

International Civil Aviation Organization  
Eastern and Southern African Office

**Eleventh Meeting of the Air Traffic Services/Aeronautical Information  
Service/Search and Rescue Sub-Group (ATS/AIS/SAR SG/11)  
(Nairobi, Kenya, 26 - 30 April 2010)**

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**Agenda Item 11: Review air navigation deficiencies in the ATM, AIS/ MAP and SAR fields**

**REVIEW AIR NAVIGATION DEFICIENCIES IN THE ATM, AIS/ MAP AND SAR  
FIELDS**

**(Presented by the Secretariat)**

**Summary**

This paper contains deficiencies in the ATS, SAR and AIS/MAP fields for the AFI Region as updated APIRG/16 and ATS/AIS/SAR SG10. These were developed using the uniform methodology for identification, assessment and reporting of air navigation deficiencies adopted by the ALLPIRG, the ANC and the Council of global application by all ICAO PIRGs. It contains also the performance frameworks adopted by the SP AFI8 RAN for the elimination of the deficiencies in the fields of ATM, AIS/MAP and SAR

Action by the ATS SG is proposed at **paragraph 3**.

**References:**

ALLPIRG/2 Report  
APIRG/13 Report  
APIRG/16 Report  
SP AFI/8 RAN Report  
ATS/AIS/SAR SG 10 Report

**1. Introduction**

1.1 As per definition approved by the ICAO Council, “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 Identification, assessment and reporting of air navigation deficiencies is one of the regular tasks of the ICAO planning and implementation regional groups (PIRGs).

1.3 In accordance with established practice, the sixteenth meeting of APIRG (Rubavu, Rwanda, 19 – 23 November 2007) reviewed the list of air navigation deficiencies in the AFI region.

1.4 The SP AFI/ 8 RAN meeting Rec.6/25 adopted performance objectives for the elimination of Air Navigation Deficiencies in the AFI Region, and called States to develop their national action plans, aligned with the regional performance objective, to eliminate their relevant deficiencies.

1.5 Yet, there is a persistent need for APIRG to update the list of deficiencies reported in the AFI region, and for States to take urgent actions to eliminate these deficiencies.

## **2. Discussion**

2.1 The sixteenth meeting of APIRG Rubavu, Rwanda, 19 – 23 November 2007) reviewed the list of air navigation deficiencies in the AFI region. The Group was reminded of the concern expressed by ALLPIRG/5 (Montreal, 23-24 March 2006), the Air Navigation Commission and the ICAO Council about persistent deficiencies, in particular those impairing safety. The meeting agreed that priority should be given by States to eliminate the most common and persistent deficiencies.

2.2 It is to recall that the SP AFI8 RAN meeting expressed the same concerns raised by the Commission and the Council on the serious impact of unresolved deficiencies on safety, and agreed that States concerned should with extreme urgency, take concrete measures to eliminate all deficiencies impairing safety in the region.

2.3 Based on the above and in order to address the most urgent deficiencies, the SP AFI/8 RAN agreed to the following recommendation:

### **Recommendation 6/25 — Elimination of air navigation deficiencies in the AFI Region**

That:

- a) APIRG adopt the Performance Objective: Elimination of Air Navigation Deficiencies in the AFI Region as contained in the performance framework form in Appendix J to the Report on Agenda Item 6;

- b) States develop their national action plans, aligned with the regional performance objective, to eliminate their relevant deficiencies in the fields of aerodromes and ground aids (AGA), air traffic management (ATM), aeronautical information services (AIS), communications (CNS), meteorological (MET) and search and rescue (SAR), priority being given to the deficiencies as contained in the performance framework form in Appendix J to the Report on Agenda Item 6; and
- c) States take steps to seek assistance where required for the implementation of their action plans through ICAO mechanisms such as Technical Co-operation Bureau (TCB), International Financial Facility for Aviation Safety (IFFAS), special implementation projects (SIPs) and from industry stakeholders and donor agencies.

**Note:** The performance frameworks adopted by the SP AFI8 RAN for the elimination of the deficiencies in the fields of ATM, AIS/MAP and SAR are shown in Appendix D1 to D3 to this paper.

2.4 In accordance with the established practice, the ATM/AIS/SAR SG 10 meeting reviewed and updated the list of deficiencies in the ATS, SAR and AIS/MAP fields as shown in Appendices A, B and C .

2.5 The ATM/AIS/SAR SG 10 meeting, after discussing the issue and taking into account the SP AFI/ 8 RAN meeting Rec.6/25, adopted Conclusion 10/38 and Conclusion 10/39, all regarding the establishment and the updating of a comprehensive list of deficiencies, and calling States to take necessary actions to eliminate these deficiencies. The meeting agreed also that the list of deficiencies be circulated to States for their most recent updating.

2.6 Given the above discussion, the meeting may wish also to note that based on currently available information at the Secretariat as reflected in Appendixes A-C, 44 States have no deficiencies in the field of ATM, 51 in the fields of AIS/MAP, while in the field of SAR most States (40-45) have three similar deficiencies identified between 1991 and 1995.

2.7 In considering the abovementioned status of deficiencies, the meeting may wish to recall the deliberations of APIRG 13 on the issue of deficiencies, in particular APIRG/13-IP/17 which is provided as **Appendix D** to this working paper. Furthermore, the meeting may wish to recall that the SP AFI RAN in 2008 was apprised on the status of implementation of the eight (8) critical elements of safety oversight assessed from USOAP audits as depicted in the graph at **Appendix E** to this working paper.

