



ICAO

International Civil Aviation Organization  
North American, Central American and Caribbean Office

# **Second NAM/CAR Regional Contingency and Emergency Planning and Response Meeting**

## **NAM/CAR/CONT/2**

### **Final Report**

Mexico City Mexico, 20 to 22 April 2022

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.



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## HISTORICAL

### **ii.1 Place and Date of the Meeting**

The Second NAM/CAR Regional Contingency and Emergency Planning and Response Meeting (NAM/CAR/CONT/2) was held at the ICAO NACC Regional Office in Mexico City, Mexico, and on-line from 20 to 22 April 2022.

### **ii.2 Opening Ceremony**

Dr. Melvin Cintron, Regional Director of the North American, Central American and Caribbean (NACC) Office of the International Civil Aviation Organization (ICAO) provided opening remarks, welcomed the participants and officially opened the meeting.

### **ii.3 Officers of the Meeting**

The NAM/CAR/CONT/2 Meeting was held with the participation of the Chairperson, Mr. Pablo Luna (COCESNA), who chaired the meeting plenary. Mr. Eddian Méndez, Regional Officer, Air Traffic Management and Search and Rescue of the NACC Regional Office, served as Secretary of the Meeting, assisted by Mrs. Mayda Ávila, Regional Officer, Communications, Navigation and Surveillance and Mr. Ernie Snyder, Regional Officer, Air Traffic Management and Search and Rescue both from the ICAO NACC Regional Office, and Mrs. Chrystelle Damar, Strategic Planning and Coordination Officer, Strategic Planning and Regional Affairs Coordination Section, ICAO Headquarters.

### **ii.4 Working Languages**

The working languages of the Meeting were English and Spanish. The working papers, information papers and draft report of the meeting were available to participants in both languages.

### **ii.5 Schedule and Working Arrangements**

It was agreed that the working hours for the sessions of the meeting would be from 09:00 to 15:30 hours daily with adequate breaks.

## **ii.6            Agenda**

### **Agenda Item 1:            Adoption of the Provisional Agenda and Schedule**

Under this agenda item, the Meeting will review the agenda and schedule, and adopt them. The objectives and overall expectations of the meeting will be presented.

### **Agenda Item 2:            Evaluation of Impact and Response of Contingencies Faced in 2019, 2020 and 2021**

Under this Agenda Item, the Meeting will analyse the contingency situations faced in 2019, 2020 and 2021, and will evaluate their impact and the response carried out by the region.

### **Agenda Item 3:            ICAO Requirements for Air Navigation Services (ANS) Contingency Planning**

Under this Agenda Item, the Meeting will review and analyse ICAO Standards and Recommended Practices (SARPs) and regional agreements regarding contingency arrangements, and their compliance by CAR States and Territories. The Meeting will analyse the level of response to the request to update Air Traffic Services (ATS) contingency plans by States and Territories of the CAR Region.

### **Agenda Item 4:            CAR Air Traffic Services (ATS) Regional Contingency Plan**

Under this Agenda Item, the CAR ATS Regional Contingency Plan will be reviewed, The linkage of this Plan with other counterparts from different areas of air navigation services will be analysed, as well as the Regional Contingency Plans of adjacent regions.

### **Agenda Item 5:            CAR Region Contingencies Table-Top Exercise**

Under this Agenda Item the Meeting will perform a table top exercise in preparation for the 2022 hurricane season.

### **Agenda Item 6:            Other Business**

Under this Agenda Item the Meeting will address other issues related to the contingency planning and response that have not been reviewed in the previous Agenda Items.

## ii.7 Attendance

The Meeting was attended by 23 States/Territories from the NAM/CAR Regions, 2 International Organizations, totalling 65 delegates as indicated in the list of participants.

## ii.8 Draft Conclusions and Decisions

The Meeting recorded its activities as Draft Conclusions and Decisions as follows:

### DRAFT

**CONCLUSIONS:** Activities requiring endorsement by the Directors of Civil Aviation of North America, Central America and Caribbean (NACC/DCA).

List of Draft Conclusions/Decisions

Number	Title	Page
1	<b>REGIONAL CONTINGENCIES MULTIDISCIPLINARY ANALYSIS</b>	2-2
2	<b>PROPOSALS TO IMPROVE THE EFFECTIVENESS OF REGIONAL CONTINGENCY PLANNING</b>	4-2

An executive summary of these conclusions/decisions is presented in the **Appendix** to this report.

