# Khartoum FIR

# Air Traffic Management Contingency Plan

# Amendment 1

Prepared by: Khartoum FIR Contingency Coordination Team

#### **TABLE OF CONTENTS**

#### **FOREWORD**

#### RECORD OF AMENDMENTS

#### SCOPE OF WORK

#### CHAPTER 1: GENERAL

**DEFINITION OF TERMS** 

**OBJECTIVE** 

AFFECTED STATES AND FIRS

APPLICATION OF THE CONTINGENCY PLAN

**OVERFLIGHT PERMISSION** 

INTERCEPTION OF CIVIL AIRCRAFT

#### **CHAPTER 2: DIVERSIONARY ROUTE ARRANGEMENTS**

NORTH-SOUTH ROUTE TO AVOID KHARTOUM FIR

#### **CHAPTER 3: CONTINGENCY ROUTES AND PROCEDURES**

OPERATIONS WITHIN KHARTOUM FIR OVER SOUTH SUDAN (KFOSS) ABOVE FL245

ATS OPERATIONAL PROCEDURES

**Issuing NOTAM** 

Application of separation

Airspace Classifications

Position Report

Procedures for other ATS units within South Sudan airspace

Overflying traffic

#### PILOTS AND OPERATORS PROCEDURES

Filing of flight plans

*Pilot operating procedures* 

Collision avoidance

# OPERATIONS IN AIRSPACE OVER THE TERRITORY OF SUDAN

#### ATS OPERATIONAL PROCEDURES

**Issuing NOTAM** 

*Application of separation* 

PILOTS AND OPERATORS PROCEDURES

Filing of flight plans

Pilot operating procedures

#### APPENDIX 1: CONTACT DETAILS OF ADJACENT FIRS

# APPENDIX 2: CONTACT DETAILS OF INTERNATIONAL ORGANIZATIONS

#### APPENDIX 3: CONTACT DETAILS OF SUDAN COORDINATING GROUP

APPENDIX 4: DIVERSIONARY ROUTE ARRANGEMENT CHART

APPENDIX 5: EAST-WEST ARRANGEMENT THROUGH KFOSS ABOVE FL245

APPENDIX 6: OPERATIONS IN AIRSPACE OVER THE TERRITORY OF SUDAN

APPENDIX 7: ATS UNIT FREQUENCIES

APPENDIX 8: CONTINGENCY PLAN AMENDMENT 1 IMPLEMENTATION CHECKLIST

#### **FOREWORD**

The ICAO MID Regional Office received information on 15 April 2023 regarding the interruption of the provision of air navigation services by the Khartoum ACC (the disruption) due to the security unrest in Sudan.

This Contingency Plan comprises procedures and other arrangements to minimize the impact of this disruption and ensure the continued safety of flight operations, in accordance with the provisions of Annex 11 — *Air Traffic Services*.

Based on the Memorandum of Understanding (MoU, signed by South Sudan and Sudan Civil Aviation Authorities on 16 August 2018), the provision of air traffic services (ATS) in the airspace over South Sudan, above FL245, was assigned to Khartoum ACC, while the airspace FL245 and below is controlled by Juba Approach/Tower unit. The TMA airspace is Class C, with both Class E and G outside the TMA up to FL245.

This Plan has been developed in close coordination with all relevant stakeholders including those responsible for the adjacent FIRs, as well as international organizations and the airspace users concerned.

The Plan will be activated by the promulgation of a set of NOTAMs. Currently, Sudan requests Egypt to promulgate information on its behalf.

The implementation of this plan shall be continuously monitored by all States concerned. Each State is required to keep the Khartoum FIR Contingency Coordination Team (CCT) informed by providing suitable reports.

# RECORD OF AMENDMENTS

Amendment Number	Effective Date	Date Entered	Entered By	Paragraph / Reference
1	15 August 2023	10 August 2023	Khartoum FIR CCT	Addition of operations in airspace over the territory of Sudan (paragraph 3.2 and appendix 6)

#### **SCOPE OF WORK**

This contingency plan focuses on optimizing international traffic flow during the contingency situation resulting from the interruption of ATS provided by the Khartoum ACC. Considering the available provision of air navigation services and the availability of diversionary routing schema, operators may elect to circumnavigate the whole or parts of Khartoum FIR or use any of the contingency or diversionary routes, based on the results of safety risk assessments, using the information provided within this plan and other sources.

#### **CHAPTER 1**

#### **GENERAL**

#### **DEFINITION OF TERMS**

1.1 To avoid any misinterpretation and confusion, when the following terms are used in this plan, they have the following meanings:

*Khartoum ACC airspace:* the airspace within the Khartoum FIR excluding that defined as South Sudan airspace.

**Khartoum FIR:** an airspace of defined dimensions expressed in Sudan AIP including the airspace above the territory of Sudan, the airspace above the high seas (Red Sea under the responsibility of Sudan) as well as the airspace above the territory of South Sudan.

*Khartoum FIR over South Sudan above FL245 (KFOSS above FL245):* the airspace over the territory of South Sudan above FL245.

*South Sudan airspace:* the airspace of defined dimensions expressed in South Sudan AIP over the territory of South Sudan at FL245 and below.

#### **OBJECTIVE**

1.2 This Contingency Plan contains arrangements to ensure the continued safety of flight operations during the disruption. The plan has been prepared in accordance with ICAO Annex 11 — *Air Traffic Services*, Chapter 2, paragraph 2.32 and Attachment C to provide the ATS procedures, contingency route structure, and other arrangements, to be used on a temporary basis, while air traffic services are not being provided from Khartoum ACC.

