ENR 1.8

ATM CONTINGENCY PLAN FOR BAMAKO ACC

PART I: LEVEL 2 CONTINGENCY PLAN (REQUIRING INTERVENTION OF ADJACENT FIR)

1. OBJECTIVES

- 1.1. This contingency plan contains procedures to ensure the provision of air navigation services in the event of partial or total disruption of Air Traffic Services (ATS) within Bamako Upper Traffic Area and is in accordance with ICAO Annex 11 Air Traffic Services Chapter 2, paragraph 2.32, and Attachment C, and Mali RAM 11, Part 2 (Chapter 2, paragraph 11.2.2.31 and Attachment C), document 4444 ATM- PANS (Chapter 15.8 and chapter 16.6).
- 1.2. This Contingency Plan is designed to accommodate the flow of international air traffic with a minimum of disturbance for aircraft transiting the airspace under the responsibility of BAMAKO ACC. Routes and flight levels are limited.

2. STATES AND FIRS AFFECTED

2.1. In the event that Mali Civil Aviation Authority (ANAC-Mali) activates this Contingency Plan, the adjacent BAMAKO ACC, will be notified in accordance with the Letter of Agreement (LOA) established between them. The adjacent BAMAKO ACC directly affected by this Contingency Plan are as follows:

State	FIR	ATS Unit
Burkina Faso	Niamey FIR	Ouagadougou ACC
Niger	Niamey FIR	Niamey ACC
Côte-D'Ivoire	Dakar FIR	Abidjan ACC
Mauritania	Dakar FIR	Nouakchott ACC
Senegal	Dakar FIR	Dakar ACC
Guinea Conakry	Roberts FIR	Roberts ACC

2.2. The contact details of the civil aviation authorities and organizations concerned are contained in PARAGRAPH 15 below.

3. MANAGEMENT OF THE CONTINGENCY PLAN

- 3.1. The contingency measures set out in the first part of this Plan are applicable in cases of foreseeable events is for level 2.
- 3.2. The following procedures have been put in place to ensure that the management of the Contingency Plan provides for international flights to proceed in a safe and orderly fashion through BAMAKO UTA.

3.3. CENTRAL COORDINATING COMMITTEE

The Central Coordinating Committee (CCC) function shall be to oversee the implementation of the Contingency Plan and in the event that the Air Traffic Services (ATS) in BAMAKO UTA is disrupted for an extended period, make arrangements for and facilitate the temporary relocation of the Air Traffic Services to DAKAR ACC or ABIDJAN ACC and the restoration of Air Traffic Services in BAMAKO UTA.

The Central Coordinating Committee comprises representation from the following:

1) MALI CIVIL AVIATION AUTHORITY (ANAC-MALI);

2) ASECNA HEADQUARTER AND ASÈCNA-MALI; 1

3) OTHER RELEVANT AUTHORITIES.

Contact details of its members are provided in paragraph 15.1 below.

3.4. ATM OPERATIONAL CONTINGENCY GROUP

The ATM Operational Contingency Group (AOCG) will be convened by the CCC with a primary responsibility to oversee the day to day operations under the contingency arrangements, and coordinate operational ATS activities, 24 hours a day, throughout the contingency period in coordination with the WACAF Contingency Coordination Team and adjacent FIRs. The AOCG will include any necessary specialist personnel from the following disciplines:

- Air Traffic Control Services (ATS)
- Aeronautical Telecommunication (COM)
- Aeronautical Meteorology (MET)
- Aeronautical Information Services (AIS)
- ATS equipment maintenance service provider.

Contact details of its members are provided in paragraph 15.2 below.

4. AIR TRAFFIC MANAGEMENT AND CONTINGENCY PROCEDURES

4.1. Air Traffic Services Responsibilities

- 4.1.1. Tactical ATC considerations during periods of over-loading may require re-assignment of routes or portions thereof.
- 4.1.2. Alternative routes are designed to maximize the use of existing ATS route structures and communications, navigation and surveillance services.



- 4.1.3. In the event that ATS cannot be provided within BAMAKO UTA , ASECNA shall publish not less than 48 hours before, if practicable, the corresponding NOTAM indicating the following:

 - a) Time and date of the beginning of the contingency measure;
 b) Airspace available for landing and over flying traffic and airspace to be avoided;
 - c) Details of the facilities and services available or not available and any limits on ATS provision (e.g. ACC, APP, TWR and FIS), including an expected date of restoration of services if available;
 - d) Information on the provisions made for alternative services;
 - e) ATS contingency routes;
 - f) Procedures to be followed by neighboring ATS units;
 - g) Procedures to be followed by pilots; and
 - h) Any other details with respect to the disruption and actions being taken that aircraft operators may find useful.
- 4.1.4. In the event that ASECNA is unable to issue the NOTAM, ICAO will take action to issue the NOTAM of contingency measures upon notification by ASECNA-Mali.

