



**WORKING PAPER**

**FIFTH MEETING OF THE ALLPIRG/ADVISORY GROUP**

(Montreal, 23 – 24 March 2006)

**Agenda Item 5.3: Coordination between the regions and between the Regional Offices and Headquarters**

**REVIEW OF THE UNIFORM METHODOLOGY FOR THE IDENTIFICATION, ASSESSMENT AND REPORTING OF AIR NAVIGATION DEFICIENCIES**

(Presented by the Secretariat)

**SUMMARY**

In recent past, PIRGs have developed proposals to update the Uniform Methodology for the identification, assessment and reporting of air navigation deficiencies in light of the experience gained in its utilization. This working paper discusses the regional proposals and its implication for worldwide application. The Appendix to this working paper provides the Uniform Methodology, as approved by the Council on 30 November 2001.

Action by ALLPIRG/5 is in paragraph 3.

**1. INTRODUCTION**

1.1 The uniform methodology for the identification, assessment and reporting of air navigation shortcomings and deficiencies (henceforth referred to as Uniform Methodology) was prepared with the assistance of the planning and implementation regional groups (PIRGs) of ICAO and approved by the ICAO Council on 23 June 1998 for the efficient identification, assessment and clear reporting of air navigation deficiencies.

1.2 In 2001, in order to avoid any ambiguity, ALLPIRG proposed, in Conclusion ALLPIRG 4/11 that the definition for a shortcoming or a deficiency as contained in the Uniform Methodology be replaced with a single definition for both situations. In response to this the Council, on 30 November 2001, approved the single definition by retaining the word *deficiency* in the new single definition, as the negative connotation associated with the word had political and financial leverage to assist with the corrective action required. The amended version of the Uniform Methodology (the Appendix refers) has been consistently implemented by all PIRGs.

## 2. REGIONAL EXPERIENCES

### 2.1 Relevance to Universal Safety Oversight Audit Programme (USOAP)

2.1.1 The **European Region** raised the issue of uniform methodology and its relevance to USOAP, and suggested that USOAP should eventually incorporate the current PIRGs activities in identifying deficiencies. It is of the opinion, however, that there would be merit in maintaining the role of the PIRGs in dealing with the safety-related deficiencies and should consider the USOAP and the PIRGs activities as complementary under the Unified Strategy for the rectification of safety-related deficiencies. It should be noted, in this regard, that most of the issues covered in the PIRGs' lists of deficiencies are primarily of an operational nature and may require urgent attention, while USOAP audit findings are aimed at identifying the ability of States to conduct their safety oversight obligations.

2.1.2 USOAP foresees that all States will be regularly audited, approximately following a six-year cycle. On the other hand, PIRG meetings are convened on an annual basis and its contributory bodies hold their annual meetings during that time. This provides a very good opportunity for PIRGs to keep deficiencies under constant review, monitor the remedial actions taken by the States, and identify areas where ICAO assistance is required.

2.1.3 In view of the above, these two ways of addressing deficiencies by USOAP and PIRGs are considered complementary by nature and confirms that addressing air navigation deficiencies may still need to be one of the major tasks of the PIRGs, as specified in the terms of reference of PIRGs.

### 2.2 Supplement to Uniform Methodology

2.2.1 The **Asia/Pacific Region** felt that it was necessary to develop a more detailed regional guidance on the implementation of the Uniform Methodology (regarded as a framework in dealing with deficiencies) since it was found to be lacking some procedures thereby posing difficulties in its practical implementation. Accordingly, in August 2004, the fifteenth meeting of the ASIA/PAC Air Navigation Planning and Implementation Regional Group (APANPIRG/15) finalized a Supplement to the Uniform Methodology, outlining procedures for identification, validation, reporting, and elimination of the deficiencies in the different air navigation fields

2.2.2 The Supplement, in amplifying the procedures set forth in the ICAO Uniform Methodology, provides for a systematic approach to the management of deficiencies in the Asia and Pacific Regions through detailed regional procedures which to be followed by the States, users and the ICAO Asia and Pacific Regional Office in implementing the Uniform Methodology. In the regional procedure, the deficiencies identified follow the SMART concept, where the description of a deficiency shall be:

- **Specific** – clear task on what needs to be done
- **Measurable** – precise requirements
- **Achievable** – task sensible in scope
- **Realistic** – task has deadlines and completion requirements
- **Time-bounded** – sensible guide for completion and imposes a schedule.