#### AFFECTED STATES AND FIRS

- 1.3 The adjacent FIRs directly affected by this Contingency Plan are as follows:
  - Chad\Ndjamena (FTTT)
  - Democratic Republic of Congo\Kinshasa (FZZA)
  - Ethiopia\Addis Ababa (HAAA)
  - Egypt\Cairo (HECC)
  - Kenya\Nairobi (HKNA)
  - Republic of Congo\Brazzaville (FCCC)
  - Saudi Arabia\Jeddah FIR (OEJD)
  - Uganda\Entebbe (HUEC)

#### APPLICATION OF THE CONTINGENCY PLAN

- 1.4 The implementation of this plan shall be continuously monitored by all relevant States. Each State is required to keep the CCT informed by providing regular reports including, but not limited to the following:
  - status of hotspot areas;
  - capacity constraints;
  - status of CNS equipment and facilities;
  - status of voice communication/coordination and data exchange with adjacent FIRs;
  - changes to aeronautical publications; and
  - any development having an impact on the implementation of the plan.
- 1.5 In addition to the above, IATA is responsible for providing the CCT with the required feedback from airspace users.
- 1.6 ATS units are reminded of their obligations under Annex 11, to conduct a safety risk assessment and implement appropriate risk mitigation measures to achieve the best arrangements which will avoid hazards to civil aircraft. Operators are reminded of their obligations under Annex 6 *Operation of Aircraft*, to conduct a safety risk assessment and take appropriate risk mitigation.
- 1.7 The final version of the contingency plan and its amendments will be posted on the ICAO website: https://www.icao.int/MID/Pages/FIR/Khartoum-FIR-Contingency-Plan.aspx.
- 1.8 NOTAMs listed in this document are for reference only and should not be assumed to be current.

#### **OVERFLIGHT PERMISSION**

- 1.9 A restricted area, HSR5, is established over the territory of Sudan (NOTAM A00XX/23 refers). Aircraft may only enter restricted area HSR5 for operations to and from Port Sudan (HSPN), using the contingency routes described herein, or for humanitarian and evacuation flights. All flights to and from Port Sudan require prior permission (PPR) as per Sudan AIP GEN 1.2.
- 1.10 Rules governing entry to, transit over and departure from the territory of South Sudan are contained in AIP South Sudan.

#### INTERCEPTION OF CIVIL AIRCRAFT

1.11 Pilots need to continuously guard the IATA In-flight Broadcast Procedure (IFBP) AFI Region designated frequency 126.9 MHz, Khartoum ACC frequency 127.3 MHz and the emergency frequency 121.5 MHz, and must keep their transponder operational during flight. Transponders should be set on a discrete code assigned by ATC or, if code not assigned, select code 2000.

#### **CHAPTER 2**

#### **DIVERSIONARY ROUTE ARRANGEMENTS**

#### NORTH-SOUTH ROUTES TO AVOID KHARTOUM FIR

- 2.1 While ATS is unavailable in Khartoum ACC airspace, the usual traffic exchange points between Cairo and Khartoum FIRs of waypoint: NUBAR, ENABU, ATMUL, SISID, and ALEBA cannot be used for overflying traffic (transit). Rather, the diversionary route arrangement in **Appendix 4** utilizes the available routes within Jeddah, Asmara, and Addis Ababa FIRs to circumnavigate Khartoum FIR as follows:
  - Southbound Traffic from Cairo FIR:

Exit Cairo FIR via DEDLI M999 JDW G650 RASKA.

- Northbound traffic from Asmara FIR:

Exit Asmara FIR via RASKA T513 EGMEG G660 JDW M686 GIBAL or PASAM.

# **CHAPTER 3**

# CONTINGENCY ROUTES AND PROCEDURES

# 3.1 OPERATIONS WITHIN KHARTOUM FIR OVER SOUTH SUDAN (KFOSS) ABOVE FL245

3.1.1 The following two unidirectional contingency routes, shown graphically in **Appendix 5**, are available for en-route traffic:

Contingency route designator	Entry FIR	Route and entry and exit waypoints	Exit FIR	Distance	Minimum flight level	Navigation specification	Airspace classification	Flight level allocation	Direction	Flight planning
CR1	Addis Ababa	BRO DCT KAFIA	N'Djamena	658 NM	FL300			Even flight levels	Westbound only	Departure traffic from Addis Ababa FIR airports: Relevant SID GUDER T139/UT139 BRO DCT KAFIA UA410, or DCT IRAGA  Overflights: KONET M308/UM308 or BOPSA UL432 or TORBA B535/UB535 GWZ T139/UT139 BRO DCT KAFIA UA410, or DCT IRAGA
CR2	Brazzaville	ASKON L558 DASTU	Addis Ababa	410 NM	FL310	RNAV5	Class G	Odd flight levels	Eastbound only	Arrival traffic to Addis Ababa FIR airports: UT139/UT419/DCT ASKON L558 DASTU T139/UT139 GUDER relevant STAR  Overflight: UT139/UT419/DCT ASKON L558 DASTU T139/UT139 GWZ M308/UM308 KONET or UL432 BOPSA or B535/UB535 TORBA

#### ATS OPERATIONAL PROCEDURES

#### Issuing NOTAM

3.1.2 The Plan will be activated by promulgation via NOTAM(s) under the authority of the Sudan Civil Aviation Authority, with the agreement of the South Sudan Civil Aviation Authority, in coordination with the adjacent States.