The data used to develop the graph related to 36 AFI States which had been audited as of November 2008 and it represented 68 per cent of the total number of 53 States within the AFI Region. The unsatisfactory condition reports (UCRs) database under the purview of the AFI Tactical Action Group (TAG) undoubtedly points towards a higher state of deficiencies than that reflected in the current database.

2.8 Considering the definition of “deficiency,” particularly as discussed in detail at **Appendix D**, the status of implementation of SARPs and the ANP requirements in the AFI, including the number of ATS routes in the ANP Table ATS 1, some of which (unimplemented routes) have been identified by APIRG 14, 15, 16 and the ATS/AIS/SAR SG/10, as well as the status of UCRs considered by the TAG, the meeting may wish to acknowledge that a comprehensive review of the AFI deficiency database is necessary in order to more closely reflect the actual status of deficiencies.

2.9 In view of the above, the Subgroup may wish to adopt the following conclusions:

*DRAFT CONCLUSION 11/XX: ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE ATM, AIS/MAP, AND SAR FIELDS*

*That, in order to facilitate the updating of the deficiency database by the Regional Offices, and to foster the elimination of deficiencies in the AFI Region:*

- a) APIRG Subsidiary bodies and Secretariat establish a comprehensive list comprising all air navigation deficiencies consistent with the ICAO definition of deficiency as approved by Council, for necessary attention;*
- b) States and international organizations (including IATA, IFALPA, IFATCA) are urged to actively contribute towards updating the deficiency database, by providing to the Regional Offices, information on the implementation status of SARPs and Air Navigation Plan (ANP) requirements*
- c) AFI States provide copies of action plans developed in pursuant to SP AFI RAN Recommendation 6/25 to the concerned APIRG Subsidiary bodies and the Regional Offices;*
- d) APIRG adopt a matrix similar to the model in safety management guidance (Appendix F) to facilitate a consistent assessment and prioritization of deficiencies (i.e. Urgent, Top Priority and Intermediate requirement).*

(This Draft Conclusion supersedes ATS/AIS/SAR SG10 Conclusions 10/38 and 10/39)

*DRAFT CONCLUSION 11/X: DEVELOPMENT OF THE AFI WEB-BASED AIR NAVIGATION DEFICIENCY DATABASE*

*That in order to enable States and International Organizations to contribute directly to the deficiency database on a continuous basis, ICAO Regional Offices expedite the development of a web-based AFI Air Navigation Deficiencies Data Base (AANDDD)*

2.10 The Subgroup may recall also that letter referenced ES AN 4/60-0095 convening this meeting, requested State representatives to bring along necessary information to update listed/known deficiencies data relating to each State, including proposed corrective actions and target dates as applicable.

**3. Action required:**

The Sub-Group is requested:

- a) to review and update performance framework forms adopted by the SP AFI RAN for the elimination of the deficiencies in the fields of ATM, AIS/MAP and SAR as shown in appendix D1 to D3 to this paper
- b) to update the list of deficiencies in the ATS, SAR and AIS/MAP fields at Appendixes A, B and C, with information brought by States representatives.
- c) To adopt draft conclusions in para 2.9 above
- d) to forward the updated list to APIRG for consideration and action

**Appendix D1**

**ATM PERFORMANCE OBJECTIVES**

<b>ELIMINATION OF IDENTIFIED ATM DEFICIENCIES</b> (provision of ATC service and implementation of ATS routes including RNAV routes, joint use of airspace)				
<b>Benefits</b>				
<b>Environment</b>	• reductions in fuel consumption			
<b>Efficiency</b>	• ability of aircraft to conduct flight more closely to preferred trajectories			
<b>Safety</b>	• enhance safety by wider distribution of aircraft in a given airspace			
	• enhanced safety management			
<i>Strategy</i>				
<b>Short term (2010)</b>				
<i>Medium term (2011 - 20015)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
<b>AOM</b>	• implementation and provision of ATC service along ATS routes UA618, UB525, UB607, UL612, UM220, UM365, UR400 (Khartoum FIR) and UR780 (Mogadishu FIR), in the Table ATS 1 – Basic ANP, Doc 7474 and the provision of ATC service at terminal area of Mogadishu International Airport	2008 – 2009		
	• elimination and/or removal of special use airspaces (prohibited restricted and danger areas)	2008 – 2009		
	• State develop an implementation action plan to eliminate/or reduce these deficiencies	2008 – 2009		
<b>linkage to GPIs</b>	GPI/1: Flexible use of airspace; GPI/7: Dynamic and flexible ATS route management; GPI/8: Collaborative airspace design and management; GPI/10: Terminal area design and management			

Appendix D2

SEARCH AND RESCUE (SAR) PERFORMANCE OBJECTIVES

ELIMINATION OF IDENTIFIED SAR DEFICIENCIES (SAR legislation, SAR agreements and SAR ELT)				
Benefits				
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• efficiency in the conduct of SAR service</li> <li>• effective and timely assistance by all participating emergency response agencies</li> </ul>			
<b>Safety</b>	<ul style="list-style-type: none"> <li>• safety of life</li> </ul>			
<i>Strategy</i> <b>Short term (2010)</b> <i>Medium term (2011 - 20015)</i>				
ATM OC COMPONENTS	TASKS	TIMEFRAME START-END	RESPONSIBILITY	STATUS
<b>SAR service</b>	<ul style="list-style-type: none"> <li>• review deficiencies in the provision of effective SAR and rescue service</li> </ul>	2008 – 2009		
	<ul style="list-style-type: none"> <li>• review deficiencies concerning implementation of SAR legislation</li> </ul>	2008 – 2009		
	<ul style="list-style-type: none"> <li>• review deficiencies concerning implementation of SAR agreements with assisting SAR organizations</li> </ul>	2008 – 2009		
	<ul style="list-style-type: none"> <li>• review deficiencies concerning implementation of COSPAS SARSAT ELT 406 MHz</li> </ul>	February 2009		
	<ul style="list-style-type: none"> <li>• develop State action plan to eliminate and/or reduce these deficiencies</li> </ul>	2009		
<b>linkage to GPs</b>	GPI/16: Decision support and alerting service			

