mr. Jorge Woods	Airservices Australia GPO Box 367 Canberra, ACT 2601 <u>AUSTRALIA</u>	Tel: +61 4343 61131 Fax: +61 6217 1500 E-mail: Jorge.Woods@airservicesaustralia.com
BANGLADESH (3)		
Mr. Md Ramij Uddin	Assistant Director, CATC Civil Aviation Authority of Bangladesh Headquarters Office Kurmitola, Dhaka 1229 <u>BANGLADESH</u>	Tel: +880 891 4870 Fax: E-mail: ramijuddin.ats@gmail.com
Mr. Md Shamsul Haque	Senior Aerodrome Officer ATS Division Civil Aviation Authority of Bangladesh Headquarters Office Kurmitola, Dhaka 1229 <u>BANGLADESH</u>	Tel: +880 (2) 891 4810 Ext. 3409 Fax: +880 (2) 891 3322 E-mail: shamsul_caab@yahoo.com
Mr. Yamter Hossain	Senior Aerodrome Officer Civil Aviation Authority of Bangladesh Headquarters Office Kurmitola, Dhaka 1229 <u>BANGLADESH</u>	Tel: +880 (2) 891 4870 MB: +880 1712 181013 Fax: E-mail: akhtercaab@gmail.com
CHINA (4)		
Mr. Li Xin	Deputy Director, Strategic Development Division ATMB of CAAC No. 12, Zhonglu, Third Ring Road Chaoyang District Beijing 100022 <u>PEOPLE'S REPUBLIC OF CHINA</u>	Tel: +86 (10) 8778 6932 Fax: +86 (10) 8778 6937 E-mail: lixin@atmb.net.cn

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
Ms. Zhang Jing	Director of International Cooperation Division ATMB of CAAC No. 12, Zhonglu, Third Ring Road Chaoyang District Beijing 100022 <u>PEOPLE'S REPUBLIC OF CHINA</u>	Tel: +86 (10) 8778 6051 Fax: +86 (10) 8778 6055 E-mail: cheny@atmb.net.cn
Ms. Wang Rui	Assistant of International Cooperation Division ATMB of CAAC No. 12, Zhonglu, Third Ring Road Chaoyang District Beijing 100022 <u>PEOPLE'S REPUBLIC OF CHINA</u>	Tel: Fax: E-mail:
Mr. Shi Le	Assistant of Strategic Development Division ATMB of CAAC No. 12, Zhonglu, Third Ring Road Chaoyang District Beijing 100022 <u>PEOPLE'S REPUBLIC OF CHINA</u>	Tel: Fax: E-mail:
HONG KONG, CHINA (5)		
Mr. Li Tin Chui, Simon	Assistant Director-General of Civil Aviation Hong Kong Civil Aviation Department 3/F, Dragonair House II Tung Fai Road Hong Kong International Airport <u>HONG KONG, CHINA</u>	Tel: +852 2591 5000 Fax: +852 2845 7160 E-mail: stcli@cad.gov.hk
Mr. Li Luen-on	Chief Experimental Officer Hong Kong Observatory 134A Nathan Road <u>HONG KONG, CHINA</u>	Tel: +852 2926 8209 Fax: +852 2375 2645 E-mail: loli@hko.gov.hk
Ms. Wong Shan Ngar, Sarah	Acting Senior Operations Officer Hong Kong Civil Aviation Department Air Traffic Management Division 4/F, Air Traffic Control Complex Hong Kong International Airport <u>HONG KONG, CHINA</u>	Tel: +852 2910 6443 Fax: +852 2910 0186 E-mail: ssnwong@cad.gov.hk
Mr. Samuel Ng	Evaluation Officer Hong Kong Civil Aviation Department Air Traffic Management Division 4/F, Air Traffic Control Complex Hong Kong International Airport <u>HONG KONG, CHINA</u>	Tel: +852 2910 6451 Fax: +852 2910 0186 E-mail: sng@cad.gov.hk
Mr. Tsao Chi Wai, Felix	Electronic Engineer Hong Kong Civil Aviation Department 3/F, Dragonair House, II Tung Fai Road Hong Kong International Airport <u>HONG KONG, CHINA</u>	Tel: +852 2591 5131 Fax: +852 2845 7160 E-mail: cwtsao@cad.gov.hk