2.2.3 Recognizing the immense value of the ASIA/PAC Supplement, the APANPIRG had urged States and international organizations to utilize the guidance materials as appropriate. The post-implementation review is scheduled to be conducted by APANPIRG in August 2006 to assess the effectiveness and efficiency of resolving the deficiencies using the guidance material of the ASIA/PAC

Supplement. The Secretariat will subsequently examine the outcome of the review of APANPIRG to determine its global applicability.

### 2.3 Rationale for non-elimination of deficiencies

2.3.1 The **Middle East (MID) Region** through Conclusion 8/54 of the eight meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/8), invited the States of the MID Region to allocate sufficient resources for the elimination of the air navigation deficiencies and urged them to inform ICAO of any implementation problems they may encounter in this regard within their State(s) giving the rationale for non-elimination of deficiencies. To this end, States were requested to formulate, and review on a regular basis, an action plan including the rationale for non-elimination of deficiencies. Only few States had replied to the Regional Office and, in most cases, without giving the rationale for non-elimination. MIDANPIRG/9 in reviewing the above conclusion identified four different root causes as main rationale for the non-elimination of deficiencies:

- i) F: the rationale for non-elimination is due to a Finance problem
- ii) H: the rationale for non-elimination is due to a lack of Human resources/expertise
- iii) S: the rationale for non-elimination is due to a State reason (military/political issue)
- iv) O: for Other unknown causes.

2.3.2 Although MIDANPIRG recommended adopting this proposal into the uniform methodology, it is considered necessary to await the experience gained in its utilization by the MID Region before extending its application to other regions.

### 2.4 On-line database of regional air navigation deficiencies

2.4.1 It was observed by the **Caribbean/South America (CAR/SAM) Regions** that keeping the list of deficiencies up-to-date by Regional Offices and PIRGs proved to be a challenging task. Moreover, the manual method did not allow any reformatting of the list, for example, based on States, type of deficiency or date categories. In addition, despite numerous contacts with States, updates are not received on a regular basis. Consequently, the CAR/SAM Regional Planning and Implementation Group (GREPECAS) developed an on-line database of regional air navigation deficiencies that provides secure access to authorized users.

2.4.2 In this respect, it was noted that, the **MID Region** is in the process of developing such an on-line database, whereas the **African-Indian Ocean (AFI) Region** has just established the database, on a trial basis, for their Region.

2.4.3 Acknowledging that such a methodology, in addition to providing transparency, enables information in the database to be current and formatted by State, type deficiency, date, etc., all PIRGs may wish to consider establishing and maintaining a regional on-line database of air navigation deficiencies. Accordingly, ALLPIRG is invited to agree to adopt the following conclusion:

#### **Draft Conclusion 5/X – A regional on-line database of air navigation deficiencies**

That, PIRGs consider establishing and maintaining a regional on-line database of air navigation deficiencies that ensures transparency and provides a secure access to authorized users.

## 2.5 Last resort action

2.5.1 The **CAR/SAM Regions** recognized that the Regional Offices in Mexico and Lima and GREPECAS had been addressing the ongoing issue of elimination of regional air navigation deficiencies with the cooperation of States, international organizations and other entities through missions, letters, meetings and even telephone communication. Furthermore, even though a number of deficiencies remain unresolved, only a few States in CAR/SAM Regions had responded with an action plan to eliminate the deficiencies. Consequently, when efforts to eliminate deficiencies prove unsuccessful after exhausting all alternatives, GREPECAS adopted the following last resort action, which consists of two parts: first, propose the inclusion of an alternate facility/procedure in the air navigation plan (ANP); and, second, if this is not feasible, States, users and ICAO should be provided with an analysis concerning the risk associated with such a deficiency. Noting that the last resort action embodies the principle of transparency and, as such, is in harmony with the recently adopted “Unified strategy to resolve safety-related deficiencies” (A35-WP/63 refers) by the 35th Session of the ICAO Assembly, it would be relevant for adoption of a similar approach by the other regions to resolve regional air navigation deficiencies.