**Appendix D3**

**AIS/MAP PERFORMANCE OBJECTIVES**

<b>ELIMINATION OF AIS/MAP DEFICIENCIES</b> (implementation of WGS-84 coordinates, publication of aeronautical charts and timely publication and updating of AIS/MAP documents, i.e. NOTAMs, AIPs, AICs, etc.)				
<b>Benefits</b>				
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>improved collaborative decision-making through sharing aeronautical data information</li> </ul>			
<b>Safety</b>	<ul style="list-style-type: none"> <li>enhance safety by timely exchange air safety data, i.e. electronically and wider distribution of such data</li> </ul>			
<i>Strategy</i>				
<i>Short term (2010)</i>				
<i>Medium term (2011 - 20015)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
<b>AIS/MAP</b>	<ul style="list-style-type: none"> <li>publication of relevant aeronautical charts</li> </ul>	2008 – 2009		
	<ul style="list-style-type: none"> <li>publication of WGS-84 coordinates for en-route waypoints and use for GNSS coordinates for terminal approaches and departure procedures</li> </ul>	2008 – 2009		
	<ul style="list-style-type: none"> <li>publication of AIPs, NOTAMs and AICs using standards formats</li> </ul>			
	<ul style="list-style-type: none"> <li>States concerned to develop action plan to eliminate the deficiencies</li> </ul>	2008 – 2009		
<b>linkage to GPIs</b>	GPI/18: Aeronautical information; GPI/20: WGS-84			

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## *ATM Deficiencies*

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Algeria</i>	AFI/7 Rec.5/21	FIR Algiers	Non-implementation of ATC in the upper airspace in the South area (prevision of implementation in 2006).					31/12/09	A U
<i>Angola</i>	APIRG/13 Conclusion 13/43	Luanda FIR	Non-provision of 10 minutes longitudinal separation	1998			Angola	31/12/09	
<i>Benin</i>	This State has no deficiency in this field.								
<i>Botswana</i>	This State has no deficiency in this field.								
<i>Burkina Faso</i>	This State has no deficiency in this field.								
<i>Burundi</i>	This State has no deficiency in this field.								
<i>Cameroon</i>	This State has no deficiency in this field.								

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Appendix A**

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Cape Verde</i>	This State has no deficiency in this field.								
<i>Central African Republic</i>	This State has no deficiency in this field.								
<i>Chad</i>	This State has no deficiency in this field.								
<i>Comoros</i>	This State has no deficiency in this field.								
<i>Congo</i>	LIM AFI Rec.10/38	SSR Provision of effective surveillance.	Need for SSR surveillance in extended TMA as expressed in the AFI CNS/ATM Plan.	1998	Traffic density/complexity contributing to frequent ATS incidents	Implement SSR at Brazzaville	Congo	31/12/09	U
<i>Côte d'Ivoire</i>	This State has no deficiency in this field.								
<i>Dem. Rep. of Congo</i>	AFI/7 Rec.5/21	FIR Kinshasa	Non-provision of ATC service.	-	-	-	-	31/12/09	U
	APIRG/13 Conc.13/43	FIR Kinshasa	Non-implementation of 10 minute longitudinal separation.	-	-	-	-	31/12/09	U

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	RNAV UL612	Goma-EL Dhaba (Paleohora)	1995	Aircraft subjected to fly non-economical routes.	States concerned to coordinate common implementation dates.	Congo (DRC)-Egypt - Sudan	31/12/09	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	RNAV UL612	Goma-El Dhaba(Paleohora)	1995	Aircraft subjected to fly non-economical routes.	States concerned to coordinate common implementation dates.	Congo (DRC)-Egypt-Sudan	31/12/09	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	UB 527	Lubunbashi – Daras Salam	2001	Aircraft subjected to fly non-economical routes.	States concerned to coordinate a common implementation date.	D. R. Congo - Tanzania	31/12/09	
<i>Djibouti</i>	This State has no deficiency in this field.								
<i>Egypt</i>	This State has no deficiency in this field.								
<i>Equatorial Guinea</i>	This State has no deficiency in this field.								
<i>Eritrea</i>	This State has no deficiency in this field.								
<i>Ethiopia</i>	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP	Route UB525	Addis Ababa-ALEBA-Luxor	1996	Aircraft subjected to fly non-economical	States concerned to coordinate common implementation dates.	Eritrea	1/9/2009	A



<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Liberia</i>	This State has no deficiency in this field.								
<i>Libya</i>	This State has no deficiency in this field.								
<i>Madagascar</i>	This State has no deficiency in this field.								
<i>Malawi</i>	This State has no deficiency in this field.								
<i>Mali</i>	This State has no deficiency in this field.								
<i>Mauritania</i>	This State has no deficiency in this field.								
<i>Mauritius</i>	This State has no deficiency in this field.								
<i>Morocco</i>	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Airspace Management	Problems associated with non flight level allocations on ATS	1998	Non-standard flight level allocations contributed to	States concerned to meet and address issues under column 3.	Morocco-Portugal	31/12/09	U