#### Application of separation

3.1.3 Longitudinal separation: A minimum of twenty (20) minutes constant or increasing separation shall be applied between aircraft operating on the same track and same level on contingency routes in KFOSS above FL245. The transferring ACC is responsible for ensuring that this separation will be maintained through KFOSS above FL245, based on pilot estimates over entry and exit points.

**Note:** based on Doc 4444, PANS-ATM, 5.4.2.1.1, longitudinal separation between aircraft following the same track may be maintained by application of speed control, including Mach number technique.

#### Airspace Classification

3.1.4 During the application of this contingency arrangement, all airspace within KFOSS above FL245 is **Class G**.

#### Position Reporting

3.1.5 In addition to routine position reports (PANS-ATM, (Doc 4444, 4.11.2) on the Khartoum ACC sector frequency 127.3 MHz (transmitting blind), pilots shall apply the IATA Inflight Broadcast Procedure (IFBP) AFI Region while operating within KFOSS above FL245 on the designated frequency 126.9 MHz, and maintain a listening watch on 121.5 MHz. Aircraft operating at FL245 and below will transmit position reports to Juba APP on 123.9 MHz.

Note. — IATA IFBP can be found at: https://www.iata.org/en/programs/safety/operational-safety/operational-notices/

#### Procedures for domestic South Sudan operations and flights to/from airports inside South Sudan.

- 3.1.6 Domestic operations within South Sudan and international flights to and from airports located inside South Sudan airspace shall follow instructions from the appropriate ATS unit and remain below FL245, with the following exception:
  - aircraft flight planned to Juba aerodrome via Entebbe FIR and aircraft departing Juba airport via Entebbe FIR, shall follow instructions/clearances issued by Juba Approach or Entebbe ACC.

# Overflying traffic

- 3.1.7 For traffic transiting KFOSS above FL245, on the contingency routes, the last ACC sector controlling aircraft prior to entry into KFOSS above FL245 is required to take the following actions:
  - a) a minimum of twenty (20) minute longitudinal separation constant or increasing shall be applied between aircraft on same track and same level;
  - b) inform the pilot prior to entry of KFOSS above FL245 that the IATA IFBP and airspace Class G prevails over South Sudan above FL245 and that ANS has been withdrawn;
  - c) pass to the ACC where the aircraft will exit after overflying South Sudan airspace, the pilot estimated time over the exit point of the airspace over South Sudan, assigned flight level, speed restrictions (if any) and SSR code;
  - d) instruct the pilots to maintain the last assigned flight level and speed while overflying KFOSS above FL245, except in emergency;
  - e) avoid changing flight level of aircraft within 10 minutes flight time of entering KFOSS above FL245; and
  - f) prior to the entry of KFOSS above FL245, advise pilots that they must contact the ensuing ACC at least 10 minutes before entering their airspace.

#### PILOTS AND OPERATORS PROCEDURES

#### Filing of flight plans

- 3.1.8 Flight planning requirements in KFOSS above FL245 are to be followed as per normal flight planning requirements contained in the Sudan Aeronautical Information Publication (AIP).
- 3.1.9 For flight planning purposes, international departures, arrivals and domestic flights, operating from/to airports located within South Sudan airspace shall plan levels FL240 or below, except those international operations where departure or arrival aerodrome is Juba, and flight plan route is via Entebbe FIR.

#### Pilot operating procedures

- 3.1.10 The variable nature of operations during a contingency situation mean that pilots must maintain a high level of alertness while operating in any portion of KFOSS above FL245 and must be prepared to take appropriate action to ensure the safety of their flight.
- 3.1.11 Aircraft operating in KFOSS above FL245 shall comply with the following procedures:
  - a) adhere to contingency route scheme on paragraph 3.1.1 and shown at **Appendix 5**;
  - b) apply Strategic Lateral Offset Procedures (SLOP) (PANS-ATM, 16.5);
  - c) Airborne Collision Avoidance System (ACAS) meets RVSM requirements and is operational;
  - d) should have ADS-B operational;
  - e) navigation and anti-collision lights on;

- f) maintain the assigned flight level and, if applicable, speed, during entire flight within KFOSS above FL245 except in cases of emergency;
- g) the last assigned SSR Code shall be maintained or, if no SSR Code has been assigned, the SSR Code 2000 shall be set;
- h) aircraft are required to reach the flight level last assigned by the transferring ACC at least 10 minutes before entering KFOSS above FL245, or as otherwise instructed by the transferring ACC;
- i) pilots are required to include in their last position report prior to entering the KFOSS above FL245, the estimated time over the entry point and exit point of KFOSS above FL245:
- j) pilot must contact the ensuing ACC at least 10 minutes prior to entering their airspace;
- k) in addition to routine position reports (PANS-ATM, 4.11.2) on the normal Khartoum ACC sector frequency 127.3 MHz (transmitting blind), pilots shall follow the IATA In-flight Broadcast Procedure (IFBP) AFI Region on the designated frequency 126.9 MHz and maintain a listening watch on 121.5 MHz;
- 1) should an aircraft need to make an emergency descent, this should be performed in accordance with the PANS-ATM, 15.1.4; and
- m) contact with Juba APP should only be initiated in the event of an emergency, and descent below FL245 becomes necessary.
- 3.1.12 If the aircraft is required to deviate from track to avoid adverse meteorological conditions over KFOSS above FL245, until such time as an ATC clearance is received, the pilot shall take the following actions:
  - a) if possible, deviate away from an organized track or route system;
  - b) establish communications with and alert nearby aircraft by broadcasting, at suitable intervals: aircraft identification, flight level, position (including ATS route designator or the track code and intentions), on 126.900 MHz, the normal ACC frequency 127.300 MHz, and maintain listening watch on 121.5 MHz;
  - c) watch for conflicting traffic both visually and by reference to ACAS;
  - d) keep all aircraft exterior lights on;
  - e) for deviations of less than 10 NM remain at the level assigned by ATC;
  - f) for deviations greater than 10 NM, when the aircraft is approximately 10 NM from track, initiate a level change in accordance with table below; and
  - g) when returning to track, be at assigned flight level when the aircraft is within approximately 10 NM of the centre line.

