



International Civil Aviation Organization

**Fourteenth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/14)**

Bangkok, Thailand, 28 June – 2 July 2004

Agenda Item 6: Deficiencies in the Air Navigation field

LIST OF AIR NAVIGATION DEFICIENCIES

(Presented by the Secretariat)

SUMMARY

This paper presents in its Appendix a list of air navigation deficiencies in the ATM/AIS/SAR fields for review and action by the meeting. The list is based on the uniform methodology for the identification, assessment and reporting of such deficiencies as described in Part V of the APANPIRG Procedural Handbook.

1. INTRODUCTION

1.1 The ICAO Council, at the 164th Session on 30 November 2001, approved the definition of a deficiency as follows:

“A deficiency is a situation where a facility, service, or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation”.

1.2 The 11th Air Navigation Conference (22 September – 4 October 2003, Montreal) recalled efforts by ICAO, PIRGs and States in pursuing the elimination of deficiencies in the air navigation field and the implementation of all regional air navigation plans to further improve the existing levels of safety. The Conference noted that many deficiencies had continued to persist for a number of years, thus causing concern. Furthermore, the Conference noted that States should increase their efforts to overcome the delay in mitigating the air navigation deficiencies identified by the respective PIRG and resolve cases of non-implementation of regional plans.

1.3 Under the Terms of Reference of APANPIRG, one of the primary objectives of the Group is to *“identify and address specific deficiencies in the air navigation field”*. In meeting this objective, APANPIRG shall *“facilitate the development and implementation of action plans by States to resolve identified deficiencies, where necessary”*. Consequently APANPIRG regularly reviews deficiencies, including those in the fields of ATM/AIS/SAR in the Asia Pacific Region, and develops recommendations for remedial actions.

2. DISCUSSION

Reporting of information on deficiencies

2.1 In order to enable APANPIRG and its Sub-Groups to make detailed assessments of deficiencies, States and appropriate organizations (including IATA and IFALPA) are expected to provide formal notification to the ICAO Asia/Pacific Regional Office for action as appropriate, including action at APANPIRG and Sub-Group meetings. The reporting and assessment of deficiencies should be undertaken in accordance with the requirements of the Uniform Methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies (the “Uniform Methodology”) described in the APANPIRG Procedural Handbook.

2.2 The information provided through this formal notification process, should at least include:

- a) description of the deficiency;
- b) risk assessment;
- c) possible solution;
- d) time-lines;
- e) responsible party;
- f) agreed actions to be taken, and
- g) report on actions already taken.

2.3 Similarly, States and appropriate organizations should provide formal notification of the implementation/rectification of a deficiency to the Regional Office, to enable the list of air navigation deficiencies to be updated and maintained as an accurate record within APANPIRG.

The Asia/Pacific Supplement to the Uniform Methodology

2.4 The APANPIRG/13 meeting (9-13 September 2002, Bangkok) considered the need for improvement of the regional procedures in applying the Uniform Methodology. The meeting noted that the existing Uniform Methodology did not clearly specify what subjects or requirements, including SARPs, should be considered when PIRGs develop a list of deficiencies and that this has been left to the discretion of the PIRGs. Another problem that APANPIRG had been facing was the lack of precise procedures for validation and assessment of the reported deficiencies as well as for monitoring of the corrective actions.

2.5 In view of the above, the meeting agreed to set up a Task Force to assist APANPIRG and the Secretariat in their future work on this subject. The Deficiencies Review Task Force (DRTF) was created and tasked with developing detailed regional procedures as a supplement to the Uniform Methodology, for the identification, assessment, reporting and monitoring of the status of air navigation deficiencies.

2.6 The second meeting of the Task Force (DRTF/2, 13-14 May 2004, Bangkok) reviewed and finalized the draft Asia/Pacific Supplement to the Uniform Methodology and formed Draft Conclusions for consideration by APANPIRG/15 (scheduled August 2004) that the Asia/Pacific Supplement be adopted and that the Task Force be dissolved as its work had been completed.

List of air navigation deficiencies in the ATM/AIS/SAR fields

2.7 Based on information currently available at the Regional Office, a list of air navigation deficiencies in the ATM/AIS/SAR fields has been prepared and is appended to this paper.

3. **ACTION BY THE MEETING**

3.1 The meeting is invited to

- a) note the formal notification processes required under the uniform methodology for the reporting of air navigation deficiencies;
- b) note that an Asia/Pacific Supplement to the Uniform Methodology has been prepared and will be considered for adoption by APANPIR/15;
- c) review the appended list of air navigation deficiencies in the ATM/AIS/SAR fields and update with target dates/actions as appropriate in light of discussions at this meeting, so that the list can be presented to the APAPNIRG/15 for action, and
- d) provide formal notification to the ICAO Asia Pacific Regional Office that a deficiency has been identified or rectified, to enable the list of air navigation deficiencies to be updated and maintained.

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE ATM/AIS/SAR FIELDS IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
Requirements								
A202	Hong Kong, China/Japan	Partially implemented	24/11/93	Hong Kong-Bangkok segment was implemented on 1 November 2001. Japan has proposed the deletion of the requirement for Chitose-Hong Kong segment in consultation with Hong Kong, China. Japan considering implementation as a conditional route	Japan - co-ordinate Hong Kong, China	Hong Kong, China/ Japan	HongKong-Bangkok segment 1/11/2001; Hong Kong-Chitose segment TBD	B
A203	China/Hong Kong, China	Not implemented	24/11/93	China advises no international flight requirements.	China - consider implementation requested deletion and amendment to ANP	China/Hong Kong, China	Subject to ANP amendment	B
A211	Indonesia	Partially implemented	24/11/93	ICAO has requested Malaysia to co-ordinate the early implementation of A211 with States concerned. Malaysia has advised at SEACG/10 of the implementation of the route within Malaysia on 29 November 2001.	Indonesia - implement the missing segment ICAO- coordinate the implementation with Indonesia	Indonesia ICAO	29/11/2001 (by Malaysia) TBD by Indoensia	B

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A218	China/Russian Federation	Partially implemented	24/11/93	ICAO has taken action to co-ordinate with China/Russian Federation for implementation of Harbin-Ekimchan segment and to amend ANP. APAC 99/1-ATS was approved on 26/1/00. CAAC subsequently advises (14 Apr 03) that current route G212 meets the requirements and the proposed A218 is no longer required.	China/Russian Federation - consider implementation China requested deletion and amendment to ANP	China/Russian Federation ICAO	Subject to ANP amendment	B
A223	Japan	Not implemented	24/11/93	Japan has advised that a domestic route network covers the route; thus will propose the deletion of the requirement.	Japan - co-ordinate the deletion with IATA Japan - consider implementation as a conditional route	Japan	TBD	B
A335	China/Mongolia/Russian Federation	Not implemented	24/11/93	China and Mongolia advised that this segment is covered by other ATS routes properly; thus will has proposed its deletion from ANP.	China, Mongolia - propose ANP amendment	China/Mongolia	Deletion of A335 notified 9 Oct 01 Subject to ANP amendment	B
A341	Indonesia/Malaysia	Partially implemented	24/11/93	ICAO has requested Indonesia to co-ordinate implementation with Malaysia. Malaysia has advised that the existing route B584 fulfils sufficiently the requirement and would propose the deletion of the requirement for Syrabaya-Kota Kinabalu segment.	Indonesia/Malaysia - consider full implementation	Indonesia/Malaysia	12/2001	B

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A450	Indonesia/United States	Partially implemented	24/6/94	ICAO has requested Indonesia to co-ordinate implementation with United States. United States has agreed to the implementation, and a response from Indonesia is being awaited.	Indonesia/United States - consider full implementation	Indonesia/United States	TBD	B
A469	Viet Nam	Implemented as W9 before. As of 1 Nov 2001 implemented as L643.	19/8/94	ICAO has requested Viet Nam to implement as A469. Viet Nam advised that W9 was replaced with L643 on 1 November 2001.	Viet Nam - propose deletion of the requirement as A469 ICAO process ANP amendment	Viet Nam ICAO	<u>Subject to ANP amendment</u>	B
A473	India/Nepal	Not implemented	16/3/99	India and Nepal have advised that realignment is being co-ordinated and the route is to be implemented. Proposal to realign the route.	India/Nepal- implement the route	India/Nepal	Sep 2003	B
A581	Thailand	Partially implemented	17/2/97	China, Lao PDR and Thailand proposed an amendment to ANP. ICAO processed APAC99/11 in co-ordination with China/Myanmar/Thailand. APAC99/1 was approved on 15 December 2000.	Thailand - implement accordingly.	Thailand	11/2002	B
A584	United States	Partially implemented	24/6/94	ICAO has requested United States to implement the missing segment. United States has proposed deletion of the missing segment, and the proposal is under preparation.	ICAO - process an amendment in co-ordination with United States	United States ICAO	Subject to ANP amendment	B

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B201	Fiji/New Zealand	Not implemented	24/11/93	Fiji/New Zealand have advised that they agreed to delete the requirement. ICAO will process ANP amendment as this was covered by routes B575, G457 and R327.	Fiji/New Zealand - propose an amendment to delete the requirement in ANP	Fiji/New Zealand ICAO	Subject to ANP amendment	B
B204	Maldives	The requirements for this route are not detailed in ANP	24/1/96		Maldives - propose an amendment to ANP to add the route	Maldives ICAO	Subject to ANP amendment	B
B212	Japan/Rep of Korea	Not implemented	24/11/93	Japan is considering implementation as a conditional route and will coordinate with Rep of Korea	Japan/Rep of Korea - consider implementation	Japan/Rep of Korea	<u>12/2005</u>	B
B213	China	Not implemented	24/11/93	CAAC advises no international flight requirements - route H12 is available.	China - consider implementation China - propose deletion and amendment to ANP	China ICAO	Subject to ANP amendment	B
B456	Papua New Guinea	Partially implemented	24/11/93	Papua New Guinea has advised that they will formally propose ANP amendment for deletion of the missing segment.	Papua New Guinea - propose an amendment to ANP. ICAO-process ANP amendment.	Papua New Guinea ICAO	<u>Subject to ANP amendment</u>	B
B591	China	Partially implemented	22/7/97	Co-ordination is in progress among States and ICAO	ICAO - continue on-going implementation co-ordination related to the Revised South China Sea route structure with States	China	TBD	B

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Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
G211	Malaysia	Not implemented	24/11/93	ICAO has requested Malaysia to implement G221. Malaysia has advised that G211 would be replaced with EMARSSH routes; thus would propose the deletion of the requirement when an ANP amendment relating to EMARSSH is prepared.	Malaysia - propose deletion ICAO- process ANP amendment	Malaysia ICAO	28/11/2002 Subject to ANP amendment	B
G461	Indonesia	Implemented with different route specification	24/11/93	ICAO co-ordinated with Indonesia to amend ANP requirement. APAC00/1-ATS was approved on 15 January 2001.	Indonesia-implement the requirement accordingly.	Indonesia	TBD	B
G473	Cambodia /Philippines Thailand/Viet Nam	Partially implemented	24/11/93	Co-ordination is in progress among States and ICAO	ICAO - continue ongoing implementation co-ordination related to the Revised South China Sea route structure with States	Cambodia /Philippines Thailand/Viet Nam	TBD	B
G589	DPR Korea/ Rep of Korea	Not implemented	24/11/93		B467 established instead of G589 April 1998	DPR Korea/ Rep of Korea	April 1998 Completed	B
R216	China/Kazakhstan	Not implemented	24/11/93	CAAC advises current routes B215, Kuqa, A460 REVK1 to Alma Ata meets the requirements for traffic from Urumqi to Alma Ata and requests deletion of R216 from ANP (14 Apr 03)	ICAO co-ordinate with States for implementation and report the outcome to EAAR CAAC proposes deletion	China/Kazakhstan ICAO	Subject to ANP amendment	B

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Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
R221	Russian Federation	R221 was implemented on 19 April 2001 in Malaysia in accordance with the requirement in ASIA/PAC ANP. The same route designator in use in Russian Federation	24/11/93	ICAO has requested Russian Federation to delete R221 and promulgate the route as R466 in AIP. Input from Russia is being awaited.	ICAO - co-ordinate with Russian Federation to redesignate the route as R466 as already assigned as a matter of priority	Russian Federation	TBD	A
R333	China	Not implemented	24/11/93	China is considering future implementation	China co-ordinating with Hong Kong CAA	China	TBD	B
R335	China/Hong Kong, China	Not implemented	24/11/93	CAAC advises no international flight requirements and requests deletion from ANP (14 Apr 03)	China - consider implementation propose deletion and amendment to ANP	China/Hong Kong, China ICAO	Subject to ANP amendment	B
R345	Cambodia/Lao PDR/Thailand	Not implemented	24/11/93	Cambodia has advised that the requirement is no longer valid and will propose the deletion of requirement in consultation with Lao PDR and Thailand.	ICAO - continue ongoing implementation co-ordination related to the Revised South China Sea route structure with States Camodia- coordinate the deletion with IATA as well as Lao PDR and Thailand	Cambodia/Lao PDR/ Thailand	TBD	B
R455	Indonesia	Partially implemented	24/11/93	ICAO has requested Malaysia to co-ordinate the implementation of R455 with States concerned. Malaysia has advised that R455 was implemented within Malaysia on 29 November 2001.	Indoensia - implement the requirement	Indonesia	29/11/2001 (by Malaysia) TBD by Indoensia	B

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R459	Indonesia	Implemented as W51 and W36	24/11/93	ICAO has requested Indonesia to implement as R459	Indonesia - consider promulgation of the route with designator R459 in AIP	Indonesia	TBD	B
R466	Russian Federation	Implemented as R221 in Russian Federation. Route requirement is listed in EUR/NAT ANP	24/11/93	ICAO has requested Russian Federation to delete R221 and promulgate the route as R466 in AIP, and awaits input from Russia.	ICAO - co-ordinate with Russian Federation to redesignate the route as R466 as already assigned as a matter of priority	Russian Federation ICAO	TBD	A
R579	Indonesia/Malaysia	Not implemented	24/11/93	ICAO has requested Malaysia to co-ordinate with Indonesia for implementation. Malaysia considered there was no longer requirement due to a low traffic movement; thus will propose the deletion.	Indonesia/Malaysia - consider implementation	Indonesia/Malaysia	12/2001	B
R593	India/Oman	Not implemented	24/11/93	India has advised that the implementation of R593 is being considered in conjunction with the implementation of RVSM in November 2003.	India coordinated with Oman India - propose deletion and amendment to ANP	India/Oman (SWACG) ICAO	Subject to ANP amendment	B
<u>WGS-84</u>								
WGS-84	Bhutan	Not implemented	2/7/1999	Data conversion completed, but not published		Bhutan	TBD	A

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WGS-84	Cambodia	Partially implemented	28/6/2001	Cambodia has previously informed ICAO that their WGS-84 conversion had been completed. Cambodia has now informed ICAO of flaws in their conversion and their intention to start all over again. Cambodia reported ICAO on 22 June 2004 that the WGS-84 coordinates has been implemented in international airports, airspace and international routing.		Cambodia	TBD	A
WGS-84	China	Not implemented * implemented in the Sanya AOR as of 1 Nov 2001	2/7/1999	Differences to Annex 15 - <i>Aeronautical Information Services</i> are notified		China		A
WGS-84	DPR Korea	Not implemented				DPR Korea	TBD	A
WGS-84	French Polynesia	Implemented at main airports		in progress		French Polynesia	2003	A
WGS-84	Kiribati	Not implemented				Kiribati	TBD	A
WGS-84	Lao-PDR	Partially implemented				Lao-PDR	TBD	A
WGS-84	Malaysia	Partially implemented		In progress. Updated information received. Confirmation of completion date required.		Malaysia	December 2002	A
WGS-84	Nauru	Not implemented		Conferring with consultant		Nauru	TBD	A

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WGS-84	Philippines	Implemented at main airports		on-going		Philippines	2004	A
WGS-84	Solomon Islands	Not implemented				Solomon Islands	1999	A
WGS-84	Vanuatu	Implemented at main airports	2/7/1999			Vanuatu	1999	A
<u>Type of ATS</u>								
Area Control Services	India	In Mumbai FIR, routes Class E except for some ATS route segments are subject to Advisory Services	24/11/93	Co-ordination in progress through BBACG. HF radio being modernized and datalink being installed by December 2004.	India - implement Area Control Services	India	end of 2004	A
Area Control Services	Sri Lanka	Several ATS route segments are subject to Advisory Services	24/11/93	Co-ordination in progress through BBACG	Sri Lanka - implement Area Control Services	Sri Lanka	Completed	A
<u>Airspace Classification</u>								
Airspace Classification	China	Not implemented	7/7/99		Difference to Annex 11 is published in AIP, China.	China		A
Airspace Classification	Cook Islands	Not implemented	7/7/99			Cook Islands	TBD	A
Airspace Classification	DPR Korea	Not implemented	7/7/99			DPR Korea	TBD	A
Airspace Classification	Japan	Not implemented	7/7/99		Implementation in progress	Japan	19 Feb 2004 Partially implemented except for oceanic	A
Airspace Classification	Kiribati	Not implemented	7/7/99			Kiribati	TBD	A

