



| ICAO

CAPACITY & EFFICIENCY

ATS Contingency Planning & Emergency Response Plan

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Overview

- ✈ Background
- ✈ Objectives
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- ✈ ATS contingency planning overview
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CHICAGO CONVENTION

- 192 Contracting States
- 96 Articles
- Foundation:
 - Each State has complete sovereignty on its air space
 - Los Estados Contratantes se comprometen a adoptar los SARPS de la OACI en la medida de lo posible

Doc 7300/9



**Convention on
International Civil Aviation**

**Convention relative à
l'aviation civile internationale**

**Convenio sobre
Aviación Civil Internacional**

**Конвенция о международной
гражданской авиации**

This document supersedes Doc 7300/8,
le présent document annule et remplace le Doc 7300/8.
Este documento reemplaza el Doc 7300/8.
Настоящий документ заменяет Doc 7300/8.

Ninth Edition – Neuvième édition – Novena edición – Издание девятое – 2006

International Civil Aviation Organization
Organisation de l'aviation civile internationale
Organización de Aviación Civil Internacional
Международная организация гражданской авиации



Article 25 of the Chicago Convention

‘Each Contracting State undertakes to provide such measures of assistance to aircraft in distress in its territory as it may find practicable.....’

‘Each Contracting State, when undertaking search for missing aircraft, will collaborate in coordinated measures which may be recommended from time to time ...’

Background

✈ Doc 7300, Art. 37

✈ Catalogue of CAR/SAM
ATS Contingency Plans
(GREPECAS Conclusion
14/50)





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International Standards
and Recommended Practices



Annex 12
to the Convention on
International Civil Aviation

Search and Rescue

This edition incorporates all amendments adopted by the Council prior to 24 February 2004 and supersedes, on 25 November 2004, all previous editions of Annex 12.

For information regarding the applicability of the Standards and Recommended Practices, see Foreword.

Eighth Edition
July 2004

International Civil Aviation Organization

Annex 12: SAR

- ✈ States RCCs, collaborate with the supply of the SAR service on the territory of other States, who will retain their SAR responsibility within the air space of jurisdiction
- ✈ A modern SAR system should be built under an operational perspective with a basic system of regional cooperation among States, Territories, and involved International Organizations, without borders limit
- ✈ Aviation and maritime services should consider periodic joint sessions to encourage the regional consistency and cooperation of the SAR operations to provide HUMANITARIAN AID
- ✈ To combine efforts through multilateral agreements among civil and military authorities, communication providers, the meteorological service, ATS services, and aircraft operators



International Standards
and Recommended Practices

Annex 11
to the Convention on
International Civil Aviation

Air Traffic Services

Air Traffic Control Service
Flight Information Service
Alerting Service

This edition incorporates all amendments adopted by the Council prior to 13 March 2001 and supersedes, on 1 November 2001, all previous editions of Annex 11.

For information regarding the applicability of the Standards and Recommended Practices, see Foreword.

Thirteenth Edition
July 2001

International Civil Aviation Organization

Annex 11

- ✈ To raise awareness to develop preventive measures in the event of disruption or potential disruption of air traffic services and related supporting services in the airspace for which States are responsible

- ✈ **ATS Contingency Plan (par 2.30; Attachment C)**
 - ✈ General considerations to develop an ATS contingency plan
 - ✈ Procedures for the coordination and publication of information on volcanic ashes for the flight crew



Annex 11: ATS

- ✈ Air space, airports ...
- ✈ Warn SAR units on aircraft that is known or it is suspected that are in an emergency phase (INCERFA – ALERFA - DETRESFA)



- ☑ Procedures for flight emergencies;
- ☑ Safety warning supply
- ☑ Pilot assistance:
 - ☑ To operate in a safe air space;
 - ☑ Reassume normal operations; or
 - ☑ Allow a safe aircraft landing

ATS Contingency plan;

Objective:

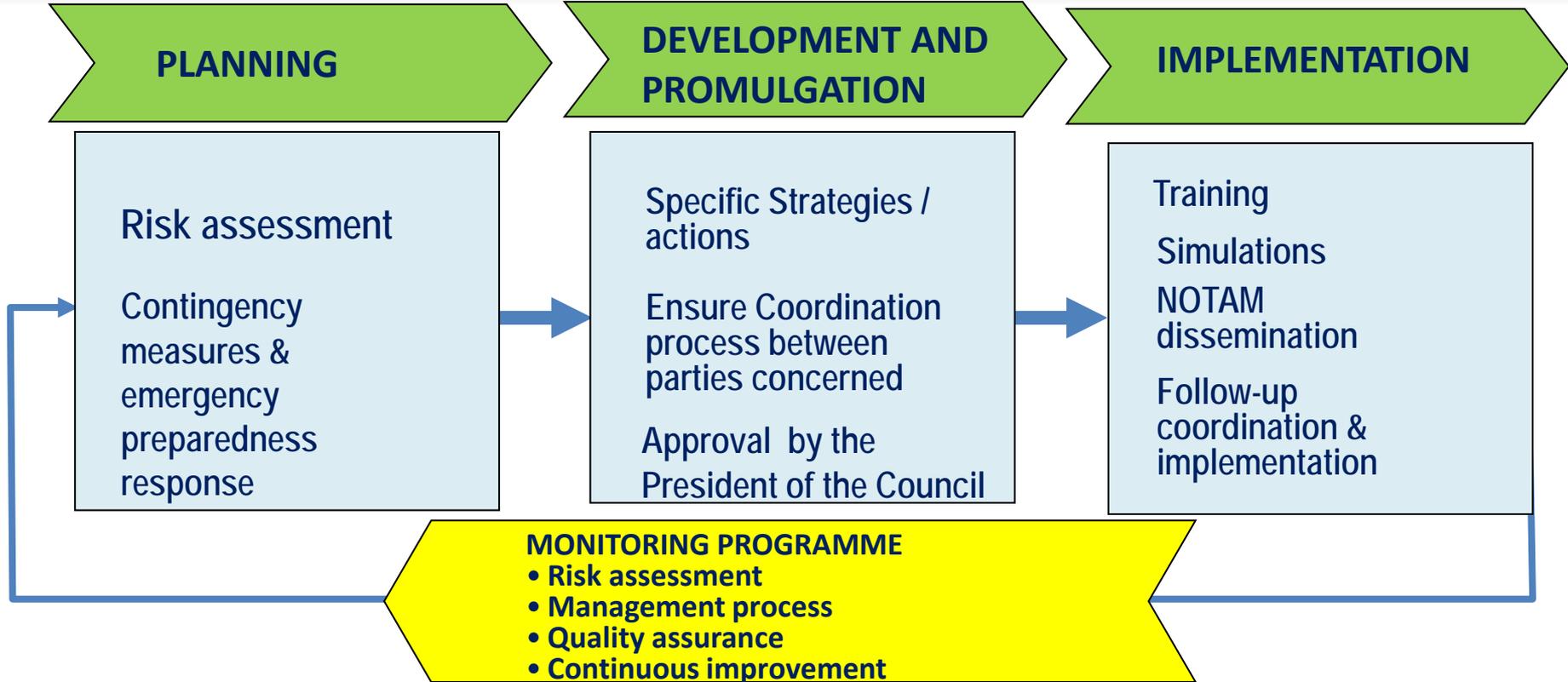
- ✈ Ensure safe and orderly flow of international air traffic in the event of disruptions of air traffic services and related supporting services