Route centre line track	Deviations > 19 km (10 NM)	Level change
EAST	LEFT	DESCEND 90 m (300 ft)
000° – 179° magnetic	RIGHT	CLIMB 90 m (300 ft)
WEST	LEFT	CLIMB 90 m (300 ft)
180° − 359° magnetic	RIGHT	DESCEND 90 m (300 ft)

#### Collision Avoidance

3.1.13 If a pilot determines that immediate action is necessary to avoid an imminent collision risk, and this cannot be achieved in accordance with right-of-way provisions, the pilot should:

- a) unless an alternative maneuver appears more appropriate, climb or descent 500ft;
- b) display all available aircraft lighting which would improve visual detection;
- c) as soon as possible, reply to the broadcast advising action being taken;
- d) notify the action taken on the appropriate ATS frequency; and
- e) as soon as the situation has been rectified, resume last assigned flight level, notifying the action on the appropriate ATS frequency.

#### 3.2 OPERATIONS IN AIRSPACE OVER THE TERRITORY OF SUDAN

- 3.2.1 A restricted area, HSR5, is established over the territory of Sudan (NOTAM A00XX/23 refers). Aircraft may only enter restricted area HSR5 for operations to and from Port Sudan (HSPN), using the contingency routes described herein, or for humanitarian and evacuation flights. All flights to and from Port Sudan require prior permission (PPR) as per Sudan AIP GEN 1.2.
- 3.2.2 The following contingency route, shown graphically in **Appendix 6**, is available for traffic operating to or from Port Sudan (HSPN) through the Cairo FIR:

Contingency route designator	Route	Minimum flight level	Airspace classification	Direction	Flight planning
CR3	HSPN – ALEBA (Cairo FIR)	FL300 over ALEBA	Class F	Bi- directional	Outbound from HSPN: Relevant SID PEKAB P751 ALEBA. Inbound to HSPN: ALEBA PEKAB Relevant STAR HSPN

3.2.3 The following two unidirectional contingency routes, shown graphically in **Appendix 6**, are available for traffic operating to or from Port Sudan (HSPN) through the Jeddah FIR:

Contingency route designator	Entry to Khartoum FIR from/Departure aerodrome	Route	Arrival aerodrome/Exit Khartoum FIR	Airspace classification	Available Flight levels	Direction
CR4	Jeddah FIR OEJD	KAROX L311 MAHDI Q563 Relevant STAR	Port Sudan HSPN	- Class F	EVEN levels between FL160 and FL240 over KAROX	Westbound only
CR5	Port Sudan HSPN	Relevant SID M562 BOGUM M562 MIPOL	Jeddah FIR OEJD	Class I	ODD levels between FL170 and FL230 over MIPOL	Eastbound only

#### ATS OPERATIONAL PROCEDURES

#### Issuing NOTAM

3.2.4 The Plan will be activated by promulgation via NOTAM(s) under the authority of the Sudan Civil Aviation Authority, in coordination with the adjacent States.

#### Application of separation

3.2.5 Longitudinal separation: A minimum of ten (10) minutes constant or increasing separation shall be applied between aircraft operating on the same track and same level.

**Note:** based on Doc 4444, PANS-ATM, 5.4.2.1.1, longitudinal separation between aircraft following the same track may be maintained by application of speed control, including Mach number technique.

#### Airspace Classification

3.2.6 During the application of this contingency arrangement, all airspace within restricted area HSR5, excluding the Port Sudan CTR and TMA, is **Class F**.

#### PILOTS AND OPERATORS PROCEDURES

#### Filing of flight plans

- 3.2.7 Flight planning requirements in the restricted area are to be followed as per normal flight planning requirements contained in the Sudan AIP.
- 3.2.8 For flight planning purposes, flights operating from Jeddah FIR to Port Sudan shall plan even levels between FL160 and FL240 at KAROX. Flights operating from Port Sudan to Jeddah FIR shall plan odd levels between FL170 and FL230 at MIPOL. Flights operating from Port Sudan to Cairo FIR shall plan levels FL300 or above at ALEBA. Flights operating from Cairo FIR to Port Sudan shall plan levels FL310 or above at ALEBA.

#### <u>Pilot operating procedures</u>

3.2.9 The variable nature of operations during a contingency situation mean that pilots must maintain a high level of alertness while operating in any portion of restricted area HSR5 and must be prepared to take appropriate action to ensure the safety of their flight.