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Airspace Classification	Lao PDR	Not implemented	7/7/99		Area, Approach and Tower control services est. 1 Nov-	Lao PDR	Completed Official confirmation required	A
Airspace Classification	Nauru	Not implemented	7/7/99			Nauru	TBD	A
Airspace Classification	Papua New Guinea	Not implemented	7/7/99			Papua New Guinea	mid 2001 Official confirmation pending	A
Airspace Classification	Republic of Korea	Not implemented	7/7/99		Implemented since 1 July 2001	Republic of Korea	1 July 2001 <u>Completed</u>	A
Airspace Classification	Samoa	Not implemented	7/7/99		CTR C and D Samoa Sector Class G	Samoa	Completed Official confirmation required	A
Airspace Classification	Solomon Islands	Not implemented	7/7/99			Solomon Islands	TBD	A
Airspace Classification	Sri Lanka	Not implemented	7/7/99			Sri Lanka	Completed 2003	A
Airspace Classification	Tonga	Not implemented	7/7/99			Tonga	Completed, Official confirmation required.	A
Airspace Classification	Viet Nam	Not implemented	7/7/99			Viet Nam	2003/2004	A
AIP Format								
AIP Format	China	Not implemented	7/7/99	Implementation in progress	New AIP published 1 Oct 2002 with effective date 23 Jan 2003	China	Completed	A
AIP Format	Cook Islands	Not implemented	7/7/99			Cook Islands	TBD	A
AIP Format	Fiji	Not implemented	7/7/99			Fiji	Sep 2002 (to be confirmed)	A
AIP Format	Kiribati	Not implemented	7/7/99			Kiribati	TBD	A
AIP Format	Lao PDR	Not implemented	7/7/99			Lao PDR	Sep 2003 +H6	A
AIP Format	Myanmar	Not implemented	7/7/99			Myanmar	Completed 2003 (To be published)	A

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AIP Format	Nauru	Not implemented	7/7/99			Nauru	TBD	A
AIP Format	New Zealand	Not implemented	7/7/99	Differences to Annex 15— Aeronautical Information Services are notified		New Zealand	Revised format being prepared in line with ICAO requirements— effective 4 Sep 03	A
AIP Format	Papua New Guinea	Not implemented	7/7/99	under development		Papua New Guinea	TBA	A
AIP Format	Samoa	Not implemented	7/7/99			Samoa	5/15/2003 (to be confirmed)	A
AIP Format	Sri Lanka	Not implemented	7/7/99			Sri Lanka	Completed—to be published end of 2003	A
AIP Format	Tonga	Not implemented	7/7/99		Under preparation	Tonga	2004	A
<u>SAR capability</u>								
SARPs in Annex 12	Cambodia	Annex 12 requirements not implemented. No agreements with adjacent States.	20/2/97		Cambodia - implement Annex 12 requirements and co-ordinate LOA with adjacent States ICAO - assist to develop SAR capability and to co-ordinate with adjacent States	Cambodia	TBD	U
SARPs in Annex 12	Cook Islands	Annex 12 requirements not implemented. No agreements with adjacent States.	31/1/95	SAR agreement with New Zealand under development	Cook Islands - implement Annex 12 requirements and co-ordinate LOA with adjacent States ICAO - assist to develop SAR capability and to co-ordinate with adjacent States	Cook Islands	2004	U

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Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
SARPs in Annex 12	Maldives	Annex 12 requirements not implemented. No agreements with adjacent States.	24/4/1997	SAR services and facilities provided (details to be confirmed). SAR agreements with neighbouring States under development	Maldives - implement Annex 12 requirements and co-ordinate LOA with adjacent States ICAO - assist to develop SAR capability and to co-ordinate with adjacent States	Maldives	2004	U