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<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Sierra Leone</i>	This State has no deficiency in this field.								
<i>Somalia</i>	AFI/7 Rec.5/21	Provision of ATC 150 NM concept.	Non-provision of ATC service 150 NM of Mogadishu.	1994	Delayed descent for arrival and steep climb for departure.	No action due to the present situation	Somalia	31/12/09	U
<i>South Africa</i>	This State has no deficiency in this field.								
<i>Spain (Canary Is.)</i>	This State has no deficiency in this field.								
<i>Sudan</i>	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Route UR400	A. Simbel-Kassala	1994	Aircraft subjected to fly non-economical routes.	Not acceptable now within Khartoum FIR.	Sudan	31/12/09	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	RNAV UM665	Addis Ababa-Merowe	1994	Aircraft subjected to fly non-economical routes.	Not acceptable in Khartoum FIR due to military reasons.	Sudan	17/02/09	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	RNAV UL612	Goma-El Dhaba	1994	Aircraft subjected to fly non-economical routes.	Overlaps UB607 need to review alignment at appropriate forum.	Sudan	17/02/09	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Route UB607	Goma-El Obeid-New Valley-El Dabha	1994	Aircraft subjected to fly non-economical routes.	States concerned to coordinate common implementation dates.	Sudan	17/02/09	A

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<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Route UB525	Addis Ababa-Luxor	1994	Aircraft subjected to fly non-economical routes.	Not acceptable now in Khartoum FIR.	Sudan	17/02/09	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Route UA618	Bukavu-Malakal	1994	Aircraft subjected to fly non-economical routes.	Not available now in Khartoum FIR.	Sudan	17/02/09	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Provision of ATS	Area control service not provided to most ATS routes in the upper airspace.	1998	Aircraft subjected to fly non-economical routes.	State to expedite implementation process.	Sudan	17/02/09	A
<i>Swaziland</i>	AFI/7 Rec.5/1	P4 - Airspace Management	Prohibited area	1990	Non-availability of direct routings.	Withdraw this area - P4.	Swaziland	31/12/09	A
<i>Tanzania</i>	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	UB527	Lubumbashi - Dar-es-Salaam	2001	Aircraft subjected to fly non-economical routes.	Tanzania is coordinating with the States for a common implementation date.	D. R. Congo - Tanzania	31/12/09	A
<i>Togo</i>	This State has no deficiency in this field.								
<i>Tunisia</i>	This State has no deficiency in this field.								
<i>Uganda</i>	This State has no deficiency in this field.								

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Zambia</i>			This State has no deficiency in this field.						
<i>Zimbabwe</i>			This State has no deficiency in this field.						

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## *SAR Deficiencies*

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Algeria</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Algeria and adjacent States	31/12/09	A
<i>Angola</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Angola and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Angola	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Angola	31/12/09	A
<i>Benin</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Benin and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Benin	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Benin	31/12/09	A
<i>Botswana</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Botswana and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Botswana	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR	Establish SAR legislation	Botswana	31/12/0	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Burkina Faso</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	efficiency. Delay to conduct SAR OPS	Coordinate with States concerned	Burkina Faso and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Burkina Faso	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Burkina Faso	31/12/09	A
<i>Burundi</i>	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Burundi	31/12/09	A
	Annex 12, 2.4, Annex 12, 3.2.4: AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Coordinate with States concerned.	Burundi and Adjacent States.		
<i>Cameroon</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Cameroon and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Cameroon	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Cameroon	31/12/09	A
<i>Cape Verde</i>	This State has no deficiency in this field.								

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Central African Republic</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	CAR and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	CAR	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	CAR	31/12/09	A
<i>Chad</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Chad and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Chad	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Chad	31/12/09	A
<i>Comoros</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Comoros and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Comoros	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Comoros	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Congo</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Congo and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Congo	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Congo	31/12/09	A
<i>Côte d'Ivoire</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Cote d'Ivoire and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Cote d'Ivoire	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Cote d'Ivoire	31/12/09	A
<i>Dem. Rep. of Congo</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	DRC and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	DRC	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	DRC	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Djibouti</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Djibouti and adjacent States	31/12/09	A
	Annex 12, 2.4, Annex 12, 3.2.4, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	I) Provide SPOC to ICAO: ii) Implement 406 MHz acft.	Djibouti	31/12/09	A
	Annex 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Djibouti	31/12/09	A
<i>Egypt</i>	This State has no deficiency in this field.								
<i>Equatorial Guinea</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Equatorial Guinea and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Equatorial Guinea	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Equatorial Guinea	31/12/09	A
<i>Eritrea</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	Establish SAR agreements	1995	Delay to conduct SAR OPS	Coordination with States concerned	Eritrea and adjacent States	31/12/09	A
	Annex 12, 3.1.6, 3.1.7	SAR Legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR	Establish SAR Agreements	Eritrea	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Ethiopia</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3.	SAR Agreements	-	1995	Delay to conduct SAR/OPS	Coordinate with States concerned.	Ethiopia and adjacent States	31/12/09	A
<i>France (Réunion)</i>	This State has no deficiency in this field.								
<i>Gabon</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Gabon and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Gabon	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Gabon	31/12/09	A
<i>Gambia</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Gambia and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Gambia	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Gambia	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Ghana</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Ghana and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Ghana	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Ghana	31/12/09	A
<i>Guinea</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Guinea and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Guinea	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Guinea	31/12/09	A
<i>Guinea Bissau</i>	This State has no deficiency in this field.								
<i>Kenya</i>	Annex 12, 2.4, Annex 12, 3.2.4, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz and 121.5 Mhz not implemented	1993	Delay to conduct SAR OPS	121.5 Mhz implemented. 406 MHz not Implemented.	Kenya	31/12/09	A
	Annex 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency.	Development of draft legislation is on going	Kenya	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1996	Delay to conduct SAR OPS	Signed with EAC States only. To coordinate with other neighbouring States concerned outside EAC.	Kenya and adjacent States	31/12/09	A
<i>Lesotho</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Lesotho and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Lesotho	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Lesotho	31/12/09	A
<i>Liberia</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Liberia and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Liberia	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Liberia	31/12/09	A
<i>Libya</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Libya and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Libya	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Libya	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Madagascar</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Madagascar adjacent States	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Madagascar	31/12/09	A
<i>Malawi</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Malawi and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Malawi	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Malawi	31/12/09	A
<i>Mali</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Mali and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Mali	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Mali	31/12/09	A
<i>Mauritania</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Mauritania and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Mauritania	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Mauritania	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Mauritius</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Mauritius and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Mauritius	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Mauritius	31/12/09	A
<i>Morocco</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Morocco and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Morocco	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Morocco	31/12/09	A
<i>Mozambique</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Mozambique and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Mozambique	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Mozambique	31/12/09	A
<i>Namibia</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Namibia and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Namibia	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could	Establish SAR legislation	Namibia	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Niger</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	delay SAR efficiency. Delay to conduct SAR OPS	Coordinate with States concerned	Niger and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Niger	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Niger	31/12/09	A
<i>Nigeria</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Nigeria and adjacent States	31/12/09	A
<i>Rwanda</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Rwanda and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Rwanda	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Rwanda	31/12/09	A
<i>Sao Tome &amp; Principe</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Sao Tome & Principe and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Sao Tome & Principe	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Sao Tome & Principe	31/12/09	A