- 3.2.10 Aircraft operating in restricted area HSR5 shall comply with the following procedures:
  - a) adhere to the contingency route scheme in paragraph 3.2.2 or 3.2.3 and shown at **Appendix 6**, as appropriate;
  - b) apply Strategic Lateral Offset Procedures (SLOP) (PANS-ATM, 16.5);
  - c) should have ADS-B operational;
  - d) navigation and anti-collision lights on;
  - e) the last assigned SSR Code shall be maintained or, if no SSR Code has been assigned, the SSR Code 2000 shall be set; and
  - f) should an aircraft need to make an emergency descent, this should be performed in accordance with the PANS-ATM, 15.1.4.
- 3.2.11 Aircraft operating in restricted area HSR5 which will route through Cairo FIR shall comply with the following procedures in addition to those of paragraph 3.2.10:
  - a) aircraft are required to reach the flight level last assigned by the transferring ACC at least 10 minutes before ALEBA;
  - b) contact Cairo control on 129.4 MHz at least 10 mins prior ALEBA; and
  - c) Airborne Collision Avoidance System (ACAS) meets RVSM requirements and is operational.
- 3.2.12 CNS and ATS available at Port Sudan:

#### a) NAVAIDs

ID	Station Name	Aid	Purpose	Operability status
PIS	Port Sudan	ILS/DME RWY35	APP	
PSD	Port Sudan	VOR/DME	AE	

#### b) Communications

Type	Call sign and operational hours	Details
VHF	Port Sudan Tower H24	128.1
VHF	Port Sudan Approach H24	128.1
VHF	Khartoum EAST SECTOR Advisory H24	127.5
Hotline		
Land line	+249311829899	
	+249311820045	

#### c) Surveillance

Surveillance Radar (Mode S) is installed and in operation with controller position console is available in Port Sudan, the coverage is 250NM from PZU.

# d) ATS airspaces:

Name Lateral Limits Vertical limits Class of Airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/purpose	Remarks
Port Sudan TMA  Circle of 45 NM of radius with center at VOR/DME/PORT SUDAN (19°24'04"N, 037°14'30"E  )  FL 195 3500FT  CLASS B	Port Sudan Approach	Port Sudan Approach  English  H24	128.1MHz	
Khartoum FIR  FL 285 GND  CLASS F  UNL FL285 CLASS F	Port Sudan Approach	Port Sudan Approach  English  1. Route P751 ALEBA PSD 2. Route L311/Q563 (KAROX HSPN) 3. Route M562 (HSPN MIPOL)  H24	127.5 MHz	

# e) Aerodrome services:

Aerodrome Geographical and administrative data are available in Sudan AIP AD 2 HSPN. Due to limited parking facilities, pre-coordination with Sudan CAA and Airport operator is required.

# CONTACT DETAILS OF ADJACENT FIRS

	NAME	TITLE	TEL NO.	E-MAIL	REMARK
Addis	Ababa (HAAA)-Ethiopia				
1	Mr. Yohannes Abera	Director ATM, ECAA	M: +251 912601499 Tel: +251911250149	yohannes_abera@yahoo.com yohannesa@ecaa.gov.et	ESAF
Asmai	ra (HHAA)-Eritrea				
2					ESAF
Brazza	aville (FCCC)				
3	Mr. TCHISSAMBOU M'BOUNDOU JOACHIM	ASECNA DG REPRESENTATIV E IN CONGO	M/W: +235 63262828	TCHISSAMBOUM'BOUNDOUJo a@asecna.org	WACAF
4	BALOUNDA Gildas Guennole	ACC Manager, Ndjamena	M/W: +242 05 377 9562	BALOUNDGil@asecna.org	WACAF
Cairo	(HECC)-Egypt				
5	Mr. Wael Ezzat Ammar	General Director of Cairo ACC - NANSC	M: +2 0100 6013 734	wael.ammar@nansceg.net	) (II)
6	Mr. Amr Ibrahim Abdel Latiff	ATS Inspector - ECAA	T: +202 2287 0456 M: +20100 155 6477	amraircommander@gmail.com	MID
Enteb	be (HUEC)-Uganda				
7	Mr. Geofrey Okot	Manager ATM, Uganda CAA	M: +256755534343 Tel: +256414320368	gokot@caa.co.ug	ESAF
Jedda	h (OEJD)-Saudi Arabia				
8	Mr. Alwaleed Abdulaziz	Air Traffic Standards Manager - GACA	T: +966 566662992 M: +966 115253597	aenezi@gaca.gov.sa	MID
9	Mr. Khalid Al Harbi	Head of Airspace policies	T: +966 56 542 6837	khhalharbi@gaca.gov.sa	IVIID
10	Terad Al Ghamedi		M.: 966566555707	TAJALGHAMDI@sans.com.sa	

Khart	oum (HSSS)-Sudan				
	Mr. Imadedin Mohamed	Rep of Sudan in ICAO	+1 (438) 462-1110	ielhag@icao-delegations.org	
11	Mr. Yasir Rabih Hassan	Professional Affairs Director	T: +249 183784925 M: +249 123 288053 M: +2499 123 75269	yasirrabih20@gmail.com yasirrabih20@yahoo.com	MID
12	Abubakr Elsiddig Mohamed	ANS Director	M: +249912146745	abubakratco@gmail.com	
13	Mohamed Eltayeb Ahmed	Air Navigation Regulatory Directorate	M: +249912921131	meltayeb@scaa.gov.sd	
Juba -	- South Sudan	•			
14	Mr. Lemi Lawiya	Manager ATS	M: +211921010102	lawiyalemi@yahoo.com	ESAF
Kinsh	asa (FZZA)-Congo				
15	Mr. Eldonny MBUYI NYEMBUE	Deputy Director of Air Navigation Operations	T/W: +243815263542	eldonnymbuyi@gmail.com	WACAF
Nairol	bi (HKNA)				
16	Mr. Andrew M. Ochieng	Chief of ATM Officer, Head of Operations JKIA	M: 254 724964394	aochieng@kcaa.or.ke	ESAF
Ndjan	nena (FTTT)-Chad				
17	Mr. AHMAT HASSAN Orozi	ASECNA Representative in CHAD	M/W: +235 63262828	AHMATHASSANOro@asecna.org m	WACAF
18	Mr. ABDERAHAMANE Abdel- Aziz	ACC Manager, Ndjamena	M/W: +235 66275399	ABDERAMANEAbd@asecna.org	WACAF
Tripol	i (HLLL)				
19					MID

