

Status of PBN Implementation Plan

State/Administration	Date Versions Received
Australia	July 2009, 6 May 2010
Bangladesh	13 July 2009, 17 April 2011
Cambodia	01 September 2011 (copy of older version)
China	23 December 2008, 26 December 2009
Fiji	21 Feb 2010
French Polynesia	
Hong Kong, China	10 July 2008, July 2009, 16 January 2011
India	07 Sep 2010, 30 May 2011
Indonesia	29 June 2009, 26 April 2011
Japan	11 July 2008, July 1009
Korea, DPR	30 December 2010
Korea, Republic of	11 July 2008, 18 Jan 2010, 08 April 2011
Lao PDR	11 July 2008, 3 August 2011
Malaysia	08 July 2008, 15 Jan 2010, 11 April 2011
Maldives	09 July 2008, 1 May 2011
Mongolia	11 August 2010, 3 March 2011
Myanmar	27 April 2011
Nepal	21 July 2011
New Zealand	18 December 2009
Pakistan	19 May 2009
Papua New Guinea	Informal Plan 11 April 2011
Philippines	29 June 2009, 18 Feb 2010, 10 May 2011
Singapore	07 July 2008, 2 October 2009
Sri Lanka	4 Feb 2010, 20 Jun 2011
Thailand	08 July 2008, 13 July 2009

Summary	Focal Point / Member	State Plan
Information Submitted	<ol style="list-style-type: none"> 1. Australia 2. Bangladesh 3. Bhutan 4. Cambodia 5. China 6. China, Hong Kong 7. China, Macao 8. Fiji 9. India 10. Indonesia 11. Japan 12. Korea DPR 13. Korea Republic of 14. Lao PDR 15. Malaysia 16. Maldives 17. Mongolia 18. Myanmar 19. Nepal 20. New Zealand 21. Pakistan 22. Papua New Guinea 23. Philippines 24. Samoa 25. Singapore 26. Sri Lanka 27. Thailand 28. Viet Nam 	<ol style="list-style-type: none"> 1. Australia 2. Bangladesh 3. Cambodia 4. China 5. China, Hong Kong 6. Fiji 7. India 8. Indonesia 9. Japan 10. Korea DPR 11. Korea Republic of 12. Lao PDR 13. Malaysia 14. Maldives 15. Mongolia 16. Myanmar 17. Nepal 18. New Zealand 19. Pakistan 20. Papua New Guinea 21. Philippines 22. Singapore 23. Sri Lanka 24. Thailand 25. Viet Nam
NOT Submitted	<ol style="list-style-type: none"> 1. Afghanistan 2. Brunei Darussalam 3. Cook Islands 4. French Polynesia 5. Kiribati 6. Marshall Islands 7. Micronesia 8. Nauru 9. Palau 10. Solomon Islands 11. Timor-Leste 12. Tonga 13. Vanuatu 14. US territories 	<ol style="list-style-type: none"> 1. Afghanistan 2. Bhutan 3. Brunei Darussalam 4. Cook Islands 5. French Polynesia 6. Kiribati 7. Macao, China 8. Marshall Islands 9. Micronesia 10. Nauru 11. Palau 12. Samoa 13. Solomon Islands 14. Timor-Leste 15. Tonga 16. Vanuatu 17. US territories

