



INTERNATIONAL CIVIL AVIATION ORGANIZATION

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**

**Shortcomings and deficiencies in the AOP field**

(Presented by the Secretariat)

**SUMMARY**

This paper presents the latest list of the shortcomings and deficiencies in the AOP field as updated by AOP/SG/4 Meeting and the Secretariat based on information from States and various other sources in accordance with the uniform methodology for identification, assessment and reporting of air navigation shortcomings and deficiencies.

Action by the meeting as at paragraph 3.

**1 Introduction**

1.1 According to its term of reference, The APIRG has been regularly reviewing the status of implementation of the AFI Air Navigation Plan (ANP) according to the uniform methodology approved by the ICAO Council to identify, assess and report the safety aspect of air navigation shortcomings and deficiencies. The result is reported to the ICAO Council and notified to the States and users organizations concerned.

**2. Discussion**

2.1 It is advisable to recall that a situation where a facility is not installed or a service is not provided in accordance with the regional air navigation Plan is considered to be a **shortcoming**. 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 effect of either a shortcoming or a deficiency is a negative impact on safety, regularity and/or efficiency of international civil aviation.

2.2. Since APIRG/12, a number of follow-up actions have been taken by regional Offices to pursue the matter with the States concerned and, as a result, some of the

outstanding shortcomings and deficiencies have been resolved in the AOP field. However, many shortcomings and deficiencies remain as is evident from the list attached in appendix A to this paper.

2.3 This list have been reviewed and revised by the Secretariat and subsequently by the AOP/SG on the basis of information obtained through informal and regional meetings, missions to States and inputs from various other sources including user organizations in accordance with the uniform methodology approved by the Council. The list was furthermore updated based on additional information from States individually referred to by the Secretariat to validate the shortcomings and deficiencies identified on their territory and indicate remedial actions taken or considered as well as the dates of implementation.

**3. Action by APIRG:**

APIRG is invited to:-

- a) Note and amend as necessary the list of shortcomings and deficiencies in the AOP field.
- b) Re-emphasize the institutional strategies for removal of shortcomings and deficiencies as identified at AFI/7 RAN Meeting.
- c) Urge all States to take all the necessary measures to eliminate these shortcomings and deficiencies.

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**Attachment:** List of shortcomings and deficiencies in the AOP field.

## APPENDIX A

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### APPENDIX A: SHORTCOMINGS/DEFICIENCIES IN THE AOP FIELD (Ref: Air Navigation Plan - Africa-Indian Ocean Region (Doc. 9702))

Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
Aerodrome fencing and security lighting AFI/7 Conc. 4/2 and 4/9 Annex 14 vol I, para 8.4.1 - 8.4.3	Cameroon/ Douala	Aerodrome fence inadequate	1993	D	Access to manoeuvring areas by Unauthorized persons.	Fence to be completed.	CCAA		B
	Chad/ N'djamena	Aerodrome fence incomplete	1998	D	Access to manoeuvring areas by unauthorized persons.	Fence to be completed	DCA/ ANAT		A
	Central African Republic/ Bangui	Aerodrome fence non existing	1999	S	<i>Access control impossible.</i>	<i>Build perimeter fence and road for patrols.</i>	DGACM		A
	Côte d'Ivoire/ Abidjan	Aerodrome fence incomplete	1998	D	Access to all airside areas by Unauthorized persons.	Fence to be completed	SODEXAM/ ANAC		A
	Congo/ Brazzaville	Aerodrome fence inadequate	1993	D	Control of unauthorized persons in movement areas inadequate	Extensive repair of fence required	ANAC	2000	A
	D. R. of Congo/ Kinshasa	Aerodrome fence incomplete	1998	D	Access to all airside areas by unauthorized persons.	Extensive repair of fence required	RVA		A

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Gabon/ Libreville	Aerodrome fence incomplete	1999	D	Access to airside by unauthorized persons.	Complete the fence construction	SGAC		A
	Guinea Bissau/ Bissau	Aerodrome fence inadequate	1993	D	Access to airside by unauthorized persons.	Extensive repair of fence required	DCA		B
	Mali/ Bamako	<del>Aerodrome fence inadequate</del>	<del>1994</del>	<del>D</del>	<del>Access to airside by unauthorized persons.</del>	Fence around the restricted area under construction. New fence completed and commissioned on 13 August 2000.	DNAC/ ADM  2000		<del>B</del>
	Mauritania/ Nouakchott	Aerodrome fence inadequate	1996	D	Control of access by animals and unauthorized persons to airside inadequate	New concrete fence installed but not entirely adequate	SAM		A
	Mauritania/ Nouadhibu	Aerodrome fence non existing.	1996	S	Access to airside by unauthorized persons.	Build a perimeter fence using appropriate materials.	SAM		B
	Niger/ Niamey	Aerodrome fence inadequate	1992	D	Access to airside by unauthorized persons.	Corrective measures not entirely adequate System of access ID implemented. Project of a new fence envisaged.	DCA/ ASECNA	2.0e+07	B