# CONTACT DETAILS OF INTERNATIONAL ORGANIZATIONS

NO	NAME	TITLE	TEL NO.	E-MAIL	REMARK
ICA	ОНО				
1	Mr. Chris Dalton	Chief, Air Traffic Management Section	M:+1 514-862-8537	CDalton@icao.int	
2	Mr. John Welton	Technical Officer, Air Traffic Management Section	M: +1 514-248-7442	JWelton@icao.int	
ICA	O MID				
3	Mr. Ahmad Amireh	Regional Officer, ATM/SAR	T:+20 2 2267 4840 ext. 4120 M:+20 10 5021 4480	AAmireh@icao.int	
4	Mr. Ahmad Kavehfirouz	Regional Officer, ATM	T: +20 2 2267 4840 ext. 4122 M:+201032182488 M:+989123230447	AKaveh@icao.int	
ICA	O ESAF				
5	Ms. Keziah Ogutu	Regional Officer, ATM/SAR	M: +254 727 366293	KOgutu@icao.int	
6	Mr. Colin Bryant	Regional Officer, ATM	M: +254 742 223775	CBryant@icao.int	
ICA	O WACAF				
7	Mr. Nika Meheza MANZI	Deputy regional director	M.: +221 77 746 67 80	NManzi@icao.int	
8	Mr. Fanfe BAMBA	Regional Officer, AIM		FBamba@icao.int	

9	Serge Guy TCHANDA	Regional Officer, ATM		stchanda@icao.int			
AFI Contingency Plan Project Team (APIRG PMT)							
10	Mr. Collins Ochillo	Chairperson of the AFI ATM CP coordination team.	M:+254722408294	cochillo@kcaa.or.ke			
11	Mr. Kennedy Blege	Secretary of the AFI ATM CP coordination team.	M:+233208783826	kenblege@gmail.com			
IATA	A (Africa and Middle Ea	ast)					
12	IATA AME Operations Desk			IATA_AME@IATA.ORG	To be addressed in the first instance		
13	Ms. Sharron Caunt	Regional Director Safety & Flight Operations (Africa & Middle East)	T: +962 6 580 4200 M: +962 79 8029 555	caunts@iata.org			
14	Mr. Protus Seda	Assistant Director Operations, ATM and Infrastructure (Africa & Middle East)	M: +27 716875948 Tel: +27115232737	sedap@iata.org			
15	Mr. Yassine El Charkaoui	Manager Operations, ATM and Infrastructure (Africa & Middle East)	T: +962 65804200 Ext 1410 M: +962795428351	charkaouiy@iata.org			
16	Ms. Lindi-Lee Kirkman	Manager Safety & Flight Operations ATM Infrastructure Focus Africa & Middle East	+27 823313259	kirkmanl@iata.org			
EUR	OCONTROL						
17	Mr. Tihomir Todorov	Head of Section Airspace DesignNMD/ACD/OPL/DES	T.: +32 2 729 31 34 M.: +32 485 568 570	Tihomir.TODOROV@eurocontrol.int			
EAS	A						
18	Mr. Gian Andrea Bandieri	Section Manager –Cybersecurity in Aviation & Emerging Risks	T.: +49 221 89990-6044	gian-andrea.bandieri@easa.europa.eu			
19	Mr. Adam Borkowski	Aviation Security & Intelligence Expert	M.: +49 151 6187 2961	adam.borkowski@easa.europa.eu			
20	Mr. Emiliano Lombardi	Senior Military Expert on Conflict Zones	M.: +49 151 1740 1804	emiliano.lombardi@easa.europa.eu			

