



International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)
**Second Meeting of the Communications, Navigation and Surveillance / Air
Traffic Management Subgroup (CNS/ATM/SG/2)**
(Mexico City, Mexico, 16 to 19 November 2010)

Agenda Item 2: Follow-up to the implementation status of the performance-based navigation systems plans in the CAR and SAM Regions and to the latest amendments to the ATM- and CNS-related SARPs

**MODEL ACTION PLAN FOR THE IMPLEMENTATION OF THE NEW ICAO FLIGHT PLAN
FORMAT**

(Presented by Brazil)

SUMMARY

This information paper presents the Action Plan of Brazil, as reference material to assist CAR/SAM States in the preparation of their national plan for the implementation of the new ICAO flight plan format, in keeping with the CAR/SAM implementation strategy.

References:

- Report of the CNS/ATM/SG/1 meeting, Lima, Peru, 15-19 March 2010.
- Report of the Seminar/Workshop on the Implementation of the New Flight Plan Format in the SAM Region, Lima, Peru, 13-15 September 2010.

ICAO Strategic Objectives:

A: Safety — Enhance global civil aviation safety
D: Efficiency — Enhance the efficiency of aviation operations

1. Introduction

1.1 In order to ensure a homogeneous and timely transition from the current to the new ICAO FPL format by States/Territories/International Organizations, the CNS/ATM/SG/1 meeting adopted Conclusion CNS/ATM/1-8 - Implementation of the new flight plan format in the CAR/SAM Regions, which had been approved by the CAR/SAM States/Territories and International Organizations through the GREPECAS fast-track procedure in June 2010.

1.2 The conclusion, amongst other aspects, urges the States/Territories and International Organizations to develop action plans, taking into account the CAR/SAM regional strategy for the harmonious implementation of the new ICAO flight plan format and the associated ATS messages.

1.3 This information paper presents the strategy for the implementation of the Action Plan of Brazil, as reference material to assist the States in the preparation of their national plans for the implementation of the new ICAO flight plan format, in keeping with the CAR/SAM regional strategy.

2. Discussion

2.1 A Seminar/Workshop for the Implementation of the New Flight Plan Format in the SAM Region was held in Lima on 13-15 September 2010. The seminar/workshop was attended by 41 participants of 10 States (Argentina, Bolivia, Brazil, Chile, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela), 1 International Organization (IATA) and 5 industry providers (Adacel Inc., Atech, Indra, Ineco-Tifsa and Radiocom Inc.).

2.2 The presentations, working papers and the report containing the relevant aspects of the seminar/workshop are posted on the website of the ICAO SAM Regional Office.

2.3 At this seminar/workshop, Brazil presented its action plan for the implementation of the new flight plan format, pursuant to Amendment 1 to the 15th Edition of the ICAO PANS/ATM (Doc 4444). The participants considered that the action plan was very comprehensive and that it could be used by the States as reference material for the drafting of their national plan.

2.4 Regarding the action plan, its implementation strategy is based on four modules (legislation, safety assessment, automated systems, and training), which are considered action fronts.

2.5 Module 1 (Legislation) contains actions directly related to the revision of the existing Brazilian legislation and of the operational models of national ATC entities, as applicable, in light of the modifications contained in Amendment 1 to the 15th edition of the ICAO PANS-ATM (Doc 4444).

2.6 Module 2 (Safety Assessment) addresses actions concerning the safety assessment, taking into account the possible impact of the modifications to be introduced on the operation, and the related risks, which may result in the need to adopt mitigating measures and to establish contingency plans.

2.7 Module 3 (Automated Systems) addresses actions concerning the update of automated systems, including the impact studies to be conducted for sizing the effort required for adjusting the systems affected by the modifications contained in the aforementioned amendment.

2.8 Module 4 (Training) contemplates actions concerning the drafting of the plan for training human resources that need to be familiar with, and apply, the modified concepts, especially air traffic controllers and AIS operators.

2.9 The Action Plan of Brazil appears in **Appendix A** to this working paper.

3. Suggested action

3.1 The Meeting is invited to take note of the information provided in this paper.

**MINISTRY OF DEFENCE
AERONAUTICS COMMAND
DEPARTMENT OF AIRSPACE CONTROL**



ACTION PLAN

**IMPLEMENTATION OF THE NEW FLIGHT PLAN FORMAT
ACCORDING TO AMENDMENT 1 TO THE 15TH EDITION OF
THE ICAO PANS-ATM (DOC 4444)**



MINISTRY OF DEFENCE
AERONAUTICS COMMAND
DEPARTMENT OF AIRSPACE CONTROL

ADMINISTRATIVE PROVISION DECEA N° 122/DGCEA, OF 24 AUGUST 2010.

Approves the Action Plan for the implementation of the new flight plan format according to Amendment 1 to the 15th Edition of the ICAO PANS-ATM (Doc 4444), effective 15 Nov 2012, and other provisions.

THE DIRECTOR-GENERAL OF THE DEPARTMENT OF AIRSPACE CONTROL, by virtue of the powers granted by art. 4, items III and IV, and art. 10, item IV, of the Regulations of the Department of Airspace Control (ROCA 20-7), approved through Administrative Provision 369/GC3, of 9 June 2010, resolves:

Art. 1 To approve the Action Plan for the implementation of the new flight plan format at SISCEAB, in keeping with Amendment 1 to the 15th Edition of the ICAO PANS-ATM (Doc 4444), effective 15 Nov 2012.

Art. 2 To entrust the SDTE, together with the other bodies and relevant sectors under the DECEA, with the coordination of the actions required for the implementation of the new flight plan format, which are contained in Module 3 (Automated Systems).

Art. 3 To entrust the SDOP, together with the other bodies and relevant sectors under the DECEA, with the coordination of the actions required for the implementation of the new flight plan format, which are contained in Module 1 (Legislation) and in Module 4 (Training).

Art. 4 To entrust the ASEGCEA, together with the other bodies and relevant sectors under the DECEA, with the coordination of the actions required for the implementation of the new flight plan format, which are contained in Module 2 (Safety Assessment).

Art. 5 This Administrative Provision is effective as of the date of its publication.

(a) Lieut. Brig Ar RAMON BORGES CARDOSO
Director-General of DECEA

(Published in Internal Bulletin n^o 161, of 25 August 2010)

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PREAMBLE

The Flight Plan is a specific document containing information on a planned flight or part thereof, which is provided to the bodies responsible for providing air traffic services.

The purpose of Amendment 1 to the 15th edition of the ICAO PANS-ATM (Doc 4444), effective 15 November 2012, is to update the flight plan format established by ICAO so as to include modern on board avionics and meet automated air traffic management system requirements.

The material of this Amendment has been developed by the Flight Plan Study Group (FPLSG), created by ICAO to make better use of advanced avionics available in more modern aircraft and to meet the requirements of new automated air traffic management systems.

The new flight plan addresses air navigation functionalities and technologies such as GNSS, RNAV, PBN, datalinks, ADS-B and ADS-C. These changes are more clearly reflected in items 10 and 18 of the flight plan format.

This information shall be taken into account by air traffic management systems, providing air traffic controllers the data required for air traffic planning and for the issuance of alerts whenever there is a change in the declared data that affects the control actions planned.

This Action Plan contains a series of measures to be taken by regional bodies and sectors under the DECEA, and defines objectives, criteria, methods, priorities and responsibilities concerning the implementation of the new flight plan format in the SISCEAB, in keeping with the established requirements, to ensure a coordinated transition to the aforementioned amendment.

1 PRELIMINARY PROVISIONS

1.1 PURPOSE

The purpose of this Plan is to establish guidelines for the implementation of the new flight plan format in the SISCEAB, pursuant to Amendment 1 to the 15th edition of the ICAO PANS-ATM (Doc 4444), effective 15 November 2012.

1.2 CONCEPTS

CONTROL AREA – A controlled airspace extending upwards from a specified limit above the earth. The control area concept also includes airways and TMAs.

AREA CONTROL CENTRE – A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.

FLIGHT PLAN – Specified information provided to air traffic service units, relative to an intended flight or portion of a flight of an aircraft.

FILED FLIGHT PLAN – The flight plan as filed with an ATS unit by the pilot or a designated representative, without any subsequent changes.

CURRENT FLIGHT PLAN – The flight plan, including changes, if any, brought about by subsequent clearances.

PROJECT C3 – A project established by the GREPECAS CNS/ATM Subgroup under the ATM Automation and Situational Awareness Programme, for the implementation of the new flight plan format in CAR/SAM States, in keeping with the strategy approved at the CNS/ATM/SG/1 meeting.