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
DPR KOREA (4)		
Mr. Pak Yong Chol	Director, Air Traffic Management Department General Administration of Civil Aviation Sunan District Pyongyang <u>DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA</u>	Tel: +850 (2) 1811 1999 Ext. 8108 Fax: +850 (2) 2381 4410 E-mail: gaca@silibank.NET.KP
Mr. Ri Hong Sung	Chief, Navajds Section Air Traffic Management Department General Administration of Civil Aviation Sunan District Pyongyang <u>DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA</u>	Tel: +850 (2) 1811 1999 Ext. 8108 Fax: E-mail: gaca@silibank.NET.KP
Mr. Jong Kun Chol	Chief, External Relations Department General Administration of Civil Aviation Sunan District Pyongyang <u>DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA</u>	Tel: +850 (2) 1811 1999 Ext. 8108 Fax: E-mail: gaca@silibank.NET.KP
Mr. Kim Sok Chol	Senior Official, International Organization Department General Administration of Civil Aviation Sunan District Pyongyang <u>DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA</u>	Tel: +850 (2) 1811 1999 Ext. 8108 Fax: E-mail: gaca@silibank.NET.KP
INDIA (4)		
Mr. A.K. Dutta	General Manager (ATM) Airports Authority of India Corporate HQs New Delhi 110003 <u>INDIA</u>	Tel: +91 (11) 2461 0776 Fax: +91 (11) 2461 0776 E-mail: akdutta@aai.aero
Mr. Y.K. Rohilla	Deputy General Manager (ATM) Airports Authority of India Corporate HQs New Delhi 110003 <u>INDIA</u>	Tel: +91 (11) 2461 0536 Fax: +91 (11) 2461 5508 E-mail: yogendrarohilla@aai.aero
Mr. G. Shiv Kumar	Deputy General Manager (ATM) Airports Authority of India Corporate HQs New Delhi 110003 <u>INDIA</u>	Tel: +91 (11) 2462 1772 Fax: E-mail: gshivkumar@aai.aero
Mr. R.R. Bassi	Joint General Manager (CNS-P) Airports Authority of India Corporate HQs New Delhi 110003 <u>INDIA</u>	Tel: +91 (11) 246 9 2913 Fax: E-mail: Ravi_Bassi@hotmail.com