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Nigeria/ Abuja	Aerodrome Fence inadequate	2000	D	Access to airside by unauthorized persons and stray animals	Build a perimeter fence using appropriate materials. Project for adequate fence budgeted for year 2001.	FAAN	2001	A
	Nigeria/ Kano	Aerodrome fence inadequate	1999	D	Access to airside by unauthorized persons and stray animals	Previous efforts not effective. Project for adequate fence budgeted for year 2001.	FAAN	2001	A
	Nigeria/ Lagos	Aerodrome fence incomplete	1993	D	Access control implemented with regular patrols using the perimeter road.	New type of fence under construction.	FAAN	2001	B
	Sao Tomé & Principe/ Sao Tomé	Aerodrome fence inadequate	1993	D	Access to airside by unauthorized persons	Fence to be repaired	DCA		B
	Sierra Leone/ Freetown	Fence missing over more than half of perimeter.	1993	D	Access to airside by unauthorized persons	Situation to be evaluated after civil unrest	SLAA		B
	Somalia/ Mogadishu	Aerodrome fence inadequate	1995	D	Access to airside by unauthorized persons	Extensive repair of fence	Not available		B
	Tanzania/ Dar es salaam	Aerodrome fence incomplete	2000	D	Access to airside by unauthorized persons	Complete the ongoing repairs to the fence and rehabilitation of the perimeter road	TAA		B

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
Bird hazard control and reduction AFI/7 Conc. 4/2 and 4/7 Annex 14 vol I, para 9.5.1 - 9.5.3	Angola/ Luanda	Inadequate bird hazard control	1998	D	Grain seeds available close to aircraft manoeuvring areas. Slum development close to airport.	Control measures to be implemented and monitored Land use plan for airport environs required.	ENANA		A
	Benin/ Cotonou	Inadequate bird hazard control mechanism	1998	D		Control measures to be implemented and monitored	ASECNA/ DCA		A
	Burkina Faso/ Ouagadougou	Inadequate bird hazard control mechanism	1998	D	Problem discussed with Administration during the last Workshop on reducing bird hazard held in Ouagadougou from 9 to 13 October 2000.	Control measures to be implemented and monitored in particular relocation in coordination with local authorities of factors attracting birds (tannery, slaughterhouses, refuse dumps). Organization in progress.	ASECNA- DAAN/ DCA		U
	Chad/ N'Djamena	Bird hazard control measures to continue	1996	D		Equipment to reduce number of birds now available, Bird Hazard Committee created.	ANAT/ DCA/ ASECNA	1999	A
	Côte d'Ivoire/ Abidjan	Bird hazard control measures to continue.	1998	D		Coordination committee and equipment to reduce number of birds now available.	SODEXA M/AERIA/ ASECNA		B

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Democratic Rep. Of Congo/ Kinshasa	Inadequate bird hazard control measures	1998	D		Control measures to be implemented and monitored	RVA		A
	Gabon/ Libreville	Bird hazard control measures necessary	1996	D		Bird control measures to be enhanced and monitored.	SGAC/ ASECNA/ ADL	1998	B
	Guinea/ Conakry	Bird hazard control measures to continue.	1998	D		Bird control measures in progress	DNAC/ ANA- SOGEC		B
	Kenya/ Nairobi	Inadequate bird hazard control measures	1999	D	Airport located close to national park.	Bird control measures to be enhanced and monitored	KAA		
	Libya/ Benghazi	Bird hazard control measures required		S		Control measures to be implemented and monitored	NCAA		U
	Libya/ Tripoli	Bird hazard control measures required		S		Control measures to be implemented and monitored	NCAA		U
	Malawi/ Lilongwe	Additional bird hazard control measures required	1993	D	Ornithological study required to determine cause of bird attraction to airport.	Monitor and control farming activities around airport. Maintain appropriate grass height. Ornithological study.	Malawi DCA		U

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Mali/ Bamako	Bird hazard control measures required	1998	S		<del>Control measures to be implemented and monitored. Bird strikes to be reported to IBIS.</del> Bird Control Committee created in 1999. <i>Environmental management measures and awareness increase through media underway.</i>	DCA/ ASECNA/ Aéroports du Mali.	2.0e+07	⊕ A
	Senegal/ Dakar	Bird hazard control measures to continue	1993	D		Bird control unit set. Equipment available. <i>Bird control unit to be re-activated.</i>	ASECNA/ AANS		B
	Sudan/ Khartoum	Bird hazard control measures required	1993	S		Control measures to be implemented and monitored	NCAA		A
	Togo/ Lome	Bird hazard control measures to continue.	1996	D		Bird control committee and scaring equipment now available. <i>Committee activated and bird hazard control programme developed.</i>	DCA/ ASECNA/ SALT		A  2001

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
Rescue and fire fighting AFI/7 Conc. 4/2 and 4/7 Annex 14 Vol. 1 para 2.11.1 - 2.11.4 and 9.2.1 - 9.2.33	D. R. of Congo/ Kinshasa	RFFS: Major improvements required. RFFS CAT 9 not achieved. (Only cat 7 available)	1997	D		Procure new fire vehicles and accessories. Training and recycling of personnel. Action by ICAO/UNDP in progress	RVA	1998	U
	Guinea Bissau/ Bissau	Fire fighting services inadequate. Rescue services inadequate.	1999	D	Equipment vandalized during the unrest situation.	General revision and rehabilitation required. Supplement certain rescue equipment to meet the required level as in AFI ANP.	ENAG		U
	Liberia/ Monrovia	RFFS: inadequate	1996	D	<i>A study was carried out by ICAO/UNDP.</i>	<i>Rehabilitate facilities and acquire equipment as defined in the OACI/PNUD study available.</i>	DCA		U
	Nigeria/ Lagos	Communications equipment on RFF vehicles inadequate	2000	D		Equip all fire tenders with adequate two- way communication equipment.	FAAN		A
	Somalia/ Mogadishu	RFFS practically inexistent	1995	S		Establish new RFFS for Mogadishu airport	Not available!		U
	Tanzania/ Zanzibar	Fire fighting and rescue services inadequate	1999	D	CAT 8 required not met, rescue equipment not sufficient, staff not adequately trained, no grid map, station inappropriately located	Heavy investment required to train staff, procure additional fire trucks and rescue equipment and tools.	Zanzibar Director Aviation		U

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
Pavement strength AFI/7 Conc. 4/4 and 4/10 Annex 14 Vol.1 para 2.5.1 - 2.6.8	Angola/ Luanda	Parallel txwy to Rwy 23 required. Runway needs resurfacing.  Runway shoulders and clear-way need stabilizing. Apron uneven.	1998	D	Delays inevitable.  Aircraft vibrating at take-off and landing. FOD risks.	Development master plan and corresponding financial investment required.	ENANA		A
	Burkina Faso/ Ouagadougou	<i>Wrenching of asphalt pavement in some zones of Apron. Raising of bitumen to the surface of runway pavement.</i>	1999/1999	D		<i>Repairs on damaged areas required.</i>	ASECNA/ DAAN		B
				D	<i>Risk of skid during raining times.</i>	<i>Monitor the status and initiate studies for rehabilitation if deemed necessary.</i>			B
	Cameroon/ Douala	Bearing strength on some parking positions (C8) inadequate. Taxiway surface in critical condition.	1993	D	Risk of damage to aircraft.	Matter being reviewed for action <i>Rehabilitation in progress.</i>	ADC	Oct 2001	A
	Cameroon/ Yaounde	Poor braking action when wet	1998	D	Information on runway friction characteristics not promulgated.	Measure friction resistance and promulgate. <del>Rubber removal procedures required</del>	ADC	Feb 2001	A
	Chad/ N'Djamena	Runway surface degraded. Heavy rubber deposits on runway	1998	D	Potholes on runway surface	Pavement rehabilitation. Rubber deposit removal	ANAT/ DCA		U A
	Congo/ Brazzaville	Bearing strength inadequate.	1998	D		Pavement rehabi- litation required.	ANAC		U

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Côte d'Ivoire/ Abidjan	Parallel twy 23 required.	1998	D	Rehabilitation in progress.		AERIA		A
	D.R. of Congo/ Kinshasa	Rwy surface uneven and bumpy (bearing strength problem over a portion of runway). Apron surface degraded esp. P12 & P13. Apron inadequate esp. At night.	1998	D	Unevenness caused by slippage of concrete slabs and many cracks. Risk to damage of aircraft. High risk of collision of aircraft.	Pavement rehabilitation to be put in place.	RVA		A
	Gambia/ Banjul	Bearing strength problem on taxiway and runway.	1999	D	Matter being reviewed for action. <i>Urgent repairs done pending total rehabilitation planned.</i>	Pavement surface rehabilitation.	GCAA	2002	U
	Guinea Bissau/ Bissau	Parking area insufficient Bearing strength on Parking B.	1998	D		Apron rehabilitation and expansion required	DGCA/ ENAG		B
	Guinea/ Conakry	Runway slippery when wet.  Serious vibrations during take-off or landing roll.	19992000	D  D		Friction characteris- tics to be measure and published. <i>Initiate studies on the phenomenon and pavement repairs if necessary.</i>	DNAC/ ANAC		A  A

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Kenya/ Mombasa	Runway surface rough, severe undulations	1999	D	Extreme vibrations during take-off and landings.	Resurfacing to be programmed after thorough study of causes of undulations	KAA		A
	Malawi/ Lilongwe	Runway damaged	1999	D		Resurfacing to be programmed	DCA		B
	Morocco/ Casablanca	Runway surface damaged and rough.	1999	D					
	Mozambique/ Maputo	Runway damaged  Problem with blowing sand on taxiway	19991999	D  D	  Potential damage to engines due to ingestion of sand.	Runway resurfacing required Sweep off the sand and investigate cause to programme permanent solution	NCAA	1999	B  B
	Nigeria/ Kano	Severe undulation and roughness on first half of RWY06	1998	D	Causing bouncing during take-off roll. Studies for rehabilitation in progress.	Pavement rehabilitation to be put in place.	FAAN	2001	U
	Rwanda/ Kigali	Runway slippery when wet.	1999	D	Probably due to rubber deposits	Removal of rubber deposits. Measure friction factor and publish.	Régie des Aéroports		A
	Tanzania/ Dar es salaam	Runway surface rough	1999	D		Resurfacing to be programmed	DA		B
	Tanzania/ Zanzibar	Rwy length inadequate, rwy strength inadequate.	1999	D	FOD cases reported, payload restrictions	Pavement overlay required. Runway length to be extended.	Zanzibar Director Aviation		U

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Tunisia/ Djerba	Taxiway surfaces rough	1999	⊘			⊘ACA	Dec 1999	
	Tunisia/ Tunis	First part of runway 01 rough	1999	⊘			⊘ACA	Jul 2000	
Emergency plan Annex 14 vol I para 9.1.1-9.1.9	Angola/ Luanda	No aerodrome emergency plan No grid map available	1995	S D	ICAO guidance material cannot be used due to language problems.	Develop an emergency plan. Conduct a full scale emergency exercise.	ENANA		A
	Central African Rep./Bangui	Emergency plan needs updating.	1999	D		Update the existing plan. Conduct a full scale emergency exercise.	DGACM/ ASECNA		B
	Côte d'Ivoire/ Abidjan	Emergency plan needs updating.	1998	D		Update the existing plan. Conduct a full scale emergency exercise.	ANAC/AS ECNA		B
	Democratic Rep. of Congo	Emergency plan needs updating	1997	D		Update the existing plan	RVA		B
	Djibouti	No aerodrome emergency plan	2000	S		Develop an emergency plan. Conduct a full scale emergency exercise.			U
	Equatorial Guinea/Malabo	No aerodrome emergency plan	1993	S		Draft being reviewed	ASECNA		A
	Gabon/ Libreville	Emergency plan needs updating	1999	D		Update the existing plan and organize a full-scale exercise.	SGAC/ ASECNA		A

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Guinea Bissau/Bissau	No aerodrome emergency plan	1993	S		Develop an airport emergency plan. Conduct full scale emergency exercise	DGAC/ ENAG		A
	Liberia/ Monrovia	No aerodrome emergency plan	1996	S		Develop plan. Conduct emergency exercise	DCA	1998	A
	<i>Madagascar/ Antananarivo</i>	<i>No aerodrome emergency plan. Emergency exercises not held yet.</i>	<i>2001</i>	<i>S</i>	<i>Draft emergency plans by each organization to be amalgamated</i>	<i>Develop an airport emergency plan. Conduct full scale emergency exercise</i>	<i>ADM/ ADEMA/ ASECNA</i>	<i>2001</i>	<i>A</i>
	Rwanda/Kigali	No aerodrome emergency plan. Emergency exercise not held at regular intervals	2000	S		Develop an airport emergency plan. Conduct full scale emergency exercise	Régie des Aéroports		A
	Sao Tomé & Principe/Sao Tomé	No aerodrome emergency plan	1993	S		Develop an emergency plan and conduct exercises at regular intervals	DCA		A
	Somalia/ Mogadishu	No aerodrome emergency plan	1995	S		Develop an emergency plan. Conduct a full scale emergency exercise.	Not available!		B
	Tanzania/ Zanzibar	No aerodrome emergency plan	1999	S	Emergency plan still being drafted	Develop an emergency plan. Conduct a full scale emergency exercise.	Zanzibar Director Aviation		B

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Togo/ Lomé	No aerodrome emergency plan	1999	S	Emergency plan still being drafted	Develop an emergency plan. Conduct a full scale emergency exercise. <i>Emergency plan approval process underway.</i> <i>Exercise envisaged with the assistance of ICAO.</i>	DAC/ ASECNA	2001	B
Foreign objects on movement area AFI/7 Conc. 4/4 Annex 14 vol I para 2.9.1-2.9.3	Angola/ Luanda	Foreign objects on movement areas	1995	D	Potential damage to aircraft engines due to ingestion of sand.	Establish ramp safety committee. Procure pavement sweeper.	ENANA		B
	Mozambique/ Maputo	Blowing sand on taxiway	1998	D	Potential damage to aircraft engines due to ingestion of sand.	Establish sand cleaning work programme. Procure pavement sweeper if necessary.	NCAA		B
Power supply. AFI Conc 4/2 and 4/8. Annex 14 Vol 1 para 9.4.1-9.4.27	Angola/ Luanda	Primary Power supply unreliable	1995	D	Although substantial backup system in place, reliability of power supply still precarious.	Negotiate with primary power supply company for reliability	ENANA		A
	D.R. of Congo/ Kinshasa	Primary power supply unreliable. Secondary power supply arrangements deficient	1998	D		Negotiate with primary power supply company for reliability. Secondary power supply rehabilitation.	RVA		A

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Guinea Bissau/ Bissau	Secondary power supply inadequate	1993	D		Rehabilitation of secondary power supply required	DGCA		B
	Kenya/ Nairobi	Mains power unreliable. Secondary power supply arrangements deficient	1999	D	Adverse effect on all lighting, navaid and communication	Negotiate with primary power supply company for reliability. Secondary power supply rehabilitation.	KAA		A
	Kenya/ Mombasa	Mains power unreliable. Secondary power supply arrangements deficient	1999	D	Adverse effect on all lighting, navaid and communication	Negotiate with primary power supply company for reliability. Secondary power supply rehabilitation.	KAA		A
	Nigeria/ Lagos	Switch over time to secondary power supply inadequate	2000	D	Rehabilitation in progress	Rehabilitation of the connections of the facilities to standby generators to ensure automatic connection on failure of the primary source.	FAAN	2001	U
	Nigeria/ Port Harcourt	primary power very unreliable	1998	D	Frequent mains power, arrangements unreliable	Negotiate with primary power supply company for reliability. Negotiations are on <i>for a dedicated primary power source. A new 850 KVA secondary source have been provided.</i>	FAAN	2000	B

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Identification		Shortcomings				Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Somalia/ Mogadishu	Power supply inadequate	1995	D			Not available		
	Tanzania/ Dar es salaam	Main power supply unreliable. Secondary power supply inadequate	1996	D	Frequent major surges adversely affecting reliability of all lighting, nav aids and communication	Negotiate for new mains supply. Rehabilitate secondary power supply. Establish planned maintenance programme.	DA		U
Implementation of visual aids AFI/7 Conc 4/1 Annex 14 Vol I chapter 5	Angola/ Luanda	Unserviceable aids not NOTAM'ed, NDB approach only without DME vertical guidance, All markings faded	1998	D		NOTAM office to be revamped.	ENANA		A
				D					A
				D					B
	Benin/ Cotonou	PAPIs not available.  <i>Apron markings inadequate.</i>	19992000	S	Inadequate visual guidance to pilots. <i>Risk of collision between aircraft and obstacles</i>	PAPIs to be installed as per AFI ANP  <i>Rehabilitation of the apron markings taking account of different types of aircraft and minimal separation distances and update the AIP.</i>	ASECNA  ASECNA		A  A
				D					
Cameroon/ Douala	All markings faded	1999	D	Inadequate visual guidance to pilots	Regular repainting of marking required.	ADC	Feb 2001	B	
Cameroon/ Yaounde	ICAO obstacle map non available.	1998	D		Establish an ICAO obstacle map and publish.. <i>Drafting in progress.</i>	ADC/ CCAA		B	

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Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Côte d'Ivoire/ Abidjan	APAPIS implemented on RWY21 only.	1998	D		PAPIS required on RWY03 also as per AFI ANP.	ASECNA/		B
	Djibouti/ Djibouti	Threshold lighting inoperative, Taxiway lighting inadequate.  Runway markings not clear	1999	D	Inadequate visual guidance to pilots. Many bulbs missing.	Rehabilitate lighting system and implement planned maintenance programme. Repaint markings			
	D.R. Congo/ Kinshasa	No RWY markings except TDZ. All other markings implemented not meeting requirements. Approach and runway edge lighting deficient.	1998	D	Inadequate visual guidance to pilots. Many bulbs missing.	New markings to be painted in accordance with Annex 14. Lighting to be rehabilitated.	RVA		U  U
	Egypt/ Hurghada	Taxiway and apron lighting inadequate.	1999	D		Actions are being taken.		1999	A
	Egypt/ Sharm el Sheik	Taxiway and apron lighting inadequate.	1999	D		Actions are being taken.		1999	A
	Guinea Bissau/ Bissau	Lighting aids inadequate	1993	D	Inadequate visual guidance to pilots	Rehabilitation of lighting aids required	DGAC		A
	Malawi/ Lilongwe	Taxiway lights inadequate	1999	D	Inadequate visual guidance to pilots	Rehabilitate taxiway lights	Malawi DCA		B

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Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Nigeria/ Abuja	Runway centerline deficient RWY end and threshold 22 lighting inoperative.  PAPI not calibrated.	2000	D		Rehabilitation of the lighting aids required.  Calibrate the PAPI and NOTAM	FAAN	2001	B
	Nigeria/ Kano	Threshold and Rwy end lighting partially deficient. Approach lights RWY 06 & 24 partially inoperative. Taxiway edge lighting not implemented while centerline lights partially inoperative. PAPIs require calibration.  Runway markings non conspicuous.	2002	D  D  S  D  D	Inadequate visual guidance to pilots     Pilots reporting misalignment	Rehabilitate airfield lighting and establish maintenance programme.  Implement taxiway light as per AFI ANP.  Calibrate PAPIs and NOTAM.  Markings to be repainted.	FAAN	2001	U  B  B  U  A

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Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Nigeria/ Lagos	Txwy lighting inadequate and reflective markers ineffective. Centerline lighting at high speed turnoffs deficient and colors non standard. No approach light on 01L and 01R. Intensity of approach lighting on 19R cannot be controlled from control tower.  Rwy Markings unclear.	1999	D  D  S  D  D	Taxiway lights required   Approach lights frequently reported too bright.	Development plans for rehabilitation are required.      Markings to be repainted.	FAAN	2001	A
	Nigeria/ Port Harcourt	Approach lighting 21L unreliable. Rwy edge lights on first quarter of Rwy 21 inoperative. No txwy lighting PAPIs inoperative. Runway marking unclear.	1999	D  D  S  D  D	Inadequate visual guidance to pilots	Rehabilitation of lighting aids required   Markings to be repainted.	FAAN	2001	A
	Rwanda/ Kigali	Unserviceable aids not NOTAM'ed,  Runway markings unclear.	1999	D  D	Pilots misguided	NOTAM office to be revamped  Repaint markings	RWANDA Régie des Aéroports	1999	U  B

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Requirements	States/ facilities	Description	Date first reported	Status	Comments	Description	Executive body	Date of complete	Priority
	Sierra Leone/ Freetown	Only 50% runway edge lighting available Markings faded	1993	D D	Inadequate visual guidance to pilots	Rehabilitate runway edge lights. Repaint markings. Revaluation of the damage caused by the war with all the lighting system.	SLAA		A B
	Somalia/ Mogadishu	VASIS not working Markings totally faded	1995	D D	Inadequate visual guidance to pilots	Evaluation of the damage caused by the war on the lighting system.	Not available		B
	Sudan/ Khartoum	VASIS not operational	1993	D		Implement PAPIs as per AFI ANP	NCAA		
	Zambia/ Lusaka	Approach lights inoperative, taxiway lights inadequate.	1999	D	Pilot's visual guidance inadequate	Project for rehabilitation of lighting system ongoing	ZNACL		A

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