1.3 ABBREVIATIONS AND SYMBOLS

ACC	Area Control Centre
ADS-B	Automatic Dependent Surveillance - Broadcast
ADS-C	Automatic Dependent Surveillance - Contract
AIS	Aeronautical Information Service
APP	Approach Control
ASEGCEA	Airspace Control Safety Advisory Services
ATC	Air Traffic Control
ATCO	Air Traffic Controller
ATM	Air Traffic Management
ATS	Air Traffic Services

CHG	Change [Message]
CINDACTA	Integrated Air Defence and Air Traffic Control Centre
CISCEA	<i>Comisión de Implantación do Sistema de Control del Espacio Aéreo</i>
CNL	Cancellation [Message]
DECEA	Airspace Control Department
DEP	Departure [Message]
DLA	Delay [Message]
DLE	En-Route Delay [Message]
DOF	Date of Flight
EOBT	Estimated Off-Block Time
FIR	Flight Information Region
FITS	Flight Plan Implementation Tracking System
FPL	[Filed] Flight Plan [Message]
GNSS	Global Navigation Satellite System
GREPECAS	CAR/SAM Regional Planning and Implementation Group
ICA	Instruction by the Aeronautical Command
HMI	Human-Machine Interface
ICAO	International Civil Aviation Organization
PANS	Procedures for Air Navigation Services
PBN	Performance-Based Navigation
PER	(Aircraft) Performance
RMK	Remarks
RNAV	Area Navigation
RNP	Required Navigation Performance
RVSM	Reduced Vertical Separation Minima
SAGITARIO	Advanced System for Management of Air Traffic Information and Reports of Operational Interest
SDOP	DECEA Operations Sub-Department
SDTE	DECEA Technical Sub-Department
SISCEAB	Brazilian Airspace Control System

SMS	Safety Management System
CTMS	Control Tower Management System
SRPV	Regional Flight Protection Service
FPPS	Flight Plan Processing System
STS	(Special Flight Treatment) Status
DPDS	Data Processing and Display System
TALT	Take-Off Alternate
TATIC	Total Air Traffic Information Control
Waypoint	Reporting point or fix on area navigation-based routes or procedures
X-4000	Automated air traffic control system

1.4 SCOPE

This Action Plan, whose application is mandatory, applies to all SISCEAB bodies and sectors involved in the reception, transmission, processing and display of the information contained in the flight plan, or that use systems that process such information to support national air navigation management, to the extent applicable.

2 STATUS ANALYSIS

2.1 BACKGROUND

The update to the ICAO flight plan format, according to Amendment 1 to the 15th edition of the PANS-ATM (Doc 4444), approved on 27 May 2008 and effective 15 November 2012, has been formally communicated to the States through Letter AN13/2.1-08/50 dated 25 June 2008.

This material has been developed by the Flight Plan Study Group (FPLSG), created by ICAO to make better use of advanced avionics available in more modern aircraft and to meet the requirements of new automated air traffic management systems.

In view of the various automated systems involved in the reception, transmission, processing and display of the information contained in the flight plan and the nature of the changes foreseen in the aforementioned amendment, immediate plans need to be defined to update the systems and train the human resources involved in the whole process, so that the new flight plan format may be implemented in the Brazilian airspace on 15 November 2012.

In this sense, the GREPECAS/15 meeting formulated Conclusion 15/35 – Implementation of the new ICAO flight plan model, with a view to developing a regional strategy for the transition to the new flight plan model in the CAR/SAM Regions. Based on this conclusion and on ICAO guidelines contained in State Letter AN13/2.1-09/9 of 6 February 2009, a strategy was developed for the implementation of Amendment 1 to the 15th edition of the PANS-ATM (Doc 4444) in the SAM Region, which was later revised and approved by the SAM/IG/4 meeting.

This same material was revised, with minor changes, and approved by the CNS/ATM/SG meeting in March 2010 as the “Strategy for the Implementation of Amendment 1 to the 15th edition of the ICAO PANS-ATM (Doc 4444) in the CAR/SAM Regions”. This document contemplates the development, by each State, of an action plan for the implementation of the aforementioned amendment.

2.2 CURRENT SCENARIO

The flight plan is the specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

In Brazil, the Aeronautical Command directive that regulates the use of the flight plan is ICA 100-11, which supplements the provisions contained in the Rules of the Air and Air Traffic Services (ICA 100-12).

Filed flight plan cancellations, modifications and delays must be reported through ATS messages to the AIS unit of any aerodrome, not necessarily that of the aerodrome of departure.

Rules concerning the contents, format and application of ATS messages, as well as the relevant procedures for the delivery of such messages, are specified in the Aeronautical Command instruction entitled ATS Messages (ICA 100-15).

These messages are addressed by various automated systems involved in the reception, transmission, processing and display of the information contained in the flight plan and of messages related to the updating of such information, or by other systems that process such information in support of air navigation management and national airspace defence.