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Senegal</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Senegal and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Senegal	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Senegal	31/12/09	A
<i>Seychelles</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Seychelles and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Seychelles	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Seychelles	31/12/09	A
<i>Sierra Leone</i>	This State has no deficiency in this field.								
<i>Somalia</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Somalia and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Somalia	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Somalia	31/12/09	A
<i>South Africa</i>	This State has no deficiency in this field.								
<i>Spain</i>	This State has no deficiency in this field.								

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>(Canary Is.)</i>									
<i>Sudan</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Sudan and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acct. – Provide SPOC to ICAO	Sudan	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Sudan	31/12/09	A
<i>Swaziland</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Swaziland and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acct. – Provide SPOC to ICAO	Swaziland	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Swaziland	31/12/09	A
<i>Tanzania</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Tanzania and adjacent States	31/12/09	A
<i>Togo</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Togo and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acct. – Provide SPOC to ICAO	Togo	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Togo	31/12/09	A
<i>Tunisia</i>	This State has no deficiency in this field.								

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Uganda</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Uganda and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Uganda	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Uganda	31/12/09	A
<i>Zambia</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Zambia adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Zambia	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Zambia	31/12/09	A
<i>Zimbabwe</i>	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Zimbabwe and adjacent States	31/12/09	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Zimbabwe	31/12/09	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Zimbabwe	31/12/09	A

## *AIS Deficiencies*

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Algeria</i>			This State has no deficiency in this field.						
<i>Angola</i>			This State has no deficiency in this field.						
<i>Benin</i>			This State has no deficiency in this field.						
<i>Botswana</i>			This State has no deficiency in this field.						
<i>Burkina Faso</i>			This State has no deficiency in this field.						
<i>Burundi</i>			This State has no deficiency in this field.						
<i>Cameroon</i>			This State has no deficiency in this field.						
<i>Cape Verde</i>			This State has no deficiency in this field.						
<i>Central African Republic</i>			This State has no deficiency in this field.						





**ATS/AIS/SAR/SG/10**  
**Appendix C to WP/11**

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>Mozambique</i>	This State has no deficiency in this field.								
<i>Namibia</i>	This State has no deficiency in this field.								
<i>Niger</i>	This State has no deficiency in this field.								
<i>Nigeria</i>	This State has no deficiency in this field.								
<i>Rwanda</i>	This State has no deficiency in this field.								
<i>Sao Tome &amp; Principe</i>	This State has no deficiency in this field.								
<i>Senegal</i>	This State has no deficiency in this field.								
<i>Seychelles</i>	This State has no deficiency in this field.								
<i>Sierra Leone</i>	This State has no deficiency in this field.								
<i>Somalia</i>	Annex 4, 3.2, 11.2 and 13.2, AFI/7 Rec.12/31	ICAO Aerodrome Chart and the ICAO Aerodrome Obstacle Chart - Type A.	Non-availability of ICAO Aerodrome Chart, ICAO Aerodrome Obstacle Chart type A and ICAO Instrument Approach Chart for Hargeisa, Kismayu, Mogadishu.	1990	Lack of these charts affects safety.	Publish the three Charts as required	Somalia	31/12/07	U
	Annex 15, 3.6.4	Coordinates WGS84	Accuracy of coordinates to be established in accordance with Annexes 11 and 14.	01/01/98	Delay in introduction of GNSS	Implementation of WGS-84 coordinates	Somalia	31/12/07	U

<i>State Name</i>	<i>Requirements</i>	<i>Facilities or services</i>	<i>Description of Deficiency</i>	<i>Date first reported</i>	<i>Comments on Deficiency</i>	<i>Description of corrective action</i>	<i>Executing Body</i>	<i>Target date for implementation</i>	<i>Priority</i>
<i>South Africa</i>			This State has no deficiency in this field.						
<i>Spain (Canary Is.)</i>			This State has no deficiency in this field.						
<i>Sudan</i>			This State has no deficiency in this field.						
<i>Swaziland</i>			This State has no deficiency in this field.						
<i>Tanzania</i>			This State has no deficiency in this field.						
<i>Togo</i>			This State has no deficiency in this field.						
<i>Tunisia</i>			This State has no deficiency in this field.						
<i>Uganda</i>			This State has no deficiency in this field.						
<i>Zambia</i>			This State has no deficiency in this field.						
<i>Zimbabwe</i>			This State has no deficiency in this field.						