## ii.9 List of Working and Information Papers and Presentations

*Refer to the Meeting web page:*

<https://www.icao.int/NACC/Pages/meetings-2022-cont2.aspx>

### WORKING PAPERS

Number	Agenda Item	Title	Date	Prepared and Presented by
WP/01	1	Adoption of the Provisional Agenda and Schedule	30/03/22	Secretariat
WP/02	2	Review of Contingencies Occurred in the CAR Region from 2019 to 2021	18/04/22	Secretariat
WP/03	3	Status of CAR Region ATM Contingency Plans	18/04/22	Secretariat
WP/04	4	Status of CAR Region ATM Contingency Plan	18/04/22	Secretariat
WP/05	4	Recommendation to incorporate Pilot procedures in Contingency Plans	21/04/22	IFALPA

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<b>INFORMATION PAPERS</b>				
<b>Number</b>	<b>Agenda Item</b>	<b>Title</b>	<b>Date</b>	<b>Prepared and Presented by</b>
IP/01	--	List of Working, Information Papers and Presentations	18/04/22	Secretariat

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<b>PRESENTATIONS</b>			
<b>Number</b>	<b>Agenda Item</b>	<b>Title</b>	<b>Presented by</b>
1	2	Humanitarian Assistance and Disaster Response in Aviation (HADRA)	Secretariat
2	2	FAA Contingency Response: Status & Lessons Learned	United States
3	2	Aeronautical Fixed Services Telecommunications Network	Secretariat

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**LIST OF PARTICIPANTS**

**ANTIGUA AND BARBUDA/ANTIGUA Y BARBUDA**

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2. Willem A.I. Vrolijk

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6. Donna Archer

**BELIZE/BELICE**

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**CAYMAN ISLANDS/ISLAS CAIMANES**

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11. Mario Sequeira

**CURAÇAO/CURAZAO**

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16. Claudia Roa  
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**ECCAA**

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20. Andrea Lopez Moreira

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23. Enio Hernandez

**HAITI/HAITÍ**

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25. Farano Dasy

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26. Yalena Bonilla  
27. Sandy Arteaga

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28. Deano Ledford

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- 38. Ricardo Charles
- 39. Remy Avril
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- 44. Kevin Brown
- 45. Clint Balfour
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- 47. Ian Gomez
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**UNITED STATES/ESTADOS UNIDOS**

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- 57. Eddie Perez
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**Agenda Item 1:           Adoption of the Provisional Agenda and Schedule**

1.1           The Meeting elected Mr. Pablo Luna from COCESNA, as the meeting Chairperson.

1.2           The Secretariat presented WP/01 and invited the Meeting to approve the Provisional Agenda and Schedule. The Meeting approved the Agenda and Schedule as presented.

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**Agenda Item 2: Evaluation of Impact and Response of Contingencies Faced in 2019, 2020 and 2021**

2.1 Under this Agenda item the Secretariat presented WP/02, with a summary and review of the contingencies related to Air Traffic Services (ATS) occurred in the CAR Region in 2019, 2020 and 2021, with a brief analysis of lessons learned.

2.2 The nature of the contingencies faced in the CAR Region during the years 2019 to 2021 was the same as previous years. Despite the reduction of the operations, and the challenges of maintaining staff health and availability, a similar type of event affected Air Navigation Services (ANS) provision in the CAR Region. The main contingencies that occurred in this period can be classified into the following categories:

- Hurricanes and tropical storms
- Social demonstration and civil unrest
- Air Traffic Control (ATC) industrial actions
- Communications Navigation and Surveillance (CNS) systems failures
- Earthquakes and Volcanic eruptions
- COVID-19 Pandemic

2.3 Lessons learned

a. The lack of adequate planning and implementation of contingency procedures is the main limitation for several States/Territories and Service Providers, mainly in the CAR Region. Trying to respond to the different contingency situations that may arise without a properly prepared and disseminated plan, both internally and externally, is not only an inefficient exercise, but also an ineffective one. Despite the demonstrated need to develop contingency response procedures, some States continue ignoring this critical requirement.

b. Another aspect to be taken into consideration is the lack of rehearsal or trials of the already developed plans. In some cases, the steps or actions described in the contingency plans cannot be carried out, and these deficiencies only come up when a real contingency occurs.

c. Seismic activity at La Soufrière volcano in Saint Vincent (VCT) and the effusive eruption with a series of seismic swarm started on morning of 9 April 2021. The activity of the volcano lasted for several days, causing the temporary closure of several aerodromes as well as limiting operations in the region. This was a good case of regional collaboration among the eastern Caribbean States, with the leadership role played by Trinidad and Tobago as responsible of the Piarco Flight Information Region (FIR), organizing and sharing critical information between all relevant stakeholders.