2.5.2 Moreover, GREPECAS/13, in its review of air navigation deficiencies, agreed to consider a maximum of two years (until 31 December 2007) for the elimination of “urgent” deficiencies, at which point the “last resort action” as adopted by GREPECAS/12 would be applied. Acknowledging that the situation is somewhat similar to remaining Regional Offices and PIRGs, ALLPIRG may wish to consider this last resort action as a means of addressing air navigation deficiencies. As such, ALLPIRG is requested to adopt the following conclusion:

**Draft Conclusion 5/X: – Last resort action to resolve regional air navigation deficiencies**

That, when efforts to eliminate deficiencies prove unsuccessful after exhausting all alternatives, PIRGs adopt the following last resort action, which consists of the two parts, as follows:

- a) propose the inclusion of an alternate facility/procedure in the ANP; or
- b) when a corrective action as a) above cannot be recommended, provide the State(s)/Territory(ies)/users and ICAO with an analysis concerning risk associated with such deficiency.

## 3. ACTION BY ALLPIRG

3.1 The ALLPIRG/5 Meeting is invited to:

- a) note the experiences of PIRGs and the Regional Offices in the application of the Uniform Methodology in addressing air navigation deficiencies; and
- b) adopt the conclusions cited in paragraphs 2.4.3 and 2.5.2 above

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## APPENDIX

### UNIFORM METHODOLOGY FOR THE IDENTIFICATION, ASSESSMENT AND REPORTING OF AIR NAVIGATION DEFICIENCIES

(Approved by the Council on 30 November 2001)

#### 1. INTRODUCTION

1.1 Based on the information resulting from the assessment carried out by ICAO on the input received from various regions regarding deficiencies in the air navigation field, it became evident that improvements were necessary in the following areas:

- a) collection of information;
- b) safety assessment of reported problems;
- c) identification of suitable corrective actions (technical/operational/financial/organizational), both short-term and long-term; and
- d) method of reporting in the reports of ICAO planning and implementation regional groups (PIRGs).

1.2 This methodology is therefore prepared with the assistance of ICAO PIRGs and is approved by the ICAO Council for the efficient identification, assessment, and clear reporting of air navigation deficiencies. It may be further updated by the Air Navigation Commission in the light of the experience gained in its utilization.

1.3 For the purpose of this methodology, the definition of deficiency is 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.

#### 2. COLLECTION OF INFORMATION

##### 2.1 Regional Office sources

2.1.1 As a routine function, the regional offices should maintain a list of specific deficiencies, if any, in their regions. To ensure that this list is as clear and as complete as possible, it is understood that the regional offices take the following steps:

- a) compare the status of implementation of the air navigation facilities and services with the regional air navigation plan documents and identify facilities, services and procedures not implemented;

- b) review mission reports with a view to detecting—deficiencies that affect safety, regularity and efficiency of international civil aviation;
- c) make a systematic analysis of the differences with ICAO Standards and Recommended Practices filed by States to determine the reason for their existence and their impact, if any, on safety, regularity and efficiency of international civil aviation;
- d) review aircraft accident and incident reports with a view to detect possible systems or procedures deficiencies;
- e) review inputs, provided to the regional office by the users of air navigation services on the basis of Assembly Resolution A33-14, Appendix M;
- f) assess and prioritize the result of a) to e) according to paragraph 4;
- g) report the outcome to the State(s) concerned for resolution; and
- h) report the result of g) above to the related PIRG for further examination, advice and report to the ICAO Council, as appropriate through PIRG reports.

## **2.2 States' sources**

2.2.1 To collect information from all sources, States should, in addition to complying with the Assembly Resolution A31-10, establish reporting systems in accordance with the requirements in Annex 13, paragraph 7.3. These reporting systems should be non-punitive in order to capture the maximum number of deficiencies.

## **2.3 Users' sources**

2.3.1 Appropriate international organizations, including the International Air Transport Association (IATA) and the International Federation of Air Line Pilots' Associations (IFALPA), are valuable sources of information on—deficiencies, especially those that are safety related. In their capacity as users of air navigation facilities they should identify facilities, services and procedures that are not implemented or are unserviceable for prolonged periods or are not fully operational. In this context it should be noted that Assembly Resolution A33-14, Appendix M and several decisions of the Council obligate users of air navigation facilities and services to report any serious problems encountered due to the lack of implementation of air navigation facilities or services required by regional plans. It is emphasized that this procedure, together with the terms of reference of the PIRGs should form a solid basis for the identification, reporting and assisting in the resolution of non-implementation matters.