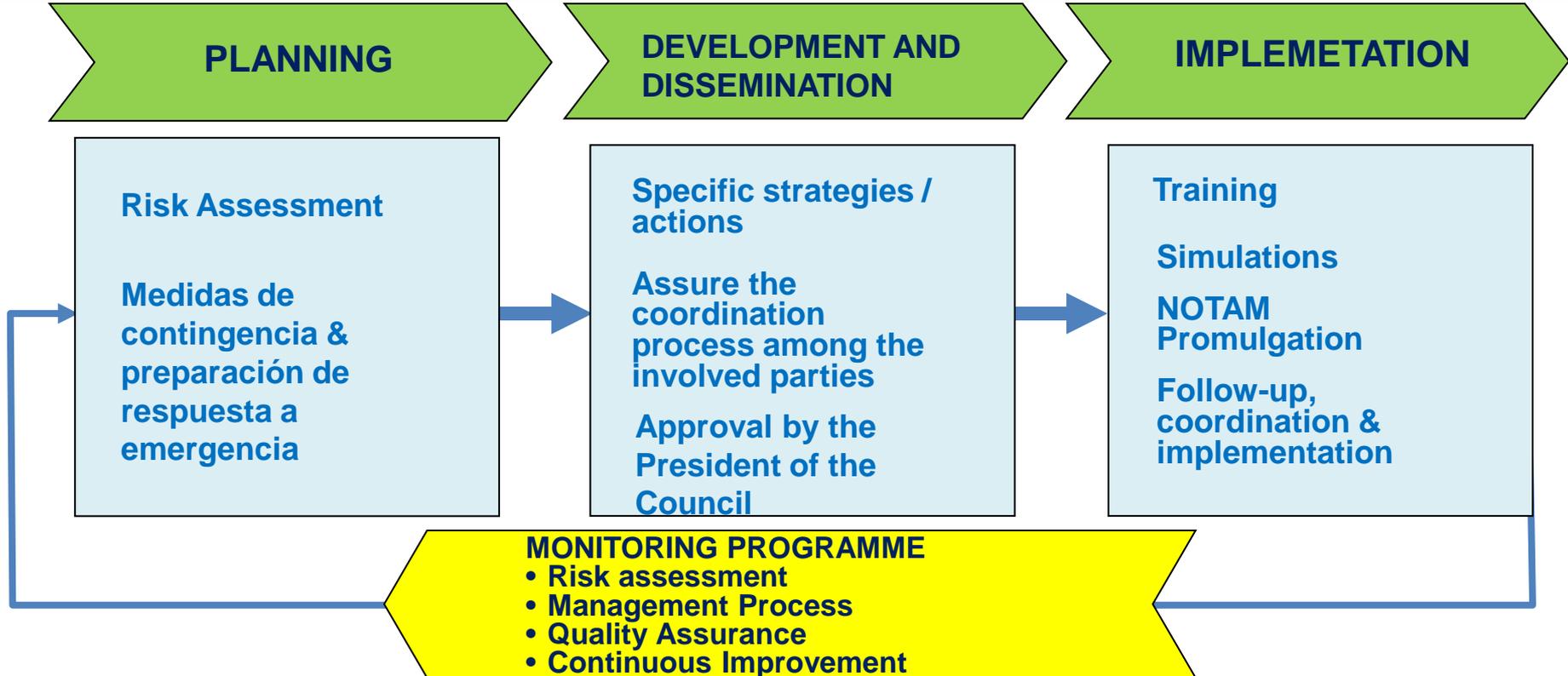




What is an ATS Contingency Plan?

- ✈ Latent partial or total disruption of ANS
- ✈ Action plan due to temporary deviation of the regional air navigation plan
- ✈ Ensures safety and efficiency targets
- ✈ Provides appropriate processes on the use of alternative facilities and services until those of the regional air navigation plan are re-activated
- ✈ Requires approval from the President of the Council on behalf of the Council
- ✈ Based on ATM expectations







GREPECAS; Conclusions 13/68, 14/50

OBJECTIVE

AIR TRAFFIC MANAGEMENT

- ✈ ATS Responsibilities
- ✈ Separation
- ✈ Level restrictions
- ✈ Other measures

TRANSITION TO THE CONTINGENCY SCHEME

CONTROL AND COORDINATION TRANSFER

PROCEDURES FOR PILOTS AND OPERATORS

OVERFLIGHT APPROVAL

CONTINGENCY UNIT

Contingency route (CR) network scheme

POCs: ANSPs, IATA, OACI

COORDINATION PROCEDURES FOR NATURAL DISASTERS



Main Elements of ATS Contingency Plans

- ✈ Flight level allocation scheme to ensure lateral and vertical separation
- ✈ ATS provision in airspace over the high seas or in delegated airspace
- ✈ Provision of adequate CNS and MET status information
- ✈ Basic information for NOTAM publication



State Responsibilities

- ✈️ Airspace over the high seas rests with the State(s) responsible for providing the air navigation services
 - ✈️ AGA, AIM, ATS, MET, SAR, CNS
- ✈️ The responsibility for appropriate contingency actions has been temporarily delegated to (an) other State(s)
- ✈️ Upon termination, the delegating State re-assumes responsibility
- ✈️ State(s) should develop, promulgate and implement appropriate contingency plans in coordination with
 - ✈️ Other States and airspace users concerned
 - ✈️ ICAO Regional Office (Doc 7300, Art. 83)



State responsibilities (cont)