d. Automation of Air Traffic Management (ATM) systems is a reality for which we have worked, and continue to work, seeking to improve operational safety and efficiency in the provision of these services. Consequently, many of the main features of the new systems depend significantly on the ability to receive and exchange data. Air Navigation Service Providers (ANSPs) need to identify all the interfaces of their ATS system and work to implement contingency procedures, in order to reduce the possibilities of disruption, ensure back-up means of data transfer, and establish alternate coordination procedures.

e. ANS systems such as Aeronautical Information Management (AIM) or the provision of meteorological information to air navigation are critical for the adequate provision of ATS. Each of these subsystems have contingency planning requirements that must be comprehensively evaluated and adjusted through joint planning. So the following Draft Conclusion was formulated:

<b>DRAFT CONCLUSION</b>		<b>REGIONAL CONTINGENCIES MULTIDISCIPLINARY ANALYSIS</b>	
<b>NAM/CAR/CONT/2/01</b>			
<b>What:</b>  That, in order to enhance regional contingency response in the CAR Region  a) the ICAO NACC Regional Office analyse the different contingencies occurred in the CAR Region in the 2019-2021 period and provide recommendations to improve the resiliency of the ANS system of the region; and  b) States, Territories and International Organizations that provide ATS in the NAM/CAR Region share good practices and lessons learned, and support actions carried out to enhance the resiliency of the regional air navigation system.	<b>Expected impact:</b>  <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Operational/Technical		
<b>Why:</b> To identify opportunities to improve the resilience of the air navigation system of the CAR Region.			
<b>When:</b>	To be presented at the NAM/CAR/CONT/3 Meeting	<b>Status:</b>	<input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed
<b>Who:</b>	<input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input checked="" type="checkbox"/> Other:	ANSPs	

2.4 The ICAO Strategic Planning and Coordination Office presented P/01 with information regarding the ICAO Humanitarian Assistance and Disaster Response in Aviation - (HADRA). The HADRA is an informal network established in 2017 at the joint initiative of ICAO and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). The HADRA Expert Group is dedicated to gaining better knowledge on the current actions from humanitarian and international aviation stakeholders for enhanced disaster response operations. P/01 included information regarding the ICAO's Focus of Work and Role in Crisis Response, and ICAO's Crisis Response Policy and the ICAO's Disaster Risk Reduction Strategy. The Meeting was also informed on the development of a beta version of the Airport Status Information Tool (ASIT); the first beta test of ASIT with Trinidad and Tobago and the support of the NACC Regional Office. A guidance document aimed at raising awareness on the respective roles and responsibilities of aviation and humanitarian stakeholders in disaster response is expected to be released in May 2022, during the Humanitarian Networks and Partnerships Week (HNPW). HNPW website is available at:  
[https://vosocc.unocha.org/GetFile.aspx?xml=7099mNSNuyt2Obljn0rASVQuOcrk99i1yNbKXSwpylU9vDMx\\_B\\_l1.html&tid=7099&laid=1](https://vosocc.unocha.org/GetFile.aspx?xml=7099mNSNuyt2Obljn0rASVQuOcrk99i1yNbKXSwpylU9vDMx_B_l1.html&tid=7099&laid=1)

2.5 Under P/02 United States presented information regarding the Federal Aviation Administration (FAA) Contingency Response: Status and Lessons Learned. The presentation provided information regarding the COVID-19-related Air Route Traffic Control Center (ARTCC) ATC-Zero Events occurred Between February 2020 and February 2022 : P/02 also informed the Meeting regarding the identified gaps in the United States FAA Air Traffic Organization operational readiness and contingency planning and consequent policy updates. These policy update include:

- More detailed Contingency Operational Procedures (OCP) requirements (to include immediately after an outage);
- Conducting annual OCP exercises and documentation requirements; and
- Requirement that OCPs and Letters of Agreement (LOAs) have approval signatures from all related air traffic management facilities

2.6 United States will review all OCPs and LOAs with contingency procedures, in order to ensure support facility procedures are clear and do not include non-surveillance routes that also lack communication capabilities. Consequently, the FAA will begin reaching out to neighbouring FIRs and all support facilities looking for contingency agreements at regional level.