4.2. Separation

Separation criteria shall be applied in accordance with the Procedures for Air Navigation Services-Air Traffic Management (Doc 4444) and the Regional Supplementary Procedures (Doc 7030). Longitudinal separation of fifteen (15) minutes or 20 nautical miles Radar separation, where Radar services are available for aircraft maintaining the same cruising flight level shall be applied.

4.3. Level restriction

Where possible, aircraft on long haul international flights shall be given priority with respect to cruising levels.

4.4. Airspace Classifications

Airspace classification will not be changed.

4.5. Aircraft position reporting

- The primary means of communication will be by VHF or HF radio. When CPDLC has been authorized for use by 4.5.1. the relevant ATC authority this will become the primary means of communication, with HF as secondary. Traffic Information Broadcast by Aircraft (TIBA) procedures shall apply in BAMAKO UTA during periods of contingency.
- 4.5.2. TIBA frequencies shall be as follows: AFI REGION - 126.9 MHz.

4.6. Other measures

Other measures related to the disruption of air traffic services and the implementation of the contingency scheme within the BAMAKO UTA may be taken as follows: • Suspension of all VFR operations;

- · Delay or suspension of general aviation IFR operations; and
- Delay or suspension of commercial IFR operations.

4.7. Procedures for ATS Units

The ATS units providing Air traffic control services will follow their unit emergency operating procedures and activate the appropriate level of contingency procedures in line with this plan.

a) ATC will inform pilots of the emergency condition and advise if it is likely that the ATS will be suspended and transmit on the radio frequency in use providing pilots with alternate means of communication;

b) during the period the contingency procedures are in effect, flight plan and other aircraft movement messages must continue to be transmitted by operators to BAMAKO ACC via the AFTN/AMHS using normal procedures;

c) on notification by ASECNA-Mali, the ATS authorities operating the DAKAR ACC (or ABIDJAN ACC) will activate the contingency procedures in accordance with this plan;

d) prior to entry to the BAMAKO UTA during contingency operations prior authorization must be obtained from MALI CIVIL AVIATION AUTHORITY (ANAC-MALI), and flights must comply with the ATC clearance and communications instructions issued by the ATS UNIT responsible for the airspace immediately adjacent to the BAMAKO ACC contingency airspace;

e) Coordination of aircraft boundary estimates and flight levels by the adjacent ATS UNIT responsible for aircraft entering the BAMAKO UTA shall be in accordance with this Plan;

f) the ATS UNIT responsible for aircraft entering the BAMAKO UTA will instruct pilots to maintain the last flight level assigned and speed (MACH number if applicable) while operating in the BAMAKO UTA; g) the ATS UNIT responsible for aircraft entering the BAMAKO UTA will not authorize any change in route, flight level or

speed unless specifically authorized by the ATS unit normally responsible for the affected airspace, or under this plan; h) the ATS UNIT responsible prior to aircraft entering the BAMAKO UTA will inform aircraft that they must establish contact with the first ATS unit after transiting the BAMAKO UTA not less than 10 minutes before the estimated time of entry to the BAMAKO UTA.

5. TRANSITION TO CONTINGENCY SCHEME

During times of uncertainty when disruption of air traffic services seems possible, aircraft operators should be prepared for a possible change in routing while en-route, familiarization of the alternative routes outlined in the contingency scheme as well as what may be promulgated by ASECNA via NOTAM.

In the event of a disruption of air traffic services that has not been promulgated, BAMAKO ACC will, if possible, broadcast to all aircraft in the BAMAKO UTA, airspace that is affected by the disruption and any further instructions.

It is recognized that when a disruption of air traffic services or airport closure occurs and is promulgated, operators may have different requirements as to their alternative routings. BAMAKO ACC will evaluate all requests to ensure safety is maintained.