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INTERNATIONAL CIVIL AVIATION ORGANISATION

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP  
THIRTEENTH MEETING (APIRG/13)**  
(Sal, Cape Verde, 25-29 June 2001)

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**Agenda Item 5: Shortcomings and deficiencies in the air navigation field in the AFI Region**

**REVIEW OF THE DEFINITION OF SHORTCOMINGS AND DEFICIENCIES**

(Presented by the Secretariat)

**SUMMARY**

The Air Navigation Commission (ANC 155-10), during its consideration of the uniform methodology for the identification, assessment and reporting of air navigation shortcomings and deficiencies, agreed that clear guidelines on the current uniform methodology should be developed to assist planning and implementation regional groups (PIRGs) with the reporting of detailed assessments of shortcomings and deficiencies to accommodate States' filing of differences to Standards and Recommended Practices (SARPs) in relation to an air navigation plan. The Commission agreed that a review of the definitions of *shortcoming* and *deficiency* was also necessary. ALLPIRG/4 noted the newly developed guidelines and, as further requested by the Commission, considered a single definition for *shortcomings and deficiencies*. On 5 June 2001, the Commission (157-8) agreed on the proposed single definition and will propose to the Council to approve the uniform methodology as amended to reflect the single definition proposed in paragraph 3.1. The proposed changes to the uniform methodology are shown in the appendix.

Action by the APIRG is contained in paragraph 4.

**1. INTRODUCTION**

1.1 The uniform methodology for the identification, assessment and reporting of air navigation shortcomings and deficiencies was prepared with the assistance of ICAO's planning and implementation regional groups (PIRGs) and approved by the ICAO Council (C-DEC 154/19) on 23 June 1998 for the efficient identification, assessment and clear reporting of air navigation deficiencies. For the purpose of the methodology, a situation where a facility was not installed or a service was not provided in accordance with an air navigation plan (ANP) was considered to be a shortcoming. A situation where an existing facility or service was partially unserviceable, incomplete or not operated in accordance with applicable ICAO specifications and procedures was considered to be a deficiency.

1.2 In order to enable the ICAO PIRGs to make detailed assessments of shortcomings and deficiencies, States and relevant international organizations provide information to the ICAO regional office for action as appropriate. The PIRGs, in reviewing lists of shortcomings and deficiencies, should make an assessment of the safety impact for subsequent review by the Air Navigation Commission. The purposes of these lists of shortcomings and deficiencies are to assist States in defining their implementation priorities and to indicate what kind of remedial action is required.

1.3 On 28 November 2000, the Air Navigation Commission (ANC 155-10) considered AN-WP/7568 regarding the listing of shortcomings and deficiencies by PIRGs related to differences to SARPs as notified by Contracting States to ICAO, pursuant to Article 38 of the Convention on International Civil Aviation. With this in mind, the Commission provided clear guidelines to assist PIRGs with the reporting of detailed assessments of shortcomings and deficiencies to accommodate States' filing of differences to SARPs in relation to a facility or service required in accordance with an air navigation plan.

1.4 During the discussions surrounding the differences to Standards and Recommended Practices as notified by Contracting States to ICAO, it became evident that the uniform methodology was probably being interpreted in different ways. The Commission suggested that a review of the definitions of *shortcoming* and *deficiency* was necessary. It was acknowledged that this was a complex and high-level policy matter, and that a study should be conducted as soon as possible to develop a single definition.

1.5 The Commission felt that this matter should be brought to the attention of the fourth meeting of the ALLPIRG/Advisory Group (ALLPIRG/4) before making a final decision on the issue.

## 2. DISCUSSION

2.1 ALLPIRG/4 noted the guidelines and developed Conclusion 4/10 (Reporting of shortcomings and deficiencies) which states that, where a State by virtue of Article 38 has notified ICAO of a difference to SARPs governing the actual provision of facilities and services listed in an air navigation plan, the non-implementation of such a facility or service should not be reported as a shortcoming or a deficiency when it has no negative impact on the safety of international air navigation.

2.2 ALLPIRG/4 also recognized that difficulties arose as to the use of two definitions. In particular, according to the uniform methodology, the net effect of either a shortcoming or a deficiency is a negative impact on the safety, regularity and/or efficiency of international civil aviation. As the net effect for both conditions is the same, it is very difficult for PIRGs to distinguish between situations to be classified as a shortcoming or a deficiency subject to the status of implementation.

2.3 ALLPIRG/4 agreed that a single definition for *deficiency* should be prepared for incorporation into the uniform methodology. ALLPIRG/4 felt that the word *deficiency* should be retained in a new single definition, as the negative connotation associated with the word had political and financial leverage to assist with the corrective action required.

2.4 In light of the above, ALLPIRG/4 developed a new single definition for ANC and Council consideration: "A *deficiency* is a situation where a facility, service or a procedure is not provided in accordance with ICAO Standards and Recommended Practices which has a negative impact on the safety, regularity and/or efficiency of international civil aviation."

2.5 The three levels of prioritization of deficiencies organized on the basis of safety, regularity and efficiency, as contained in Section 4 of the uniform methodology, will remain unchanged. This will ensure a means of prioritizing deficiencies to assist States with the urgency of remedial action required.

2.6 In this regard, *implementation* is defined by the ICAO Council (C-DEC 121-7 and C-DEC 121-8) as follows: “Facilities and services specified in the air navigation plan provided, installed, functioning and operated in accordance with appropriate ICAO specifications and procedures.”

3. **PROPOSED DEFINITION**

3.1 Based on the above, the Commission (157-8) considered the definition and agreed on 5 June 2001 to propose to Council to approve the uniform methodology as amended to reflect the single definition developed:

*A deficiency* is a situation where a facility, service or procedure is not provided in accordance 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.

4. **ACTION BY THE APIRG**

4.1 The APIRG is invited to:

- a) note the changes to the uniform methodology proposed to the Council

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## APPENDIX

### PROPOSED AMENDMENTS

#### UNIFORM METHODOLOGY FOR THE IDENTIFICATION, ASSESSMENT AND REPORTING OF AIR NAVIGATION ~~SHORTCOMINGS AND DEFICIENCIES~~ **RELATED TO AIR NAVIGATION PLANS**

(Approved by the Council on 23 June 1998)

#### 1. INTRODUCTION

1.1 Based on the information resulting from the assessment carried out by ICAO on the input received from various regions regarding ~~shortcomings and~~ 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 ~~shortcomings and~~ 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, a situation where a facility, ~~is not installed or a service or procedure~~ is not provided in accordance 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**, is considered to be a ~~shortcoming~~ **deficiency**. ~~A situation where an existing facility or service is partially unserviceable, incomplete or not operated in accordance with appropriate ICAO specifications and procedures is considered to be a deficiency. The net effect of either a shortcoming or a deficiency is a negative impact on 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 are expected to maintain a list of specific ~~shortcomings and~~ 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 ~~shortcomings and~~ 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;
- 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 A31-5, 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 ~~shortcomings and~~ 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 A31-5, 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 ~~SHORTCOMINGS AND~~ DEFICIENCIES

3.1 In order to enable the ICAO PIRGs to make detailed assessments of ~~shortcomings and~~ 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 ~~shortcoming and~~ 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 ~~shortcomings and~~ 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 ~~shortcomings and~~ deficiencies should be a top priority for each meeting. The PIRGs, in reviewing lists of ~~shortcomings and~~ 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 ~~shortcoming or~~ deficiency has been identified and validated, the following fields of information should be provided in the reports on ~~shortcomings and~~ 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, ~~shortcomings or~~ deficiencies would relate to a requirement identified in the regional air navigation plan documents. As a first item in the ~~shortcoming/~~ 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 ~~shortcoming or~~ deficiency

This item identifies the ~~shortcoming or~~ deficiency and would be composed of the following elements.

- i) a brief description of the ~~shortcoming or~~ deficiency;
- ii) date ~~shortcoming or~~ deficiency was first reported;
- iii) Status of implementation; ie, ~~S = shortcoming~~  
~~D = deficiency~~
- iv) 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\* ; and
- iv) when appropriate or available, an indication of the cost involved.

#### 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 Appendix is for use by PIRGs for the identification, assessment, prioritization etc. of ~~shortcomings and~~ 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 ~~shortcomings and~~ deficiencies.

6.2 It is noted that the regional offices should document serious cases of ~~shortcomings and~~ deficiencies to the Air Navigation Commission (through ICAO Headquarters) as a matter of priority, rather than

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\*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.

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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REPORTING FORM ON AIR NAVIGATION ~~SHORTCOMINGS AND~~ DEFICIENCIES IN THE .... FIELD IN THE .... REGION

Identification		Shortcomings and deficiencies				Corrective action			
Requirements	States/facilities	Description	Date first reported	Implementation status (S, D)*	Remarks	Description	Executing body	Date of complete	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	12/02/9X	S  <b>REMOVE THIS COLUMN IN FULL</b>	Co-ordination meeting between Terra X and Terra Y on 16/07/9X to finalize arrangements to implementation circuit via satellite	Implementation of direct speech circuit via satellite	Terra X	August 199X	A

\*S = ~~shortcoming~~ D = deficiency

\*\* Priority for action to remedy a ~~shortcoming or~~ 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 –

ATTACHMENT

**GUIDELINES FOR LISTING OF DEFICIENCIES IN RELATION TO A DIFFERENCE FILED**

1. In accordance with the uniform methodology, the non-implementation of facilities or a service required for air navigation as listed in the regional air navigation plan (ANP) but not provided, should be listed as a shortcoming or deficiency. However, there are certain exceptions to the rule.

In a case where safety is not affected and an alternate facility or service is available, PIRGs should not list the non-implementation as a shortcoming or deficiency.

2. This could be illustrated with the case of the world geodetic system – 1984 (WGS-84). WGS-84 is required for accurate navigation using satellite navigation. The accuracy is critical in the approach and landing phase of flight. It could therefore be argued that if an alternate means to satellite navigation, such as an instrument landing system (ILS), is available at the destination, no safety issue will arise. The only point with non-implementation of WGS-84 will be limiting the choice of systems. It should be noted that, without WGS-84 implementation, it will not be possible to apply the concept of RNP using GNSS.

3. In cases like this, the PIRGs may consider that, if safety is not compromised, there is no need to list non-implementation of an element of an air navigation plan as a shortcoming or deficiency. This is supported by the legal opinion in paragraphs 4, 5 and 6 below.

4. According to the legal opinion, the uniform methodology is not to be confused with the procedure established in Article 38 of the Convention on International Civil Aviation. In particular, deficiencies regarding compliance with particular Standards should be listed even if the State concerned would have duly filed a related difference, as the *de facto* non-compliance with Standards and Recommended Practices has to be reported according to the established methodology. Lists of shortcomings and deficiencies are set up in order to factually establish the level of implementation of facilities and services specified in regional ANPs and associated procedures, which would not amount to infractions of Articles 37 and 38 of the Convention if related differences had been duly filed with respect to the Standards concerned. In fact, this should not give rise to any particular difficulty in principle, since the said lists would then merely acknowledge situations as officially confirmed by the States concerned through the filing of differences.