2.7 Under P/03 ICAO provided information on the Caribbean Air Navigation Services Network (CANSNET) Project. NAM/CAR Regions require a new communication network that it can support the actual communication services and future services such as more voice communication channels, System Wide Information Management (SWIM), Air Traffic Flow Management (ATFM) and internet integration for aviation purposes. The current Improvements to the ATS Voice Link (MEVA) network will conclude its services on March 2025, in that sense CANSNET will be ready by the end of 2024. CAR/SAM users who may not be signatory members of the ICAO CANSNET Agreement may also connect to the network whenever required by ICAO. The prospective Service Provider will offer a main terrestrial network and/or satellite telecommunications services if it is necessary, including all related operational, management, maintenance and administrative services required by the Service Level Agreement (SLA) contracted with each CANSNET Member State/Organization.

2.8 To support this project, ICAO requested States/Territories and ANSPs of the CAR Region to provide:

- information on operational needs;
- data to ensure backup channel communication;
- information on new operational needs; and
- information regarding communications channels for contingency.

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**Agenda Item 3: ICAO Requirements for Air Navigation Services (ANS) Contingency Planning**

3.1 Under this Agenda item the Secretariat presented WP/03, Status of CAR Region ATM Contingency Plans, to review the status of the development, publication and update of the Air Traffic Management (ATM) contingency plans of States, Territories and International Organizations that provide Air traffic services (ATS) in the CAR Region.

3.2 Based in the Annex 11 requirement for contingency arrangements, the CAR/SAM Regional Planning and Implementation Group (GREPECAS) has been working to support the development of ATM contingency plans in the CAR/SAM Regions since 2005. For various reasons, compliance to the Annex 11 requirement and GREPECAS Regional Agreement did not have the expected response in the CAR Region, resulting in a significant number of States/Territories and International Organizations failing to develop, publish and submit to the ICAO NACC Regional Office a copy of their approved ATM contingency Plan.

3.3 Despite the postponement of the NAM/CAR/CONT/2 Meeting (initially scheduled for 24 to 27 March 2020), the ICAO NACC Regional Office arranged a series of teleconferences to review and update the ATM contingency plans for key CAR Flight Information Regions (FIRs). The following ATM contingency plans for the CAR Region were reviewed and updated:

- Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and COCESNA;
- Cuba;
- Curacao FIR;
- Dominican Republic;
- Jamaica;
- Mexico; and
- Trinidad and Tobago

3.4 During 2021, the region took advantage of the Eastern Caribbean ATM Committee to address the status of the ATM contingency plans for this sub region, and prepare for the 2021 hurricane season. Additionally, the ICAO NACC Regional Office organized a virtual meeting with Central American States to review, update and rehearse the Central American States and COCESNA ATM Contingency Plans.

3.5 The Meeting encouraged States/Territories and International Organizations that provide ATS services in the CAR Region to comply with the ICAO requirements and regional agreements to submit and/or update their ATM contingency plans.

3.6 During the meeting, the contingency plans of several of the participating States/Territories and Service Providers were reviewed. Note was taken of some changes required in the latest version of the Plans, which would be updated and sent to the Secretariat within a period agreed with each one.

**Agenda Item 4: CAR Air Traffic Services (ATS) Regional Contingency Plan**

4.1 The Secretariat presented WP/04, regarding the status of the approved CAR Region ATM Contingency Plan to makes suggestions to improve its effectiveness.

4.2 The NAM/CAR/CONT/1 Meeting established an Ad hoc Group, comprised by Dominican Republic, Mexico, Trinidad and Tobago, COCESNA and IATA to draft the Caribbean Region ATS Contingency Plan. This Ad hoc Group presented the first draft of this plan to the Fifth NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/5). The ANI/WG/5 Meeting endorsed the first draft of the CAR Region ATM Contingency plan, which was subsequently approved by the fast track method.

4.3 The purpose of this Plan is to provide guidance and promote a regional harmonized response to contingencies that affect or may affect continuous provision of ATS in the CAR Region, and provide guidelines for the development of contingency planning based on conclusions and decisions by the CAR/SAM Planning and Implementation Regional Group (GREPECAS).

4.4 The CAR Region ATM Contingency Plan describes a hierarchy of contingency plans (Levels 1 to 3) and categories of contingencies (Categories A to C) and include principles for ATM contingency planning. The Plan also establishes the CAR Contingency and Emergency Response Coordination Team (CAR CERT) as a direct regional coordination platform to enhance and expedite individual and regional response to contingencies or possible contingencies scenarios that may affect the ATS and all other activities related to ensuring that air transport operations.

4.5 The Meeting evaluated the relevance of the plan and some points were identified as necessary to improve its effectiveness as well as the resilience of the regional air navigation system.

4.6 The need to raise awareness about the importance of level 1 plans (for internal State plans dealing with internal/domestic coordination actions for the Air Navigation Service Providers (ANSPs)) was pointed out, promoting to senior management levels the need to generate these plans in accordance with national regulations.