6. TRANSFER OF CONTROL, COORDINATION AND DELEGATION OF RESPONSIBILITY IN THE PROVISION OF AIR TRAFFIC SERVICES WITHIN BAMAKO UTA

- 6.1. The transfer of control and communication will be at the common airspaces boundaries or as previously agreed upon between:
 - a) BAMAKO-ROBERTS ACCs; b) BAMAKO-NOUAKCHOTT ACCs; c) BAMAKO-NIAMEY ACCs;

 - d) BAMAKO-DAKAR ACCs
 - e) BAMAKO-OUAGADOUGOU ACCs;
 - f) BAMAKO-ABIDJAN ACCs.
- 6.2. The responsibility for ensuring the provision of air traffic services within BAMAKO UTA is transferred first to DAKAR ACC. according to the following considerations:

a) DAKAR ACC will ensure the provision of air traffic services for traffic operating along all the contingency routes of the BAMAKO UTA, as follows:

- DKCR10: UR977 (EREMO-BKO)
- DKCR11: UG851 (GUREL-BKO)
 DKCR12: UA600 (KIMGA-BKO)
- DKCR14: UG860 (EDGIB-BKO)
- DKCR15: UA601 (IPUGA -BKO)
- DKCR16: UA612 (NEGLO-BKO) ;

b) In the event that DAKAR ACC will not be available, the responsibility for ensuring the provision of air traffic services within BAMAKO UTA will be transferred to ABIDJAN ACC;

In that case, ABIDJAN ACC will ensure the provision of air traffic services for traffic operating along all the contingency routes of the BAMAKO UTA, as follows:

- DKCR10: UR977 (EREMO-BKO)
 DKCR11: UG851 (GUREL-BKO)
- DKCR12: UA600 (KIMGA-BKO)
- DKCR14: UG860 (EDGIB-BKO)
- DKCR15: UA601 (IPUGA -BKÓ)
- DKCR16: UA612 (NEGLO-BKO).

7. CONTINGENCY ATS ROUTES NETWORK

In the event of disruption of air traffic services within BAMAKO UTA, aircraft operators should file flight plans using alternative contingency routes listed in the scheme below:

Note: ATS routes not included in the table below are temporarily unavailable.

Routes Code	Routes name	FIR involved	Flight Levels assignment	Entry/Exit point	Communications means
DKCR10	UR 977 UM 122	Dakar FIR (Nouakchott UTA)	Northbound- : FL250 - FL370 Southbound: FL280 - FL360	EREMO/BKO	Dakar ACC: 129.5 MHz; 8861, 6535, 6673 KHz Or Abidjan ACC: 129,1 MHz; 8861 KHz; 6673 KHz
DKCR11	UG 851	Dakar FIR (Abidjan UTA)	North-Westbound: FL320 - FL380 South-Eastbound: FL310 - FL330 - FL390	GUREL/BKO	Dakar ACC: 129.5 MHz; 8861, 6535, 6673 KHz Or Abidjan ACC; 129,1 MHz; 8861 KHz; 6673 KHz
DKCR12	UA 600	Dakar FIR (Nouakchott UTA)	North-Westbound: FL340 -FL380 - FL400 South-Eastbound: FL290 - FL310 - FL390	KIMGA/BKO	Dakar ACC: 129.5 MHz; 8861, 6535, 6673 KHz Or Abidjan ACC; 129,1 MHz; 8861 KHz; 6673 KHz
DKCR14	UG 860	Niamey FIR (Ouaga UTA)	Eastbound: FL260 and FL400 Westbound: FL270, FL290 and FL410		Dakar ACC: 129.5 MHz; 8861, 6535, 6673 KHz Or Abidjan ACC; 129,1 MHz; 8861 KHz; 6673 KHz
DKCR15	UA 601	Dakar FIR (Dakar UTA)	North-Westbound: FL 260 - FL380 - FL400 South-Eastbound: FL270, FL290, FL310 and FL390	IPUGA / BKO / EBSUD	Dakar ACC: 129.5 MHz; 8861, 6535, 6673 KHz Or Abidjan ACC; 129,1 MHz; 8861 KHz; 6673 KHz
DKCR16	UA 612	Roberts FIR	North-Eastbound: FL270 - FL350 South-Westbound: FL280 - FL340	BKO/NEGLO	Dakar ACC: 129.5 MHz; 8861 KHz; 6535 MHz; 6673 KHz Or Abidjan ACC; 129,1 MHz; 8861 KHz; 6673 KHz

8. PILOT AND OPERATOR PROCEDURES

8.1. Filing of flight plans

Flight plan requirements detailed in ASECNA AIP continue to apply during contingency operations, except where modified by the contingency ATS routes and FLAS specified by ATC and/or in NOTAM.



8.2. Overflight approval

Aircraft operators must obtain over-flight approval from ANAC-Mali prior to operating flights through the BAMAKO UTA. During the period of activation of this Contingency Plan the adjacent BAMAKO ACC will provide normal ATC clearances for aircraft to enter the BAMAKO UTA. The adjacent BAMAKO ACC is not responsible for coordination or provision of overflight clearances for the BAMAKO UTA. The operator must ensure any required overflight approval has been obtained.