## **3. REPORTING OF INFORMATION ON DEFICIENCIES**

3.1 In order to enable the ICAO PIRGs to make detailed assessments of—deficiencies, States and appropriate international organizations including IATA and IFALPA, are expected to provide the information they have to the ICAO regional office for action as appropriate, including action at PIRG meetings.

3.2 The information should at least include: description of the deficiency, risk assessment, possible solution, time-lines, responsible party, agreed action to be taken and action already taken.

3.3 The agenda of each PIRG meeting should include an item on air navigation deficiencies, including information reported by States, IATA and IFALPA in addition to those identified by the regional office according to paragraph 2.1 above. Review of the deficiencies should be a top priority for each meeting. The PIRGs, in reviewing lists of deficiencies, should make an assessment of the safety impact for subsequent review by the ICAO Air Navigation Commission.

3.4 In line with the above, and keeping in mind the need to eventually make use of this information in the planning and implementation process, it is necessary that once a deficiency has been identified and validated, the following fields of information should be provided in the reports on deficiencies in the air navigation systems. These fields are as follows and are set out in the reporting form attached hereto.

a) Identification of the requirements

As per ICAO procedures, Regional Air Navigation Plans detail *inter alia* air navigation requirements including facilities, services and procedures required to support international civil aviation operations in a given region. Therefore, deficiencies would relate to a requirement identified in the regional air navigation plan documents. As a first item in the deficiency list, the requirements along with the name of the meeting and the related recommendation number should be included. In addition, the name of the State or States involved and/or the name of the facilities such as name of airport, FIR, ACC, TWR, etc. should be included.

b) Identification of the deficiency

This item identifies the deficiency and would be composed of the following elements:

- i) a brief description of the deficiency;
- ii) date deficiency was first reported;
- iii) appropriate important references (meetings, reports, missions, etc)

c) Identification of the corrective actions

In the identification of the corrective actions, this item would be composed of:

- i) a brief description of the corrective actions to be undertaken;
- ii) identification of the executing body;
- iii) expected completion date of the corrective action<sup>\*</sup>; and
- iv) when appropriate or available, an indication of the cost involved.

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<sup>\*</sup> It should be noted that a longer implementation period could be assigned in those cases in which the expansion or development of a facility was aimed at serving less frequent operations or entailed excessive expenditures.

#### 4. ASSESSMENT AND PRIORITIZATION

4.1 A general guideline would be to have three levels of priority organized on the basis of safety, regularity and efficiency assessment as follows:

“U” priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.

Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

“A” priority = Top priority requirements necessary for air navigation safety.

Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

“B” priority = Intermediate requirements necessary for air navigation regularity and efficiency.

Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

#### 5. MODEL REPORTING TABLE FOR USE IN THE REPORTS OF PIRGS

5.1 Taking the foregoing into account, the model table at the Attachment is for use by PIRGs for the identification, assessment, prioritization etc. of deficiencies. It might be preferred that a different table would be produced for each of the different topics i.e. AGA, ATM, SAR, CNS, AIS/MAP, MET. However, all tables should be uniform.

#### 6. ACTION BY THE REGIONAL OFFICES

6.1 Before each PIRG meeting, the regional office concerned will provide advance documentation concerning the latest status of deficiencies.

6.2 It is noted that the regional offices should document serious cases of deficiencies to the Air Navigation Commission (through ICAO Headquarters) as a matter of priority, rather than waiting to report the matter to the next PIRG meeting, and that the Air Navigation Commission will report to the Council.

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## ATTACHMENT TO APPENDIX

### REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE ..... FIELD IN THE ..... REGION

Identification		Deficiencies			Corrective action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action*
Requirement of Part ..., paragraph (table) .. of the air navigation plan	Terra X Terra Y	Speech circuits not implemented Villa X - Villa Y	12 Dec. 2..X	Coordination meeting between Terra X and Terra Y on 16 July 2..X to finalize arrangements to implementation circuit via satellite	Implementation of direct speech circuit via satellite	Terra X	20 Aug. 2..X	A

\* Priority for action to remedy a deficiency is based on the following safety assessments:

“U” priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.

Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

“A” priority = Top priority requirements necessary for air navigation safety.

Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

“B” priority = Intermediate requirements necessary for air navigation regularity and efficiency.

Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

— END —