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
INDONESIA (5)		
Mrs. Novi Julpah	Staff of ATM Division Directorate General of Civil Aviation Jl. Medan Merdeka Barat No. 8 Jakarta 10110 <u>INDONESIA</u>	Tel: +62 8777 417 2229 Fax: +62 350 7569 E-mail: novi.zulfah@gmail.com
Mr. Zainal Arifin Harahap	Staff of ATM Division Directorate General of Civil Aviation Jl. Medan Merdeka Barat No. 8 Jakarta 10110 <u>INDONESIA</u>	Tel: +62 81280 111551 Fax: +62 350 7569 E-mail: cokycok@gmail.com
Mr. Dwi Pramono Hadi Shaiman	Air Traffic Control Supervisor PT Angkasa Pura II Branch Sultan Syarif Kasim II Pekanbaru <u>INDONESIA</u>	Tel: +62 0761 72891 Fax: +62 0761 72891 E-mail: duwipeha@yahoo.co.id
Mr. Ngoyem Patriano Musantara	Air Traffic Control Officer PT Angkasa Pura II Soekarno-Hatta International Airport Gedun 611 Tower <u>INDONESIA</u>	Tel: +62 (21) 550 6102 Fax: +62 (21) 550 6106 E-mail: patrianon@gmail.com
Mr. Teguh Harnomo	ATS Operation PT Angkasa Pura II Bandara Soekarno-Hatta Gedung 600, Lt. 3 Air Traffic Services <u>INDONESIA</u>	Tel: +62 (21) 550 6152 Fax: +62 (21) 550 6106 E-mail: teguh.harnomo@angkasapura2.co.id tharnomo@yahoo.com
JAPAN (4)		
Mr. Atsushi Kasai	Chief Official of Air Navigation Services Planning Division Japan Civil Aviation Bureau Ministry of Land, Infrastructure, Transport and Tourism 2-1-3, Kasumigaseki Chiyoda-ku Tokyo 100-8918 <u>JAPAN</u>	Tel: +81 (3) 5253 8739 Fax: +81 (3) 5253 1664 E-mail: kasai-a2d9@mlit.go.jp
Mr. Nobuo Hongo	Chief Official of Communications, Navigation and Surveillance Planning Office Japan Civil Aviation Bureau Ministry of Land, Infrastructure, Transport and Tourism 2-1-3, Kasumigaseki Chiyoda-ku Tokyo 100-8918 <u>JAPAN</u>	Tel: +81 (3) 5353 8742 Fax: +81 (3) 5253 1663 E-mail: hongou-n299@mlit.go.jp

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
Mr. Atsushi Senoguchi	Senior Researcher Electronic Navigation Research Institute Air Traffic Management Department 7-42-23, Jindaiji Higashi-machi Chofu, Tokyo 180-0012 <u>JAPAN</u>	Tel: +81 422 41 3185 Fax: +81 422 70 8952 E-mail: senoguchi@enri.go.jp
Mr. Katsuya Fukumoto	Flight Standards Manager All Nippon Airways Co., Ltd. 3-3-2, Haneda Airport Otak-ku Tokyo 144-8515 <u>JAPAN</u>	Tel: +81 (3) 5757 5732 Fax: +81 (3) 5757 5404 E-mail: k-fuku@ana.co.jp
MALAYSIA (2)		
Mr. Ahmad Nizar Zolfakar	Director Department of Civil Aviation Air Traffic Management Section No. 27, Persiaran Perdana Level 4, Block Podium B, Precinct 4 Federal Government Administration Centre 62618 Putrajaya <u>MALAYSIA</u>	Tel: +603 8871 4227 Fax: +603 8881 0510 E-mail: ahmad_nizar@dca.gov.my
Capt. Zainal Abidin Aidid	Senior Assistant Director Department of Civil Aviation Flight Operations Sector No. 27, Persiaran Perdana Level 4, Block Podium B, Precinct 4 Federal Government Administration Centre 62618 Putrajaya <u>MALAYSIA</u>	Tel: +603 8871 4203 Fax: +603 8871 4334 E-mail: aidid@dca.gov.my
REPUBLIC OF KOREA (4)		
Mr. Dong-Cheol Jang	Deputy Director Air Traffic Management Division Office of Civil Aviation Ministry of Construction and Transportation 1-8 Byeoryang-dong Gwacheon-si Geonggi-do 427-800 <u>REPUBLIC OF KOREA</u>	Tel: +82 (2) 2669 6421 Fax: +82 (2) 6342 7289 E-mail: djang@korea.kr
Ms. Heehyun Jenny Kim	Assistant Director Air Traffic Management Division Office of Civil Aviation Ministry of Construction and Transportation 1-8 Byeoryang-dong Gwacheon-si Geonggi-do 427-800 <u>REPUBLIC OF KOREA</u>	Tel: +82 (2) 2669 6429 Fax: +82 (2) 6342 7289 E-mail: jenkim@korea.kr

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
Dr. Hyo Dal Park	Professor Inha University 253, Yonghyun-Dong Nam-Gu Incheon 402-751 <u>REPUBLIC OF KOREA</u>	Tel: +82 (32) 860 7418 Fax: +82 (32) 864 4136 E-mail: hdpark@inha.ac.kr
Dr. Hyeong-Taek Park	Professor Inha University 253, Yonghyun-Dong Nam-Gu Incheon 402-751 <u>REPUBLIC OF KOREA</u>	Tel: +82 (10) 5022 2110 Fax: +82 (32) 864 4136 E-mail: htkpark@yahoo.com
SINGAPORE (4)		
Mr. Kathirvelu Krishnan	Senior Air Traffic Control Manager Development Planning Branch Civil Aviation Authority of Singapore Singapore Changi Airport P.O. Box 1 <u>SINGAPORE</u> 918141	Tel: +65 6595 6691 Fax: E-mail: kathirvelu.krishnan@caas.gov.sg
Mr. Harrison Lim	Senior Air Traffic Control Manager ATM/System Civil Aviation Authority of Singapore Singapore Changi Airport P.O. Box 1 <u>SINGAPORE</u> 918141	Tel: Fax: E-mail: Harrison_lim@caas.gov.sg
Mr. Chan Tai Khoon	Senior Engineer Air Traffic Management Systems Civil Aviation Authority of Singapore Singapore Changi Airport P.O. Box 1 <u>SINGAPORE</u> 918141	Tel: +65 6541 2899 Fax: E-mail: chan_tai_khoon@caas.gov.sg
Mr. David Leow	Executive Engineer Air Traffic Management Systems Civil Aviation Authority of Singapore Singapore Changi Airport P.O. Box 1 <u>SINGAPORE</u> 918141	Tel: +65 6595 6771 Fax: E-mail: david_leow@caas.gov.sg
THAILAND (22)		
Mr. Nopadol Sang-ngurn	Air Traffic Control Specialist Department of Civil Aviation 71 Soi Ngamduplee Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: +66 (2) 287 0320-9 Fax: +66 (2) 286 8159 E-mail: nopadol.s@aviation.go.th
Ms. Chuleeporn Leemanan	Transport Technical Officer Department of Civil Aviation 71 Soi Ngamduplee Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: chuleeporn@aviation.go.th

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
Mr. Kittipol Horapong	Ground Instructor Civil Aviation Training Center Avionics Division 1032/355 Phaholyothin Road Jompol, Chatuchak Bangkok 10900 <u>THAILAND</u>	Tel: +66 (2) 272 5741 Ext. 263 Fax: +66 (2) 272 6104 E-mail: horapong.catc@gmail.com
Sqn. Ldr. Dr. Somchanok Tiamtiabrat	Aerodrome Safety Specialist Aerodrome Safety and Standardization Department Airports of Thailand Public Co., Ltd. 333 Cherdwutttagard, Sigun Donmeaung Bangkok 10120 <u>THAILAND</u>	Tel: +66 (2) 535 2532 Fax: +62 (2) 977 8298 E-mail: somchanok.t@airportthai.co.th
Mrs. Darina Kuasakul	Senior Aerodrome Safety Officer Aerodrome Standardization and Safety Office Airports of Thailand Public Co., Ltd. 333 Cherdwutttagard, Sigun Donmeaung Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: darina.k@airportthai.co.th
Ms. Supawadee Jantamas	Senior Aerodrome Safety Officer Aerodrome Standardization and Safety Office Airports of Thailand Public Co., Ltd. 333 Cherdwutttagard, Sigun Donmeaung Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: supawadee.j@airportthai.co.th
Mr. Phethai Chanthima	Director of Aerodrome Standardization Division Aerodrome Standardization and Safety Office Airports of Thailand Public Co., Ltd. 333 Cherdwutttagard, Sigun Donmeaung Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: phethai.c@airportthai.co.th
Mr. Visut Dechpokket	Engineering Manager Policy, Planning and Project Management Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: visut.de@aerothai.co.th

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
Ms. Siree Vatanavigkit	Engineering Manager Air Traffic Management Planning Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: siree.va@aerothai.co.th
Mr. Somnuek Suwannajit	Engineering Manager Air Traffic Services Engineering Planning Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: +66 (2) 287 8635 Fax: E-mail: tanate.kl@aerothai.co.th
Mr. Tanate Klinchat	General Administrative Manager Air Traffic Surveillance Systems Engineering Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: tanate.kl@aerothai.co.th
Sub. Lt. Sinchai Nilotbol	Engineering Manager Air Traffic Surveillance Systems Engineering Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: sinchai.ni@aerothai.co.th
Mr. Somkid Hunsanimitkul	Engineering Manager Air Traffic Surveillance Systems Engineering Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: somkit@aerothai.co.th
Mr. Yorkiat Chaiiad	Engineering Manager Data Network Engineering Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: noppharat.ra@aerothai.co.th
Ms. Supathida Boonsong	Senior Air Traffic Controller Don Mueng Airport Air Traffic Control Centre Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: supathidabo@aerothai.co.th

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
Mr. Nattapong Nuchanong	Senior Executive Air Traffic Controller Principal Approach Control Centre Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: +66 (2) 285 9618 Fax: +66 (2) 285 9603 E-mail: nattapongnu@aerothai.co.th
Mr. Kittipong Pongswasdi	Executive Officer Administration Corporate Relations Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: kittipong.po@aerothai.co.th
Mrs. Pantip Changpradit	Senior Air Traffic Controller Area Control Centre 1 Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: aeys@aerothai.co.th
Ms. Sujin Promduang	General Administrative Manager Aeronautical Information Management Centre Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: +66 (2) 285 9083 Fax: +66 (2) 287 3131 E-mail: sujin.pr@aerothai.co.th
Mr. Piyawat Tantimekabut	Executive Officer, Systems Engineering Airspace Management Centre Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: +66 (2) 287 8616 MB: +66 8 9697 5859 Fax: +66 (2) 287 8424 E-mail: piyawat@aerothai.co.th
Mr. Buntoeng Megchai	Air Traffic Control Manager Suvarnabhumi Air Traffic Control Centre ATC Complex, Suvarnabhumi Airport Bang Na-Trad Road K.M. 15, Rajatheva, Bang-phli Samutprakarn 10540 <u>THAILAND</u>	Tel: +66 (2) 131 3651 Fax: +66 (2) 131 3640 E-mail: buntoeng.me@aerothai.co.th
Mr. Noppharat Ratanapongphasuk	Engineering Manager Engineering Systems Design and Installation Department Aeronautical Radio of Thailand Ltd. 71 Soi Ngarmduplee, Rama IV Road Bangkok 10120 <u>THAILAND</u>	Tel: Fax: E-mail: noppharat.ra@aerothai.co.th
CANSO (1)		
Mr. Hai Eng Chiang	Director Asia Pacific Affairs Singapore Changi Airport P O Box 1, Singapore 918141 <u>SINGAPORE</u>	Tel: +65 6541 2006 Fax: +65 6543 4995 E-mail: hai.eng.chiang@CANSO.org

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
IATA (1)		
Mr. Ken Mclean	IATA Director of Safety, Operations and Infrastructure Asia Pacific International Air Transport Association 111 Somerset Road #14-05, TripleOne Somerset Singapore 238164 <u>SINGAPORE</u>	Tel: +65 6499 2250 Fax: +65 6233 9286 E-mail: mclean@iata.org
ICAO (11)		
Mr. H. Sudarshan	ICAO Secretariat ICAO Headquarters 999 University Street Montreal, Quebec <u>CANADA</u> H3C 5H7	Tel: +1 (514) 954 8219 Fax: E-mail: hsudarshan@icao.int
Mr. S. Da Silva	ICAO Secretariat ICAO Headquarters 999 University Street Montreal, Quebec <u>CANADA</u> H3C 5H7	Tel: +1 (514) 954 8219 Ext. 5872 Fax: E-mail: sdasilva@icao.int
Mr. Yoshiki Imawaka	Deputy Regional Director International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +66 (2) 537 8189 Ext. 35 Fax: +66 (2) 537 8199 E-mail: YImawaka@icao.int
Mr. Li Peng	Regional Officer CNS International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +66 (2) 537 8189 Ext. 158 Fax: +66 (2) 537 8199 E-mail: PLi@icao.int
Mr. Natarajan C. Sekhar	Regional Officer Aerodromes and Ground Aids International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +66 (2) 537 8189 Ext. 157 Fax: +66 (2) 537 8199 E-mail: NSekhar@icao.int
Mr. Leonard C. Wicks	Regional Officer ATM International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +66 (2) 537 8189 Ext. 152 Fax: +66 (2) 537 8199 E-mail: LWicks@icao.int

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESS	TELEPHONE/FAX/E-MAIL
Mr. Peter P. Dunda	Regional Officer MET International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +66 (2) 537 8189 Ext. 153 Fax: +66 (2) 537 8199 E-mail: PDunda@icao.int
Mr. Amal Hewawasam	Regional Officer Flight Safety International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +66 (2) 537 8189 Ext. 47 Fax: +66 (2) 537 8199 E-mail: AHewawasam@icao.int
Ms. Stacy Peel	Regional Officer Aviation Security International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +66 (2) 537 8189 Ext. 156 Fax: +66 (2) 537 8199 E-mail: SPeel@icao.int
Mr. Sujan K. Saraswati	Regional Officer CNS International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +62 (2) 537 8189 Ext. 155 Fax: +62 (2) 537 8199 E-mail: SSaraswati@icao.int
Mr. Shane Sumer	Regional Officer ATM International Civil Aviation Organization Asia and Pacific Office 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 <u>THAILAND</u>	Tel: +62 (2) 537 8189 Ext. 159 Fax: +62 (2) 537 8199 E-mail: SSumer@icao.int

Recommendations and Suggestions developed by the Workshop

- **Comment:** Modules are arranged according to the conditions of the developed countries and all States should be given the opportunity to provide input related to the modules so that modules could be further improved.

Suggestions:

- To improve the modules, suggest all the modules to provide more details information and detailed steps for how to implement in the individual country.
- ATM Automation System is one key element to support many important new function as many ASBU such as the TBO, CDM etc. Suggest to add related module on the subject to reflect the requirement and evolution of ATC Automation Systems.
- Each ASBU should contain guidance material to assist States in determining what operational performance problem the ASBU addresses and triggers on when to implement the ASBU.
- Discuss ASBU modules together with the new GANP. In particular with the process to identify performance gaps and analyze whether/which ASBU module can close them (under section of “Airspace Modernization Planning”)
- Propose to add a presentation on Doc 9883 PBA’s Performance Case as an extension of the standard business case. If so, for example note the sensitivity to traffic forecasts, importance of senior management buy-in; steps of the PBA etc.
- Search and Rescue (SAR) may also be covered as one of in the modules.
- The ANRF form may include an additional column on training requirements.
- ICAO should publish the proposed Wake Turbulence Categories and CCO manuals as mentioned in BO-70 and BO-20 respectively for study and preparation for AN-Conf/12.
- ICAO should clarify the referred standards for A-SMGCS (Levels 1 and 2 in Module BO-75).
- ICAO should standardize the unit of measurement as it is important for interoperability & seamless operation between FIRs.
- Regarding the “Metrics”, more options and suggested lists of indicators for each KPA are needed.
- Key performance area of some of the modules should be reviewed such as need to add KPA – Efficiency.
- There are some bugs in the IFSET which need to be fixed. En-route operation supports only single level. It would be much better if it could be programmed to support multiple levels with different type of aircraft in the same category of operation.