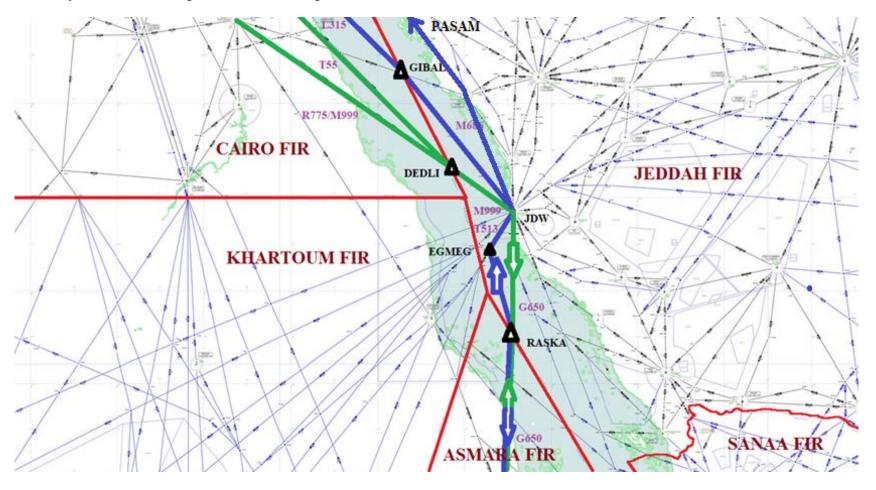
FAA								
21	Mr. Travis Fiebelkorn	Sr. International Representative for Europe, Africa, Middle East Mission Support Services   Air Traffic Organization (ATO)	EU Mobile: +32 475701756 US Mobile: +1 202 3028426	travis.fiebelkorn@faa.gov				
IFA	ГСА							
22	Mr. Fateh Bekhti	Regional EVP AFM	M: +1 4384592905/ +1 4387382141	Fateh.bekhti@ifatca.org evpafm@ifatca.org				
IFAI	IFALPA							
23	Capt. Carl Bollweg	Regional EVP AFI	M: +27832607521	carlbollweg@gmail.com				
WFF	WFP							
24	Capt. Samir SAJET	Head, Regional Aviation Safety Office, UAE	M: + 971 50 656 10 19	samir.sajet@wfp.org				
25	Mr. Denys SALTANOV		M: + 39 3427312525	denys.saltanov@wfp.org				
26	Mr. Oleh MASLYUKOV	Deputy Chief Aviation Services WFP HQ Rome, Italy	M: + 39 3406247230	oleh.maslyukov@wfp.org				
27	Mr. Philippe Martou	Director Aviation Services	M: + 39 345 584 7008	philippe.martou@wfp.org				
ASE	ASECNA							
28	Mr. Louis BAKIENON	Operation Director	M;+221 77 333 27 88	bakienonlou@asecna.org				
29	Mr. ESONO MBUY Arturo Nieto	Chief ATS Service	M; +221 77 760 28 61	ESONOMBUYArt@asecna.org				

# CONTACT DETAILS OF SUDAN COORDINATING GROUP

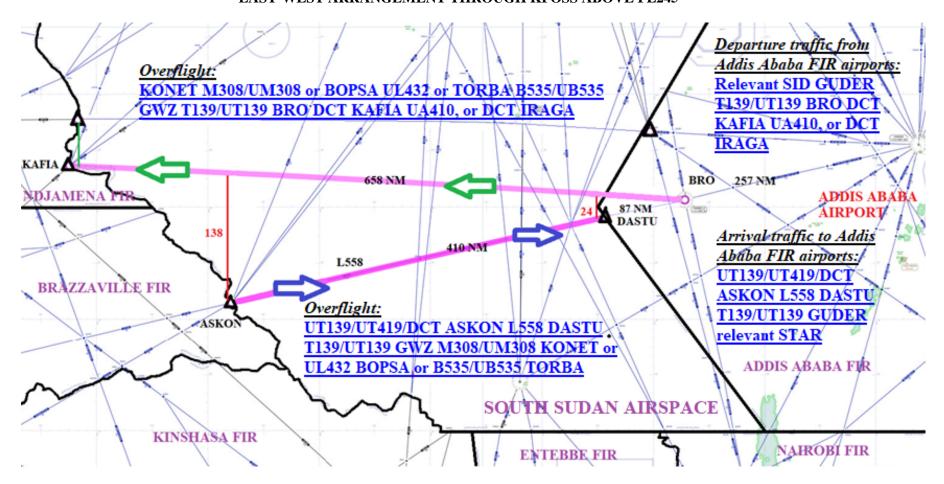
NO	NAME	TEL NO.		MOBIL NO.	E-MAIL				
SUD	SUDAN CIVIL AVIATION AIR NAVIGATION REGULATORY DIRECTORATE								
1	Mohamed Eltayeb Ahmed			+249912921131	meltayeb@scaa.gov.sd				
SUD	SUDAN PROFESSIONAL AFFAIRS DIRECTOR								
2	Yasir Rabih Hassan	+249 183784925		+249 123 288053 +2499 123 75269	yasirrabih20@gmail.com yasirrabih20@yahoo.com				
SUD	SUDAN ANSP ANS DIRECTOR								
3	Abubakr Elsiddig Mohamed			+249912146745	abubakratco@gmail.com				
DIR	DIRECTOR GENERAL OF ATS								
4	MAKKI MOHAMMED JAMEEL	+249311820045		+249123288066					
DIR	DIRECTOR GENERAL OF CNS								
7	EHAB MOHAMMED MAHGOUB			+249912277577	erheihabcaa@gmail.com				
ATC	ATC unit chief of Port Sudan unit								
	Hashim mhammed	+249311820045		+249123277979	Berber124@gmail.com				
CNS	CNS unit chief of Port Sudan unit								
7	ALBADRI ahmed alfaki	+249311820316		+249912955115	Bedri.sme@scaa.gov.sd				

#### DIVERSIONARY ROUTE ARRANGEMENT CHART

Diversionary North-South arrangement to circumnavigate Khartoum FIR.

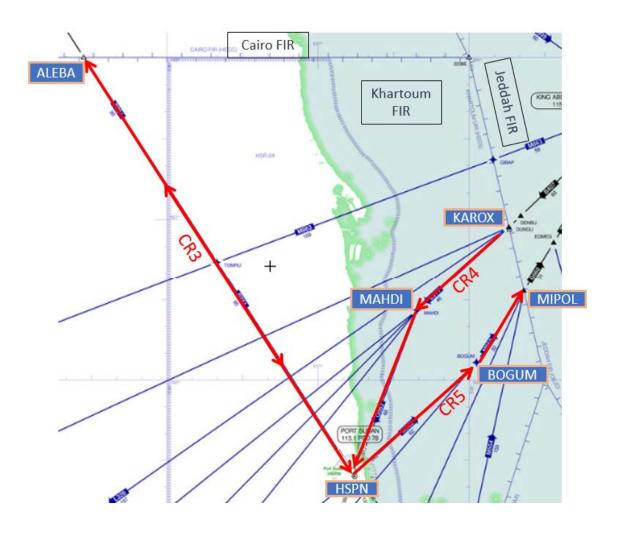


# APPENDIX 5 EAST-WEST ARRANGEMENT THROUGH KFOSS ABOVE FL245



APPENDIX 6

OPERATIONS IN AIRSPACE OVER THE TERRITORY OF SUDAN



# ATS UNIT FREQUENCIES

LIST OF AVAILABLE FREQUENCIES IN ORDER						
ATS UNIT		RTF CALL SIGN	Operational Hours	FREQUENCY		Tel NO
				Main	127.300 MHz	
	Khartoum	Information	Nil	Stand by		
Relevant Sector	ACC			Emergency		
	nee			Stand by		
				Emergency		
				Main	128.1 MHz	
	Port Sudan	TWR and APP	H24	Stand by	118.1 MHz	
				Emergency	121.5 MHz	
		Khartoum East Sector Advisory	H24	Main	127.5 MHz	
	Addis Ababa ACC	-		Main	125.100 MHz	
			H24	Stand by	125.200 MHz 11300 KHz 5517 KHz	
				Emergency		
	Brazzaville ACC			Main	121.100 MHz	
Adjacent FIRs relevant sector				Stand by	127.100 MHz 128.900 MHz 13294 Khz 5493Khz	INMARSAT – 467602 & 467603
				Alternate	CPDLC: FCCC for FANS equipped aircraft	
				Emergency		
				Main	129.4 MHz	
	Cairo ACC	Cairo	H24	Stand by	130.9 MHz 134.500 MHz 124.575 MHz	(+202) 22678883 (+202) 22667925

				Emergency	121.5 MHz HF 11300		
				Main	128.500 MHz	( , 25 ( ) 414 220007	
	Entebbe ACC			Stand by	11300 KHz	(+256) 414 320907 (+256) 312 800 890	
				Emergency	121.500 MHz	(+256) 312 352541	
	Jeddah	Indiah Hanas Wast	H24	Main	125.45 MHz	(+966) 126855006	
	ACC	Jeddah Upper West	П24	Emergency	121.5 MHz	(+966) 126855007	
				Main	126.1MHz		
	17.1 1				8903 KHz,		
	Kinshasa ACC			Stand by	13294 KHz		
	ACC				5493 KHz		
				Emergency			
				Main	121.300 MHz		
	Nairobi			Stand by			
	ACC		H24	Г	121.500 MHz		
	ACC			Emergency	11300 KHz		
			Alternate	CPDLC: HKNA for FANS			
				Anemate	equipped aircraft		
				Main	128.100 MHz		
					8873 KHz,		
					8903KHz,	INMARSAT – 467001 & 467002	
	Ndjamena		H24	Stand by	13294KHz	11 11 40 7001 & 40 7002	
	ACC		П24		2878 KHz		
				Emergency	120.500 MHz		
				-	CPDLC: FTTT for FANS		
				Alternate	equipped aircraft		
					SATCOM 467003/467004		
Other ATS Unit				Main	123.900 MHz		
Within South	Juba APP			Stand by	118.400 MHz		
Sudan airspace				Emergency	121.500 MHz		

# CONTINGENCY PLAN AMENDMENT 1 IMPLEMENTATION CHECKLIST

Row	Task	Status	Remark
1	Development of Contingency Plan.	Complete	
2	Contingency plan reviewed and agreed by CCT.	Complete	
3	Safety risk assessments by ANSPs concerned completed.	Complete	
4	Date and time of implementation agreed.	Complete	15 August 2023 0700 UTC.
5	Required hotline between Port Sudan and Cairo ACCs (or alternative agreed procedure) established and revised procedures for addressing flight plan messages and the passing of estimates finalized.	Complete	
6	Required hotline between Port Sudan and Jeddah ACCs (or alternative agreed procedure) established and revised procedures for addressing flight plan messages and the passing of estimates finalized.	Complete, being monitored	
7	Letters of Procedure (LoPs) between Port Sudan and Cairo ACCs established/amended and signed off.	Due to be signed prior to 15 August	Finalized by Sudan and Cairo. Anticipated signing before 15 August.
8	Letters of Procedure (LoPs) between Port Sudan and Jeddah ACCs established/amended and signed off.	Due to be signed prior to 15 August	Finalized by Sudan and Jeddah. Anticipated signing before 15 August.
9	NOTAM(s) promulgated, with contingency plan activation date/time incorporated, as well as suitable information and procedures to be followed	Target date 10 August	NOTAMs drafting to be completed once CP amendment is agreed. Operators require minimum 48 hours before effective date to complete safety risk assessments.
10	ATCOs in the relevant ACCs trained and able to accommodate traffic based on contingency plan (prior to date promulgated in the above mentioned NOTAM)	Controllers available	Contingency plan, NOTAMs, longitudinal separation, coordination with relevant ACC, operations in Class F.  ATS units to provide information to Regional offices when training completed.
11	Flight crew subject to operations to and from Port Sudan are briefed to handle operational requirements based on contingency plan. Operators to have completed safety risk assessments, and updated Part Cs.		Can only be commenced once activation NOTAMs have been promulgated.