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					Implementation Targets (# of RWY Ends)			Completed (# of RWY Ends)		In Progress (# of RWY Ends)		Note(s)	Implementation Targets (# of Int'l Airports)			Completed (# of Int'l Airport)		In Progress (# of Int'l Airports)		Note(s)	
					2010	2014	2016	LNAV	LNAV/VNAV	LNAV	LNAV/VNAV		2010	2014	2016	ARR	DEP	ARR	DEP		
India	ROBUST	Mr. N. V. Atale Joint General Manager (ATM) Airports Authority of India Rajiv Gandhi Bhavan, New Delhi Tel: +91-11-2461-0523 Fax: 91-11-2461-0528 Email: nvatale@aai.aero; nvatale@gmail.com	PBN Implementation Roadmap of India was published in Jan 2009 and reviewed by ICAO APAC PBN TF	Routes In progress: RNAV 10 – 33 RNAV5 – 6	28	42	38	1	1	16	16	-	6	15	-	9	8	5	5	Update ATS/AIS/SAR SG IP28 RNP AR procedure has been developed at Mumbai with a simulator trial.	
Indonesia	INCOMPLETE	1. Mr. Novie Riyanto Rahardjo Directorate of Air Navigation, Gedung Katya It 23, novieranto@yahoo.com Tel: 62-21350-6451 Fax: 62-35-350-7569 2. Agus Karya It 22, agusas@indo.net.id Tel: 62-21350-6664 Fax: 62-35-350-6663	BPEs: 1/3/6	RNAV10 Completed: 7 In progress: 4	11	40	90	9	2	0	16	Already published (LNAV): Pekanbaru, Palembang, Lombok, Banjarmasin and Kupang Airports On going progress: (LNAV/VNAV): Surabaya, Denpasar, Bandung, Medan, Padang, Balikpapan, (RNP-AR): Ambon, Manado, Jayapura	0	20	50	1	0	9	1	Short-term Target: 10 international airports Medium-term target: completion for 15 international airports and domestic airport with high-density traffic Progress: Implementation RNAV-1 STAR for Jakarta International Airports, published by AIP Supp Nr : 06 / 12 08 MAR 12 On going for Surabaya, Denpasar, Medan, Manado, Ambon, Padang, Palembang, Pekanbaru and Lombok Airports CDO's are designed for Ambon and Manado	
Japan	ROBUST	Mr. Koichiro Kubo JCAB 2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo, Japan Tel: +81-3-5253-8739 Fax: +81-3-5253-1664 Email: kubo-k2iy@milit.go.jp	JCAB published RNAV Roadmap in Nov. 2008 as Version 2. It will be revised in Mar. 2011 as Version 3. Reviewed by ICAO APAC PBN TF	.	42	154	163	13	12	2	18	Runway End Data Chart	14	14	14	12	11	2	3	PBN Implementation Progress Report dated 01 May 2011. 25 Jan 2010 Adopted by Civil Aviation Bureau (JCAB)	
Kiribati																					
Korea, DPR	MARGINAL	An Kyong Hwa Head of AIS, ATM GACA, DPR Korea Pyongyang International Airport Sunan District, Pyongyang City DPR Korea Tel: +850-2-18111-999 ext. 8108, Fax: +850-2-381-4410 ext. 4625 Email: gaca@silibank.com	BPEs: 7/2/1		-	X	-	-	-	-	-		-	X (2014)	-	-	-	-	-	-	
Korea, Republic of	ROBUST	Mr. Huho Ha Assistant Director of Air Traffic Management Division, 1-8 Byulyang-Dong, Gwacheoun-Si, Gyeonggi-Do, 427-801, Republic of Korea Tel: +82-2-2669-6425, Fax: +82-2-6342-7289 Email: hoohe_ha@korea.kr,	PBN BPEs: 10/0/0	RNAV5: 7 completed, 2 in progress, RNAV2: 2 in progress	2	23	35	10	10	23	23	RNP APCH with Baro-VNAV procedures for Gimpo International Airport Runway 32L/R will be developed in 2010 to gain operational experience. Runway End Data Chart	2	6	8	2	2	6	6	PBN approached were developed at all runways in Incheon and Gimpo airports and will be effective on 3 May 2012. Point merge methods were incorporated in STARs at Incheon Airport and will be effective on 3 May 2012. The ROK considered CDO while developing most procedures but used a conventional approach procedures to be able to use CDFA STARs at Gimpo and Incheon Airports, effective 3 May 2012.	

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					2010	2014	2016	LNAV	LNAV/ VNAV	LNAV	LNAV/ VNAV		2010	2014	2016	ARR	DEP	ARR	DEP		
Lao PDR	INCOMPLETE	Mr. Bounteng Symoon Director of Air Navigation Service Division, Department of Civil Aviation Tel/Fax: +856-21-512-091 +856-21-512-216 Email: bounteng@yahoo.com Mr. Khine Simvongsa Chief, Aeronautical Information Service Air Navigation Division Department of Civil Aviation Lao PDR Tel/Fax: +856-21-512-164 +856-21-520-237 Email: ksimvongsa@yahoo.com	BPEs: 4/2/4									Runway End Data Chart									
Macao, China	18 Jan 2010 Adopted by Macao, China	Mr. Bryan, K.H. Chiu Safety Officer (ATC) Civil Aviation Authority - Macao, China Alameda Dr. Carlos D'Assumpcao, 336-342 Centro Comercial Cheng Feng, 18 andar, Macao Tel: +853-8796-4142 Fax: +853-2833-8089 Email: bryanchiu@aacm.gov.mo;	Not submitted. To be reviewed by ICAO APAC PBN TF.		1	2	-	0	0	0	1	-	0	1	0	0	0	1	0	-	
Malaysia	MARGINAL	Mr. Nordin Ibrahim Assistant Director Air Traffic Management Sector Department Civil Aviation Malaysia No. 27, Persiaran Perdana Level 4, Block Podium B, precinct 4 62618 Putrajaya, Malaysia Tel: +603 8871 4230 Fax: +603 8881 0530 Email: nordin@dca.gov.my	BPEs: 7/2/1		4	16	24	-	-	-	-	Currently published RNAV Non-Precision Approaches are pre-PBN approach procedures. Runway End Data Chart	2	4	4	-	-	-	-		Currently published RNAV arrival (STAR) are pre-PBN procedures.
Maldives	INCOMPLETE	Ms. Fathimath Ramiza Director Air Navigation and Aerodromes Civil Aviation Department Ministry of Civil Aviation and Communication PA Complex, Male' 20307, Maldives Tel: +960-334-2984 Fax: +960-332-3039 Email: ramiza@aviainfo.gov.mv	BPEs: 3/5/2		2	14	0	2	2	0	12	RNP APCH with Baro- VNAV for Male' International Airport published since 2010. RNP APCH without only LNAV published for one of the domestic airports in February 2012. Further planning will be based on development of any new airport.	2	2	0	2	2	0	0		RNAV 1 (GNSS) SIDs and STARs published for Male International Airport since 2010.

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					2010	2014	2016	LNAV	LNAV/VNAV	LNAV	LNAV/VNAV		2010	2014	2016	ARR	DEP	ARR	DEP	
Marshall Islands																				
Micronesia, FS																				
Mongolia	ROBUST	Mr. J. Bayarsaikhan, Director of Flight Inspection & Procedure Design Service Division, Chinggis Khaan Int'l Airport, Buyant-Ukhaa, Ulaanbaatar-17120, Mongolia, Tel: (976-11) 282040, Fax: (976-10) 282-108 Email: bayarsaikhan.j@mcaa.gov.mn bayarsaikhan.mcaa@yahoo.com	BPEs: 8/1/1		2	6	-	-	-	-	-	8 aerodromes with paved runway including ZMBH, ZMCD, ZMDZ, ZMDN, ZMKD, ZMMN, ZMUB and ZMUG have been included.	1	5	-	-	-	1	-	Currently, only one international aerodrome. However, 6 international aerodromes were recorded considering Muran, Choibalsan, Khovd, Ulgii and "Gurvansaikhan" airports shall obtain international status between 2010 and 2013.
Myanmar	ROBUST	Mr. Tike Aung Director (Air Navigation Services) Department of Civil Aviation Yangon International Airport Mingaladon, Yangon 11021 Tel: 951-533008 Fax: 951-533016 Email: ats@dca.gov.mm	BPEs: 9/1/0	RNAVS : 4 (continental, by 2012) RNP4: 5 (oceanic, by 2012)	6 (by 2013)	5	7					Approach procedures with LNAV/VNAV have already been developed for Yangon, Mandalay and Nay Pyi Taw airports. Awaiting for flight validation and ATC knowledge training.	3 (by 2012)							
Nauru																				
Nepal	ROBUST	Mr. Mahesh Kumar Basnet Deputy Director, ATM Department Civil Aviation Authority of Nepal Babar Mahal, Kathmandu Tel: +977-1-426-2923 Fax: +977-1-426-2516 Email: atsd@caanepal.org.np; cnsatm@mos.com.np	BPEs: 8/2/0		RNP APCH at TIA	-	-	-	-	-	-	Nil	1?	-	-	-	-	-	-	RNAV 1 based on GNSS in KT TMA
New Caledonia																				
New Zealand	ROBUST	Mike Haines, Manager Aeronautical Services, Civil Aviation Authority of New Zealand, PO Box 31 441, Lower Hutt 5040, New Zealand; Email: mike_haines@caa.govt.nz	Reviewed by ICAO APAC PBN TF		18	42	58	32	18	-	1	Nil	3	5	6	3	2	-	1	Nil

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					2010	2014	2016	LNAV	LNAV/VNAV	LNAV	LNAV/VNAV		2010	2014	2016	ARR	DEP	ARR	DEP	
Pakistan	MARGINAL	Mr. Syed Yousuf Abbas Director Operations Headquarters Civil Aviation Authority Terminal-1 JIAP Karachi, Pakistan Tel: +92-21-9924-2742 Cell: +92-301-825-8525 Fax: +92-21-3460-4323 Email: dops@caapakistan.com.pk	Implementation plan submitted to APAC Regional office in May, 2009, reviewed by ICAO APAC PBN TF, not in accordance with Regional Plan format		8	13	8	-	-	3	1	Runway End Data Chart	14	24	8	-	-	-	-	Nil
Palau																				
Papua New Guinea		David K. Tawae Executive Manager Future Directors PNB Air Services Ltd. ATS Tower Level 1, 7 Mile, Jacksons Airport P.O. Box 273, BOROKO, NCD 111 Papua New Guinea Tel: +675 3121522, Fax: +675 3250749, Mob: ++711-764-05/ 76950424 Email: dtawae@pngairservices.com.pg	Plan received from Jeff Bollard (email 5 Mar 2010), informal plan received from web site dated April 2011																	
Philippines	ROBUST	Mr. Zerubbabel N. Cadiz ATC/Technical Officer, Airspace and Traffic Management Division Air Traffic Service, 4th Floor, Main Building, Civil Aviation Authority of the Philippines, MIA Road, Pasay City 1300 Tel/Fax: +63-2-8799-260 zncadiz@atmd.caap.gov.ph	BPEs: 8/2/0		8	To follow	To follow	2	2	17	17	Runway End Data Chart	4	To follow	To follow	-	-	12	12	
Samoa		Magele Hoe Viali Ministry of Works, Transport & Infrastructure Private Bag Savalalo, SAMOA Tel: +685 21-611 Fax: +685 28-687 Email: hoe@mwti.gov.ws																		
Singapore	ROBUST	Mr. Michael Shee Air Traffic Control Manager (Air Traffic Management) Civil Aviation Authority of Singapore Singapore Changi Airport, P.O. Box 1 Singapore 918141 Tel. +65-6541-2454, Fax: +65-6545-6516 Email: michael_shee@caas.gov.sg,	Plan submitted but originally not in accordance with Regional Plan format. Reviewed by ICAO APAC PBN TF		-	2	1	-	2	-	-	Runway End Data Chart	-	1	1	-	-	-	-	Nil