5. It was understandable that certain Contracting States may not favour the idea that the non-implementation of a Standard which has been notified to ICAO as a difference be nevertheless qualified as a *deficiency* since, from a legal viewpoint, they would be fully entitled to such a departure from the Standard concerned. It should also be noted that, in a strict legal sense, a State could not be compelled to take corrective action in this case unless safety was obviously endangered, as the State concerned would be fully entitled to depart from the Standard at issue by virtue of Article 38.

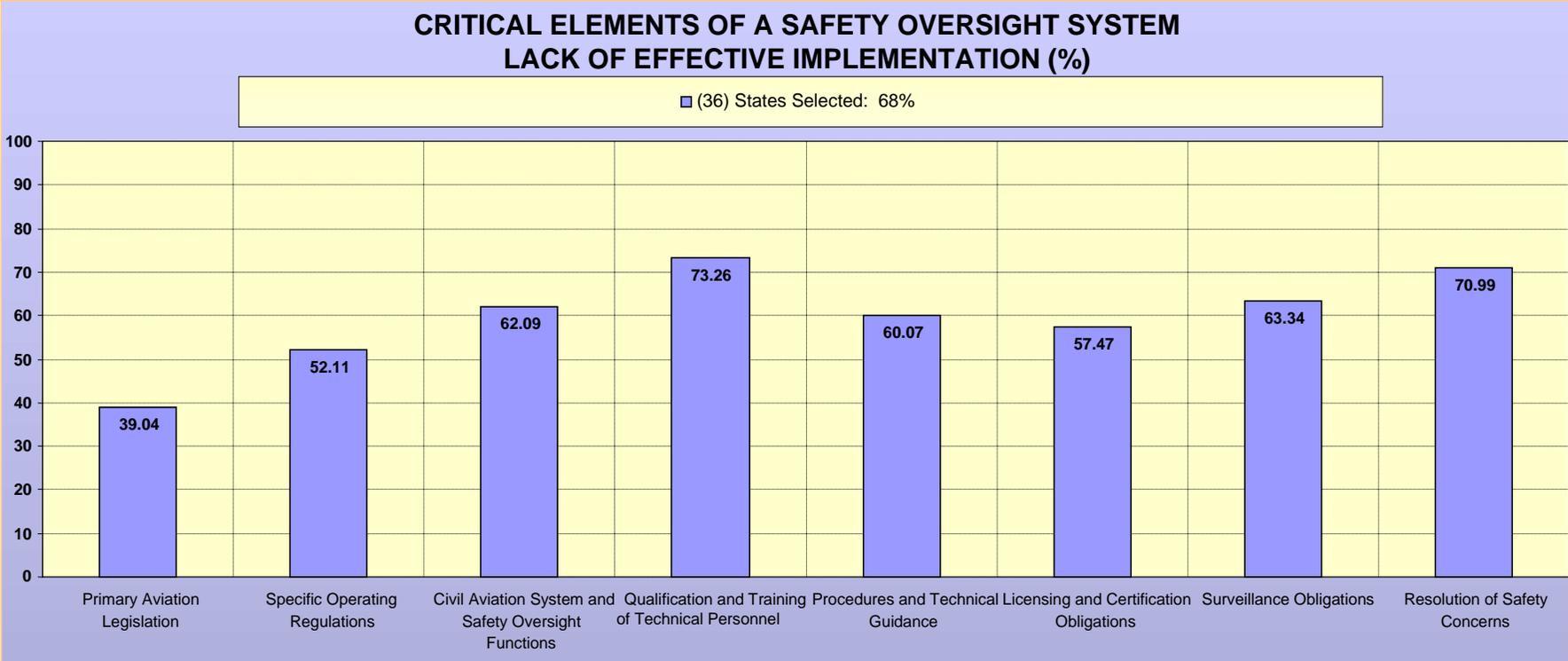
6. It can be further argued that, even if a State is under obligation to promptly notify ICAO of differences from SARPs, the lack of implementation of air navigation systems in this context should not be considered or listed in the reporting form as an air navigation shortcoming or deficiency where there is no negative impact on safety, regularity and/or efficiency of international air navigation, as assessed by a planning and implementation regional group (PIRG).

7. In summary, to accommodate States filing differences in relation to a facility or service required in accordance with an air navigation plan, it will be necessary for PIRGs to consider the following guideline when making detailed assessments of shortcomings and deficiencies:

“Where a State by virtue of Article 38 has notified ICAO of a difference to SARPs governing the actual provision of Facilities and Services listed in an air navigation plan, the non implementation of such a facility or service should not be reported as a deficiency when it has no negative impact on safety, regularity and/or efficiency .”

– END –

APPENDIX A



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International Civil Aviation Organization  
Eastern and Southern African Office

**Eleventh Meeting of the Air Traffic Services/Aeronautical Information  
Service/Search and Rescue Sub-Group (ATS/AIS/SAR SG/11)  
(Nairobi, Kenya, 26 - 30 April 2010)**

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**RISK ASSESSMENT METRIX**

Risk probability	Risk severity				
	Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Frequent 5	5A	5B	5C	5D	5E
Occasional 4	4A	4B	4C	4D	4E
Remote 3	3A	3B	3C	3D	3E
Improbable 2	2A	2B	2C	2D	2E
Extremely improbable 1	1A	1B	1C	1D	1E

Source: Safety Management Manual (Doc 9859)