APANPIRG air navigation deficiencies

1. **Definition**

1.1. The definition of an air navigation deficiency (as adopted by ICAO Council, 30 November 2001) 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 (SARPs), and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.

2. Resolution

- 2.1. The resolution of air navigation deficiencies has been given the highest priority by APANPIRG. In accordance with its terms of reference, APANPIRG (and its contributory bodies including the MET SG) shall facilitate the conduct of any necessary systems performance monitoring to identify specific deficiencies in the air navigation field, especially in the context of safety, propose appropriate corrective actions and facilitate the development and implementation of corrective action plans (CAPs) by States to resolve the identified deficiencies.
- 2.2. The Uniform Methodology (for the resolution of air navigation deficiencies) requires that States provide CAPs, comprising detailed descriptions of the actions to be taken for the expeditious rectification of the listed deficiencies. States' CAPs should be provided in a concise and concrete format for inclusion in the APANPIRG air navigation deficiencies database and reporting to APANPIRG in the Reporting Form on Air Navigation Deficiencies.

Notes:—

- a) If necessary, detailed information may be provided as an attachment to the Reporting form;
- b) CAPs should include the corrective measures to be taken by the States and the target dates by which the identified deficiencies will be resolved.
- 2.3 Under its terms of reference, the MET SG is required to assist APANPIRG with the review of the air navigation deficiencies in the MET field and, as necessary, to propose appropriate corrective actions and facilitate the development and implementation of CAPs by States to resolve identified deficiencies.
- 2.4 As a result of its review of the current list of air navigation deficiencies, APANPIRG/27 considered that the resolution of air navigation deficiencies in all fields (including ATM, SAR, AIM, AOP, CNS and MET) has lacked significant progress over several years, due in part to inadequate information in the Reporting Form, e.g., infrequent updates and lack of concise and concrete CAPs with defined target dates.
- 2.5 To help resolve the situation above, States/Administrations concerned were urged to establish action plans with defined target dates for resolution of deficiencies, update the status on the corrective action taken and report progress in the Reporting Form of Air Navigation Deficiencies (APANPIRG/27 Conclusion 27/56 refers).

3. Current list of deficiencies

3.1. The current APANPIRG list of air navigation deficiencies was developed in accordance with recommendations by the APANPIRG/17 Meeting, August 2006 (Conclusion 17/53), which called for a regional on-line database to list air navigation deficiencies in the Asia/Pacific Region. In order to ensure transparency and facilitate resolution of deficiencies, the ICAO Regional Office was invited to establish a

regional on-line database of air navigation deficiencies and provide secure access to States' administrations and other users concerned. Detailed information on the Uniform Methodology for the identification, assessment and reporting of air navigation deficiencies, is provided in the APANPIRG Procedural Handbook.

3.2. In accordance with the Uniform Methodology, information on air navigation deficiencies is provided regularly in the Reporting Form on Air Navigation Deficiencies for review by APANPIRG.

4. Deficiencies in the MET field

- 4.1. The APANPIRG list contains specific deficiencies in the MET field, identified based on the lack of compliance with the regional air navigation plan or ICAO SARPs of specific MET facilities and services required in the Asia/Pacific Region.
- 4.2. The list currently contains twenty (20) air navigation deficiencies in the MET field related to facilities and services required in eleven (11) Asia/Pacific States, which are listed below in **Table 1**. Full details of the current list of APANPIRG air navigation deficiencies in the MET field is provided in the Reporting Form on Air Navigation Deficiencies at the **Appendix 4** to this paper, which was last reviewed by APANPIRG at its twenty-seventh meeting held in Bangkok, Thailand, 5 to 8 September 2016 (APANPIRG/27 Conclusion 27/56 refers).

Table 1: APANPIRG air navigation deficiencies in the MET field in the (open) list

MET facilities and services	Asia/Pacific States	Deficiency ID
Aerodrome meteorological observations or	Kiribati	AP-MET-02
reports	Nauru	AP-MET-21
	Solomon Islands	AP-MET-01
Meteorological watch office (MWO) or	Cambodia	AP-MET-11
SIGMET information	Democratic Peoples' Republic of Korea	AP-MET-16
	Indonesia	AP-MET-06
	Lao Peoples' Democratic Republic	AP-MET-12
	Nauru	AP-MET-24
	Nepal	AP-MET-14
	Papua New Guinea	AP-MET-08/22
	Philippines	AP-MET-07
	Solomon Islands	AP-MET-23
Volcanic ash/activity information	Indonesia	AP-MET-03
	Papua New Guinea	AP-MET-04
	Tonga	AP-MET-17
WAFS forecasts and/or flight briefings	Cambodia	AP-MET-09
	Kiribati	AP-MET-18
	Nauru	AP-MET-19
	Solomon Islands	AP-MET-20

4.3. At the twenty-first meeting of the MET SG, held in Bangkok, Thailand, 29 May to 1 June 2017, an informal side meeting was conducted with States concerned to further discuss the next steps required to facilitate the reporting of CAPs by States and the reporting to APANPIRG on the validation of corrective action taken for the resolution of APANPIRG air navigation deficiencies.

- 4.4. It was noted that some States (e.g., Indonesia, Philippines and Tonga) had reported to ICAO on corrective actions taken (to resolve listed deficiencies) and that the validation of the corrective action was considered to be the final (outstanding) step required in order to remove the deficiencies from the open list
- 4.5. In the case of Indonesia, MET SG/21 considered that the evidence presented (which was supported by VAAC Darwin as well as by results from the SIGMET monitoring activity) was sufficient for APANPIRG to consider the removal of deficiencies listed concerning the provision of volcanic ash information and SIGMET information for volcanic ash (Draft Conclusion (MET SG) 21/2 refers).
- 4.6. In the case of both Philippines and Tonga, MET SG/21 agreed that ICAO should review the reports provided by both States on the corrective action taken to resolve the respective deficiencies and coordinate further with the States concerned to determine whether sufficient evidence is available to validate the corrective action with the users who made the (original) reports, e.g., airlines, VAAC and ICAO.
- 4.7. The next steps should then be to either recommend removal of the deficiencies at APANPIRG or if necessary obtain additional evidence to validate the corrective actions. It was suggested that this step could entail some testing of message exchange between units concerned (e.g., for volcanic ash information from Tonga) or targeted monitoring of service provision (e.g., SIGMET information for volcanic ash from Philippines).
- 4.8. It was considered that the remaining (MET-related) deficiencies (in other States) either required the development of appropriate CAPs as a first step or, in some cases, evidence of corrective action was available but the CAPs and progress towards resolution of the deficiencies concerned had not yet been clearly and concisely reported.
- 4.9. In the case of Nauru, where 3 deficiencies are listed (concerning aerodrome meteorological observations or reports, meteorological watch office (MWO) or SIGMET information and WAFS forecasts and/or flight briefings) it was agreed that Nauru and ICAO would coordinate on developing CAPs, which would require technical advice from ICAO on aspects such as the delegation and functions of the meteorological authority, interpretation of the ICAO provisions concerned and possible facilitation of bilateral arrangements for meteorological service provision on behalf of Nauru.