8.3. Pilots operating procedures

All aircraft transiting through BAMAKO UTA shall strictly comply with the following:

a) Maintain contact with DAKAR ACC (or ABIDJAN ACC if specified by the NOTAM) according to the paragraph 4 of this contingency plan;

b) Operate along or as close as possible to the centerline of the assigned contingency air traffic route;

c) Reach the flight level assigned by adjacent ACC for the transit of BĂMAKO UTĂ at least ten (10) minutes before entering BAMAKO UTA;

d) Maintain the flight level assigned by the last adjacent ACC while operating within BAMAKO UTA, unless an emergency or flight safety reason exists;

e) Maintain a continuous listening watch on the VHF frequency 126.9 MHz, and transmit blind in English on 126.9 MHz position reports five (5) minutes before and overhead each compulsory reporting point established along the respective air traffic route;

f) Include in the last position report to the competent adjacent ACC the estimated time of arrival over the entry and exit points of BAMAKO UTA;

g) Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for the transit of BAMAKO UTA, climb or descend well to the right of the centerline of the air traffic route being flown but remaining within BAMAKO UTA, and to inform immediately, by blind broadcast on the VHF frequency 126.9 MHz, all other aircraft likely to be affected by transmitting a relevant emergency level change message (comprising the aircraft call-sign, the aircraft position, the flight levels being left and crossed, etc.);

h) Contact the competent adjacent ACC as soon as possible and at least ten (10) minutes before the estimated time of arrival over the relevant exit point of BAMAKO UTA to obtain clearance for entering the adjacent airspace concerned; i) Display navigation and anti-collision lights always during the transit of contingency airspace;

j) The application of SLOP is strongly encouraged;

k) Transponders should be set on a discrete code assigned by ATC or select code A2000 if ATC has not assigned a code.

COMMUNICATION PROCEDURES

8.4. Degradation of Communication - Pilot Radio Procedures

- 8.4.1. When operating within the contingency airspace, pilots should use normal radio communication procedures.
- 8.4.2. In the absence of communication with ATC, the pilot should continue to make routine position reports on the assigned frequency and also broadcast positions in accordance with the TIBA procedures.

9. PUBLIC HEALTH EMERGENCIES

- 9.1. The BAMAKO ACC upon receipt of information from a pilot or another ATS unit, regarding suspected case(s) of communicable disease, or other public health risk, on board the aircraft, shall forward a message as soon as possible to the ATS unit serving the destination / departure, unless procedures exist to notify the appropriate authority designated by the State and the aircraft operator or its designated representative.
- 9.2. To avoid misunderstanding that may result in inappropriate reaction from the stakeholders including air operators, information provided by the Health Sanitary Board (HSB) should be obtained in written form and relayed to air operators in written form. Where communication means do not enable relay of written text, the information shall be read verbatim.

10. VOLCANIC ASH CONTINGENCY PLAN (VACP)

- 10.1. If a volcanic ash cloud is reported or anticipated in BAMAKO UTA, BAMAKO ACC should take the following actions:
 - a) Immediately transmit relevant information to the flight crews of potentially affected aircraft to ensure that they are aware of the current position and expected position of the cloud and the concerned flight levels;

b) Respond to requests for a course change or a level change as far as possible;

c) Propose a route change to avoid or leave the reported or predicted areas of presence of the volcanic ash cloud when requested by the pilot or as the controller deems it necessary and;

d) Where possible, request a special flight report when the flight route enters or anticipates the planned volcanic ash cloud and transmit the report to the appropriate agencies.

10.2. When a flight crew informs BAMAKO ACC that they have inadvertently entered a cloud of volcanic ash, BAMAKO ACC should:

a) Respect measures applicable to an aircraft in an emergency and;

b) Alter the assigned route or level only if the pilot requests so or if the airspace or traffic conditions require it.

11. INTERCEPTION OF CIVIL AIRCRAFT

- 11.1. Pilots need to be aware that in light of current international circumstances, a contingency routing requiring aircraft to operate off of normal traffic flows, could result in an intercept by military aircraft. Aircraft operators must therefore be familiar with international intercept procedures contained in ICAO Annex 2- Rules of the Air Paragraph 3.8 and Appendix 2, Sections 2 and 3.
- 11.2. Pilots need to continuously listen out on the VHF emergency frequency 121.5MHz and should operate their transponders always during flight, regardless of whether the aircraft is within or outside airspace where secondary surveillance radar (SSR) is used for ATS purposes. Transponders should be set on a discreet code assigned by ATC or select code A2000 if ATC has not assigned a code.

11.3. If an aircraft is intercepted by another aircraft, the pilot shall immediately:

• Follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with international procedures;

- If possible, notify appropriate ATS Unit;
- Set transponder code to 7700, unless otherwise instructed by the appropriate ATS unit;

• Attempt to establish radio communication with the intercepting aircraft by making a general call on the emergency frequency 121.5MHz and;

• If instructions are received by radio from any source that conflict with those given by the intercepting aircraft, the intercepted aircraft, shall request immediate clarification while continuing to comply with the instructions given by the intercepting aircraft.

12. SEARCH AND RESCUE

- 12.1. ATS UNITS involved in this contingency plan are required to assist any distressed aircraft of which they are aware and which flies over a contingency space.
- 12.2. The center that receives a distress message from an aircraft shall send the necessary messages (INCERFA, ALERFA or DETRESFA) to all authorities in the SAR service involved in this plan including the SAR authority of the center which is in contingency situation.
- 12.3. Each SAR authority shall assist as necessary its neighbor as requested in their LoA. Contact details of its SAR Authority are provided in paragraph 15.3 below.

13. PLAN TESTING AND REVIEW

13.1. The contingency plan shall be tested by ATC simulation at least once per year.

13.2. A full review of the contingency plan shall be conducted at least once per three years.

14. IMPLEMENTATION OF THE PLAN

The provisions of this contingency plan shall be promulgated by NOTAM to be issued by ASECNA in coordination with ICAO and the concerned States.

15. ALL CONTINGENCIES UNITS

15.1. CENTRAL COORDINATING COMMITTEE

N°	Member Title	Telephone	Email
1	Head of Air Navigation Service ANAC-Mali	+223 76 48 70 24	ousman.guingo@anac-mali.org ousguindo@yahoo.fr
2	Representative of ASECNA-Mali	+223 66 74 01 21	GOITAiss@asecna.org
3	Bamako ACC Manager	+223 66 74 01 06	moufoumaser@asecna.org
4	Bamako aerdrome Commander	+223 66 74 02 63	DEMBELEDri@asecna.org
5	Head of CNS Unit	+223 66 74 02 07	DIARRAMou@asecna.org

ASECNA HEADQUATERS (CRISIS ROOM)

N°	Member Title	Telephone	Email
1	Director of Operations	+221 77 333 27 88 +221 338 69 56 51 +221 338 69 20 62	bakienonlou@asecna.org

15.2 ATM OPERATIONAL CONTINGENCY GROUP

N°	Member Title	Telephone	Email		
1	En-Route Control Manager	+223 66 74 01 06	moufoumaser@asecna.org		
2	Chief ATM Officer in charge of Operations	+223 66 74 01 18	kanouteada@asecna.org		
3	Chief ATM Officer in charge of AIr Traffic	+223 66 74 03 49	sissokomam2@asecna.org		
4	Aeronautical Information Management Chief Officer	+223 66 74 03 36	sangaresam@asecna.org		
5	Communication Navigation Surveillance System Chief Officer	+223 66 74 02 07	DIARRAMou@asecna.org		
6	Ntework & Computer systems Administrator	+223 66 74 01 48	doucourernou@asecna.org		
7	Meteorological Weather Forecasts & Protection Chief Officer	+223 66 74 01 78	toureyou@asecna.org		
8	Telecommunication Services Officer	+ 223 66 74 01 94	SIENTAIna@asecna.org		

15.3 SEARCH AND RESCUE POINT OF CONTACT

C	Center	Member Title	Telephone	Email
Bama	ako	SAR focal point		ssdiallo@yahoo.fr diallosidisadio@gmail.com



PART II: LEVEL 3 CONTINGENCY (REQUIRING AVOIDANCE OF AFFECTED AIRSPACE)

UNAVAILABILITY OF BAMAKO UTA

OBJECTIVES

In the event that the total disruption of Air Traffic Services (ATS) within MALI AIRSPACE does not allow to fly in the airspace affected, users are invited to circumvent the airspace.

Users may also chose to avoid the MALI AIRSPACE by flight planning via any alternative ATS routes provided by neighboring ATS units of BAMAKO ACC.

Users are advised to circumnavigate MALI AIRSPACE and try to establish contact with the ATS unit responsible for the provision of service as soon as possible.

EXAMPLE:

Flights from North to South : Join the point (5LNC) on ATS Route xxx till point (5LNC) and follow instructions from [ATS UNIT(NEIGHBOR)]. Fl ights from East to West: Join the point (5LNC) on ATS route xxx till point (5LNC) and follow instructions from [ATS UNIT(NEIGHBOR)].