4.7 Consensus was generated on the opportunity to improve level 1 capabilities, linking contingency planning with service providers Safety Management System (SMS) risk management processes.

4.8 IFALPA presented WP/05 with recommendations to improve the format of contingency plans to clarify the procedures established for pilots and air operators. From an operational perspective, IFALPA considers that it would be convenient to incorporate pilot procedures detailed in Annex 11, Appendix C, subsection 6.2 and pilot procedures detailed in CAR REGION AIR TRAFFIC MANAGEMENT CONTINGENCY PLAN, into each State Contingency plan.

<b>DRAFT CONCLUSION</b>		<b>PROPOSALS TO IMPROVE THE EFFECTIVENESS OF REGIONAL CONTINGENCY PLANNING</b>	
<b>NAM/CAR/CONT/2/2</b>			
<p><b>What:</b></p> <p>That, in order to improve regional contingency planning, the Secretariat present:</p> <p>a) to the Tenth North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/10) the importance of addressing contingency planning for air navigation services, promoting civil aviation at the highest levels the need to prepare contingency plans in accordance with national regulations; and</p> <p>b) to GREPECAS a proposal to update the format of regional contingency plans, as well as the opportunity to link contingency planning with service provider SMS risk management processes.</p>	<p><b>Expected impact:</b></p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>		
<p><b>Why:</b></p> <p>To update regional contingency planning principles for the CAR Region</p>			
<p><b>When:</b> To be presented at the NAM/CAR/CONT/3 Meeting</p>	<p><b>Status:</b> <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>		
<p><b>Who:</b> <input type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input type="checkbox"/> Other:</p>			

**Agenda Item 5: CAR Region Contingencies Table-Top Exercise**

5.1 Under this Agenda item, a simulation exercise was reviewed, taking as a reference a contingency related to the degradation of air traffic control services in the upper airspace of Central America.

5.2 The steps for the activation of the COCESNA contingency plan were detailed, as well as the mitigating actions of the Air Traffic Services (ATS) units of the Central American States to guarantee the continuity of operations. Subsequently, the actions that led to the closure of the contingency were described.

5.3 The lessons learned were analysed, by both the Central American States and COCESNA, as well as the operational improvements implemented to strengthen the defences of the system.

5.4 The Meeting appreciated the transparency and proactivity of COCESNA, as well as the opportunity to exchange lessons that will serve to improve the resilience of air navigation systems in the CAR Region.

5.5 The participants considered important to link the Communications Navigation and Surveillance (CNS) part to analyse operational contingencies, as well as share the lessons learned in terms of infrastructure. Additionally, the need to share the different experiences of contingency scenarios was highlighted, as a valuable source of learning.

5.6 The Meeting drew attention to the flight plan reception and processing systems as a critical source for the operation of ATS systems. IFALPA recommended considering the temporary suspension of Reduced Vertical Separation Minimum (RVSM) when faced with a contingency in that airspace as a mitigation measure.

5.7 The Meeting considered that the evaluation of contingency scenarios, both real and fictitious, is the best way to carry out these simulation exercises.

**Agenda Item 6:           Other Business**

6.1           There were no discussions under this Agenda item.

**APPENDIX  
EXECUTIVE LIST OF CONCLUSIONS/DECISIONS**

Number	Conclusion/Decision	Responsible for action	Deadline
1	REGIONAL CONTINGENCIES MULTIDISCIPLINARY ANALYSIS		
	That, in order to enhance regional contingency response in the CAR Region		
	a) the ICAO NACC Regional Office analyse the different contingencies occurred in the CAR Region in the 2019-2021 period and provide recommendations to improve the resiliency of the ANS system of the region; and b) States, Territories and International Organizations that provide ATS in the NAM/CAR Region share good practices and lessons learned, and support actions carried out to enhance the resiliency of the regional air navigation system.	States, ICAO and ANSPs	NAM/CAR/CONT/3
2 PROPOSALS TO IMPROVE THE EFFECTIVENESS OF REGIONAL CONTINGENCY PLANNING			
2	That, in order to improve regional contingency planning, the Secretariat present:		
	a) to the Tenth North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/10) the importance of addressing contingency planning for air navigation services, promoting civil aviation at the highest levels the need to prepare contingency plans in accordance with national regulations; and	ICAO	NAM/CAR/CONT/3
	b) to GREPECAS a proposal to update the format of regional contingency plans, as well as the opportunity to link contingency planning with service provider SMS risk management processes.		