- ✈ Contingency plan acceptable to providers and users in terms of:
 - ✈ Safety
 - ✈ Traffic handling capacity
- ✈ Monitor and initiate effective contingency actions
- ✈ Establish a contingency unit to provide 24 hour/day up-to-date information on the situation and associated measures
- ✈ Create a team to coordinate activities during the ATS disruption period



State responsibilities (cont)

- ✈ Develop contingency plans based on risk assessment
 - ✈ possible consequences of natural disasters
 - ✈ public health emergencies
 - ✈ acts of unlawful interference
 - ✈ military conflict



ICAO's Role

- ✈ Initiates coordination to facilitate access to designated aerodromes for humanitarian reasons
- ✈ Provides assistance on contingency planning and measures to be taken
- ✈ Multi-State coordination leading to formal agreement





ICAO's role (cont)

- ✈ Monitors information from all relevant sources
- ✈ Initiates appropriate contingency action, when necessary
- ✈ ICAO Regional Offices keep ATS contingency plans, regionally organized by FIR
- ✈ Ensures ATS contingency plans are updated and coordinated in a timely manner

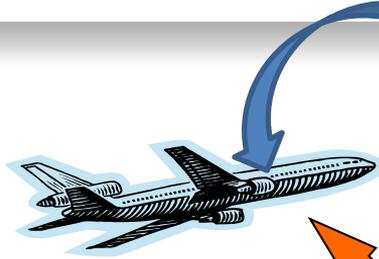


Stakeholders	Challenge	Expectation
Aviation Authority	<ul style="list-style-type: none">• Coordinate, monitor planning and performance	Guarantee the service provision
ATS Provider	<ul style="list-style-type: none">• Analyze the service demand• Risk assessment	Service provision
Internal Clients	<ul style="list-style-type: none">• Response abilities• Procedures application	Maintain team spirit in the organization
ATM Community	<ul style="list-style-type: none">• Update response levels between demand and capacity, as required	<ul style="list-style-type: none">• Provide intervention• Performance supervision activities
Procedures	<ul style="list-style-type: none">• Homogeneous with international requirements	Legal support
Infrastructure	Maintain Interoperability	Support service provision
CDM	Team work, according to the roles	Communication and information management



Natural Disasters

- ✈ Western Hemisphere is regularly impacted by natural disasters
 - ✈ Regional and national coordination of emergency response measures are required
- ✈ Emergencies range from earthquakes and volcanoes to tsunamis, hurricanes, and civil unrest
 - ✈ Reduced economic and commercial activities
 - ✈ Reduced domestic air transport system
 - ✈ Aviation security effectiveness significantly reduced due to changes in airports configuration
- ✈ When these emergencies affect the aviation system essential goods and services may not be available
- ✈ Humanitarian flights become the primary mechanism used by the air transport system to deliver basic goods and services to affected areas



ICAO Aircraft General Declaration
- Declaration of Health
(ICAO Annex 9, Appendix 1, IHR (2005) Annex 9)

- Airport Operator
- Public Health Authority
- Other agency(ies)

Via local procedure
(Aerodrome Emergency Plan)



- Aircraft Callsign (ID)
- Dep. Aerodrome
- Dest. Aerodrome
- Est. Time Arrival
- Number of persons on board
- Number of susp. cases
- Nature of public health risk

Voice (radio) or data link



Air Traffic Controller

Aircraft Operator
(or handling agency) at destination aerodrome

Voice (radio) or data link

Aircraft Operator
(or handling agency) at destination aerodrome

Voice or data link

Departure Aerodrome Tower ATC

Voice (telephone) or data link

Destination Aerodrome Tower ATC



Our Strengths

- ✈️ ATS contingency plans are completed on a regional basis
- ✈️ Contingency and coordination procedures as preventive measures against natural disasters (Volcanic Ash & Hurricane)
- ✈️ Aeronautical notification of suspected communicable disease or other public health risk



Next Steps

- ✈ Next challenges for States to develop emergency response plan as part of Contingency plans
- ✈ States, ANSPs and ICAO shall develop effective national and regional coordination
- ✈ Regional emergency preparedness and response coordinated plans
 - ✈ States
 - ✈ ICAO
 - ✈ IMO
 - ✈ PAHO
 - ✈ OEA



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Central American
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(NACC) Office
Mexico City

South American
(SAM) Office
Lima

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Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU