

# ATM Contingency Planning Workshop

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## SANS Journey

MANAGING SKIES, SECURING LIVES

- 01 OEJD FIR Overview**
- 02 ATM Emergency Operation Concept**
- 03 ATM Contingency Operation Requirements**
- 04 ATM Contingency Documentation**
- 05 ATM Contingency Annual Exercises**

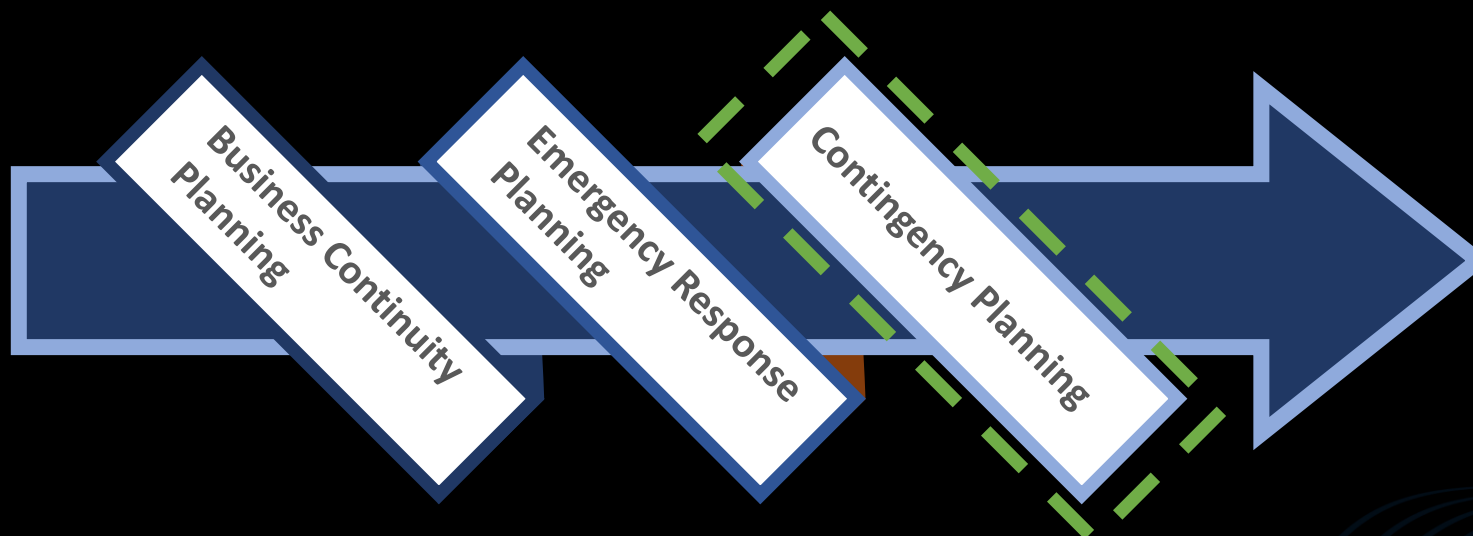


# Introduction

BEYOND



22301 BCMS



Operational  
Excellence



SANS RoadMap



2023

 **2 Million Square Kilometers**



≈ **208K** Overflying Flights



≈ **393K** International Flights



≈ **241K** Domestic Flights



**29** Airports

**14**  
Controlled  
Airports

**5**  
FIS  
Airports

**10**  
Uncontrolled  
Airports

**Operated By**

**2**  
Area Control  
Centers

**10**  
Approach  
Sectors

**14**  
Tower Units

**5**  
AFIS Units

# ATM Emergency Operation Concept

## Contingency Category 1

1

When the ATS facility is **partially unavailable** to provide ATS in cases of foreseeable events caused by unexpected interruptions.

*Ex: Degradation of CNS/ATM system, Loss of one CWP, Loss of one radar by-pass for ATC facility, Partial loss of power supply.*

2

## Contingency Category 2

When the ATS facility is **totally unavailable** to provide ATS in cases of foreseeable events which can be managed within a local alternative facility such as a simulator or backup facilities - CWP's (inside the city).

3

## Contingency Category 3

When **Jeddah ACC or Riyadh ACC** are **totally unavailable** to provide ATS.

*Ex: Airport unavailable, Natural disaster (flood, earthquake), Security reasons, Public Health Emergencies.*

4

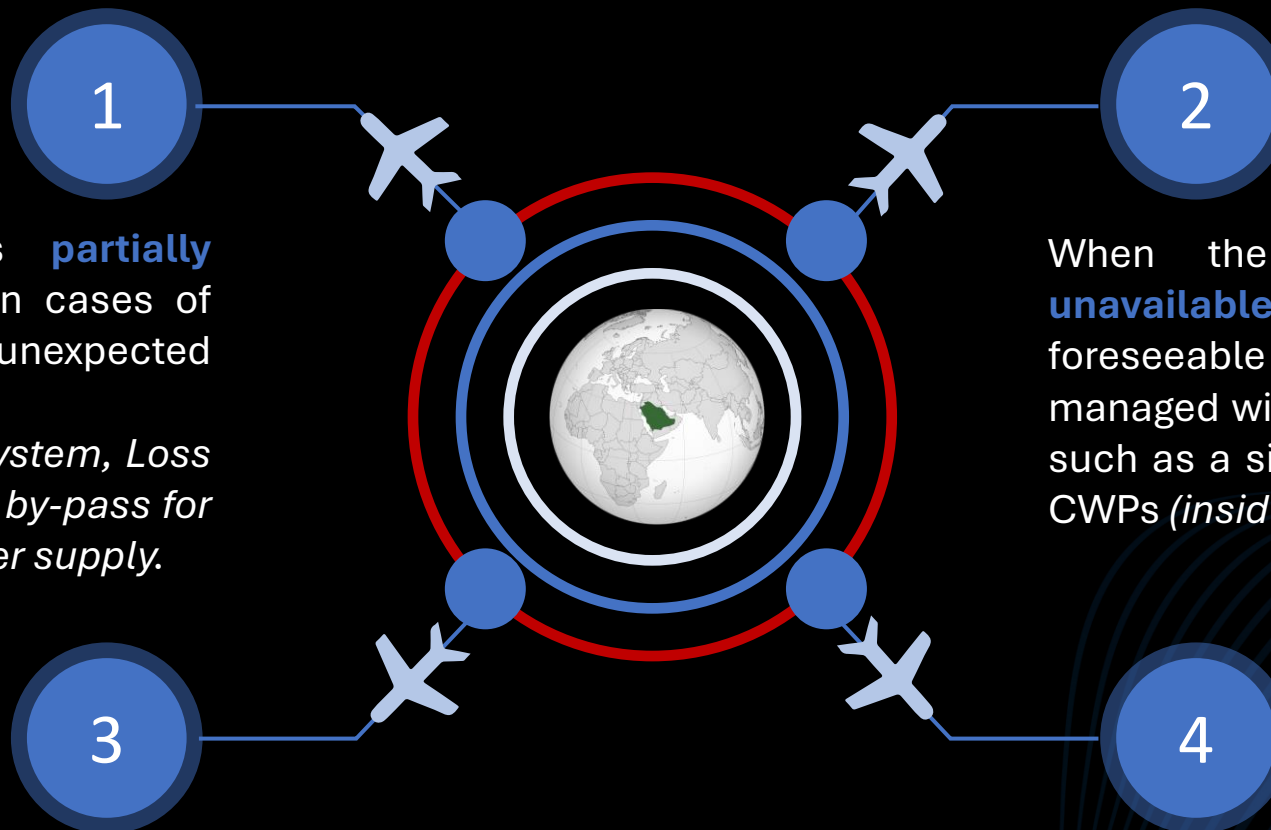
## Contingency Category 4

When the complete loss of **Both Jeddah and Riyadh ACCs** (international flights to transit the Jeddah FIR).

*Ex: Natural disaster (flood, earthquake), Security reasons. etc.*

**Category 4 - A | Airspace Safe, No ATS.**

**Category 4 - B | Airspace Not Available.**



1

Comply with applicable  
**national**  
regulations

2

Comply with applicable  
**internal policies**  
& requirements

3

Comply with  
**contingency plan**  
template

4

Ensure timely,  
efficient, and  
**appropriate**  
responses

8

Main &  
alternative facility  
**awareness**

7

Ensure staff  
**complies** with the  
determined  
**responsibilities**

6

Ensure alignment  
with **external**  
stockholders

5

Ensure alignment  
with **internal**  
stockholders

1

Ensure the alternative (backup) facility is **separated** from the main facility in a separate building

2

Ensure **redundancy** and **independence** of all safety-significant systems or equipment

3

Ensure the alternative (backup) facility is ready to **provide** the attended service in the attended AoR

4

Ensure the alternative (backup) facility systems database is **up-to-date** and identical to the main facility

5

Develop the required **transportation** service agreements for ATCOs relocation when required



# ATM Contingency Documentation

**ATSU Pre-Exercise Evacuation & Contingency Checklist**  
Form NO. : (Caliber 10) Revision : (Caliber 10) Issue Date : (Caliber 10)

This checklist should be completed by ATSU Head/Chief/Manager (or its delegate)

**A. GENERAL INFORMATION**  
A.1 Name of ATSU: \_\_\_\_\_  
A.2 ATSU Provided: ☐ ATIS ☐ TWR ☐ APP ☐ ACC  
A.3 Exercise Type: ☐ Evacuation ☐ Contingency Exercise Date: \_\_\_\_\_

**B. PRE-EXERCISE CHECKLIST**  
B.1 Evacuation Information:  
B.1.1 The evacuation routes are posted. ☐ Yes ☐ No  
B.1.2 The evacuation signals are in good condition. ☐ Yes ☐ No  
B.1.3 The exit signals are properly illuminated. ☐ Yes ☐ No  
B.1.4 The exit door(s) are clearly marked. ☐ Yes ☐ No  
B.1.5 The exit door(s) are operating properly. ☐ Yes ☐ No  
B.1.6 The egress route(s) are free of obstructions. ☐ Yes ☐ No  
B.1.7 The assembly point(s) signal are in good condition. ☐ Yes ☐ No  
B.2 Coordination:  
B.2.1 Conduct coordination with airport operation (flight/flight). ☐ Yes ☐ No  
B.2.2 Conduct coordination & preparation meetings. ☐ Yes ☐ No  
B.2.3 Conduct coordination with other stakeholders. ☐ Yes ☐ No  
B.3 Alternative Facility:  
B.3.1 Alternative facility availability. ☐ Yes ☐ No  
B.3.2 Availability of power supply. ☐ Yes ☐ No  
B.3.3 Availability of two-way voice communication. ☐ Yes ☐ No  
B.3.4 Availability of telephone communication. ☐ Yes ☐ No  
B.3.5 Availability of surveillance. ☐ Yes ☐ No  
B.3.6 Availability of meteorological information. ☐ Yes ☐ No  
B.3.7 Availability of ATIS information (system). ☐ Yes ☐ N/A

Checked By: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

**ATSU Evacuation & Contingency Exercise Evaluation**  
Form NO. : (Caliber 10) Revision : (Caliber 10) Issue Date : (Caliber 10)

**A. GENERAL INFORMATION**  
A.1 Name of ATSU: \_\_\_\_\_  
A.2 ATSU Provided: ☐ ATIS ☐ TWR ☐ APP ☐ ACC  
A.3 Exercise Type: ☐ Evacuation ☐ Contingency Exercise Date: \_\_\_\_\_

**B. EVALUATION PLAN UTILIZATION (B.1 - B.3 as per the Pre-exercise checklist provided by ATSU Head/Chief/Manager)**  
B.1 Is the Target Time for Evacuation as mentioned in the evacuation plan achieved? ☐ Yes ☐ No  
B.2 Are the evacuation routes & signals posted appropriately? ☐ Yes ☐ No  
B.3 Is the exit signals properly illuminated? ☐ Yes ☐ No  
B.4 Is the exit door(s) clearly marked? ☐ Yes ☐ No  
B.5 Is the exit door(s) operating properly? ☐ Yes ☐ No  
B.6 Is the egress route(s) free of obstructions? ☐ Yes ☐ No  
B.7 Is the assembly point(s) signal in place and in good condition? ☐ Yes ☐ No  
B.8 Is the ATSU Head/Chief ensure all staff are in assembly point(s) - headcount? ☐ Yes ☐ No  
C. ALTERNATIVE FACILITY OF THE ATSU (as per the Pre-exercise checklist provided by ATSU Head/Chief/Manager)  
C.1 As SANS RCP, is the Maximum Time to Contingency (MTTC) achieved? ☐ Yes ☐ No  
C.2 As SANS RCP, is the Maximum Acceptable Contingency Level (MACCL) achieved? ☐ Yes ☐ No  
C.3 As SANS RCP, is the Maximum Time to Recovery (MTTR) achieved? ☐ Yes ☐ No  
C.4 Is the alternative facility activated appropriately? ☐ Yes ☐ No  
C.5 Is the alternative crew reach the alternative facility at the agreed time? ☐ Yes ☐ No  
C.6 Is the power supply (UPS) generator serviceable? ☐ Yes ☐ No  
C.7 Is the two-way voice communication method serviceable? ☐ Yes ☐ No  
C.8 Is the telephone communication method serviceable? ☐ Yes ☐ No  
C.9 Is the surveillance method serviceable? ☐ Yes ☐ No  
C.10 Is the meteorological information method serviceable? ☐ Yes ☐ No  
C.11 Is the ATIS information method serviceable? ☐ Yes ☐ No

Comments: \_\_\_\_\_


Checked By: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

**ERP Exercise Checklist / ATM Executive Director**  
Form NO. : (Caliber 10) Revision : (Caliber 10) Issue Date : (Caliber 10)

**A. GENERAL INFORMATION**  
A.1 Name of Exercise: \_\_\_\_\_  
A.2 Exercise Type: ☐ Tabletop Exercise (TT) ☐ Full-scale Exercise (FSE)  
A.3 Attended Crisis Room: HQ JED RUH Event Location: \_\_\_\_\_  
A.4 Exercise Date: \_\_\_\_\_ Exercise Start: \_\_\_\_\_ Exercise End: \_\_\_\_\_


**B. ACTIONS**  
B.1 Inform and brief the CEO of the emergency (crisis) situation, such as:  
• Location (offshore ATC unit)  
• Affected services.  
• Any injuries.  
• Initial recovery action(s).  
B.2 Attend the HQ crisis room ASAP. ☐ Yes ☐ No  
B.3 Managing the ATM operational level decisions in crisis room(s). ☐ Yes ☐ No  
B.4 Oversee the operational - ATM emergency response team(s). ☐ Yes ☐ No  
B.5 Review the [disruption form](#) to be submitted to SOE (if required). ☐ Yes ☐ No  
B.6 Ensure to receive up-to-date ATM operational actions through the ATS Sector Managers. ☐ Yes ☐ No  
B.7 Delegate responsibilities to ensure effective Crisis Management (when required). ☐ Yes ☐ No

Comments: \_\_\_\_\_

**SANS** 

**Air Traffic Management**  
**Contingency Plan**  
**<ATS Unit Name> Contingency Plan**  
**Category 1 & 2**  
**SANS – OD – PL – XX**  
ATS Unit Contingency Plan Template  
SANS-OD-OD-02 - November 2022

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**SANS** 

**Quality Management System**  
**Contingency Plan**  
**<Center Name> Control Center Contingency Plan**  
**Category 1, 3 & 4**  
**SANS – OD – PL – XX**

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**SANS** 

**LETTER OF AGREEMENT**  
Between  
Kingdom of Saudi Arabia XXXXXXXXXXXXXXXXXXXXXXX  
Saudi Air Navigation Services XXXXXXXXXXXXXXXXXXXXXXX

**ATSU 1** **ATSU 2**

**Appendix H:**  
**Contingency Procedures**

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**SANS** 

**Quality Management System**  
**ATM CONTINGENCY MANAGEMENT**  
**SANS – ATM – PMM – xxx**

1<sup>st</sup> Version, 2024

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# ATM Contingency Documentation

## CHAPTER ONE – ADMINISTRATION

- 1.1. INTRODUCTION.
- 1.2. OBJECTIVES.
- 1.3. SCOPE.
- 1.4. MANAGEMENT & REVIEW.
- 1.5. TRAINING & EXERCISES.
- 1.6. ALLOCATING RESOURCES.

## CHAPTER TWO – ORGANIZATION

- 2.1. COMMAND AND CONTROL LEVELS.
- 2.2. TEAMS STRUCTURE.
- 2.3. TEAM RESPONSIBILITIES.
- 2.4. CHAIN OF COMMAND.
- 2.5. ESCALATION.

## CHAPTER THREE – GENERAL PROCEDURES

- 3.1. SANS SERVICES.
- 3.2. ATM CONTINGENCY LIFE CYCLE.
- 3.3. EMERGENCY/ CONTINGENCY LEVELS.
- 3.4. READINESS LEVELS.
- 3.5. ACTIVATION.
- 3.6. EVALUATION (Lessons Learned).

## CHAPTER FOUR – SCENARIOS

- 4.1. INTRODUCTION.
- 4.2. BUSINESS IMPACT ANALYSIS AND RISK ASSESSMENT.
- 4.3. SCENARIOS ANALYSIS.

## CHAPTER FIVE - ATM CONTINGENCY PLAN

5.1 STATES AND FIRS AFFECTED

5.2 CONTINGENCY ROUTE'S NETWORK

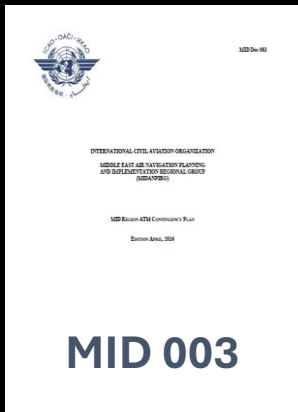
5.3 ATS RESPONSIBILITIES

5.4 AIR TRAFFIC MANAGEMENT AND CONTINGENCY PROCEDURES

5.5. AERONAUTICAL TELECOMMUNICATION PROCEDURE

5.6. SAR PROCEDURE

5.7. ICAO REGIONAL OFFICE



# ATM Contingency Annual Exercises

Each ONE  
[1] year

**Tabletop Exercise  
(TTX)**



**Full-scale Exercise  
(FSE)**

Each TWO  
[2] years



## Contingency Exercises during 2023



**20 Exercises**



**19 Airport**



**24 Department**



**79 Participants**



**104 Observations**



**5 Lessons Learned**



THANK YOU