The standard types of messages established for the exchange of ATS data, and

the corresponding designators are as follows:

MESSAGE CATEGORY		MESSAGE TYPE	DESIGNATOR
Emergency		Alert	ALR
		Radio communication failure	RCF
Movement and control	Filed flight plan and the corresponding updates	Filed flight plan	FPL
		Change	CHG
		Cancellation	CNL
		Delay	DLA
		Departure	DEP
		Arrival	ARR
	Coordination	Current flight plan	CPL
		Estimated	EST
		Coordination	CDN
		Acceptance	ACP
Supplement	Logical confirmation	LAM	
	Flight plan request	RQP	
	Supplementary flight plan request	RQS	
	Supplementary flight plan	SPL	

2.3 INTENDED SCENARIO

The intended scenario is the implementation of Amendment 1 to the 15th edition of the ICAO PANS-ATM (Doc 4444), with full implementation on 15 November 2012, through the update of national legislation, especially ICA 100-11 and ICA 100-15, and of the various automated systems involved in the reception, transmission, processing and display of flight plan information and of messages related to the update thereof, as well as the adjustment of the other systems that process such information in support of air navigation management and national airspace defence.

This amendment contains changes to the size and content of some items contained in the flight plan format (mainly in fields 10, 15 and 18), which:

- a) change the way in which aircraft equipage and capabilities are declared, including more details on such items;
- b) provide additional ways of describing en-route waypoints (specifically, azimuth and distance of other points other than navigation aids);
- c) introduce new concepts, such as the take-off alternate (TALT) and the en-route delay (DLE) specification; and
- d) permit the specification of the date of flight in item 18 (DOF) for cases in which the referred plan is filed more than 24 hours and up to 120 hours before the EOBT.

Another aspect refers to different ATS movement and control messages that are used as a means for air traffic control units to exchange flight plan data that will undergo content changes.

The main changes resulting from the application of Amendment 1 are listed

below and affect the automated air traffic control systems and, in particular, will require changes to the flight plan processing system (FPPS) and human-machine interfaces (HMI).

Changes to system requirements to enable the implementation of such amendment shall also take into account the immediate risks associated to the loss of data, misinterpretation of data, and rejection of filed flight plans, and foresee a transition phase in which the current format will co-exist with the new flight plan format.

2.3.1 FILING OF THE FLIGHT PLAN

Amendment 1 modifies the deadline for filing a flight plan, providing for up to 120 hours before the EOBT. This change requires that flight plan data processing systems be adjusted to permit the storage of this new plan status and access to its data for the purpose of updating ATS messages (CHG, DLA and CNL).

The date of flight must be stated following the DOF indicator in Item 18 of the FPL for plans filed more than 24 hours before the EOBT.

2.3.2 FPL ITEM 7 – AIRCRAFT IDENTIFICATION

Amendment 1 establishes that Item 7 of the FPL must permit the entry of up to 7 alphanumeric characters, without the possibility of using special characters (hyphen or symbols). Taking into account that some aircraft systems draft downlink messages that include special characters (hyphen) in that field, the ground system must be capable of disregard such information for purposes of association with the stored flight plan data.

2.3.3 FPL ITEM 18 – FLIGHT RULES AND TYPE OF FLIGHT

The new format permits one or more flight rule changes along the path defined in the plan, by specifying the characters “Y” or “Z” for the first flight segment. With this option, the respective items to be changed in the rule (which must be contained in the stated route) must be specified in Item 15 - Route.

For flight types that require specific treatment by ATS units, the corresponding STS indicator will be used in FPL Item 18, or the RMK indicator for cases not specified in the amendment.

2.3.4 FPL ITEM 10 – EQUIPMENT – COM/NAV

In this FPL item, the equipment available and its utilisation can be specified, in keeping with the listing contained in the Amendment.

The statement of COM/NAV equipment in the FPL must contain one or two characters, the first of which shall be alphabetic and the second (if any) must be numeric. All possible equipment combinations must be considered, thus requiring FPL Item 10 to be extended to accommodate all possible combinations.

2.3.5 FPL ITEM 13 – AERODROME AND TIME OF DEPARTURE

When the aircraft does not take off from an aerodrome, and in the absence of a location indicator, the pilot will insert ZZZZ in FPL Item 13, and will specify the first point of the route or radio aid in Item 18, after the DEP indicator.

2.3.6 FPL ITEM 15 – ROUTE

Under this item, the points on the route may also be defined, referenced to a

magnetic marking and distance to a significant point defined by geographic coordinates.

Another requirement, based on the aforementioned modification of Item 8, is the alternating insertion of letters Y or Z in Item 15 (Route), to specify more than one point of modification of the flight rules. The system shall interpret the items in which there will be a flight rule change.

2.3.7 FPL ITEM 18 – OTHER DATA

The following indicators shall be considered valid for insertion in FPL Item 18: STS/, PBN/, NAV/, COM/, DAT/, SUR/, DEP/, DEST/, DOF/, REG/, EET/, SEL/, TYP/, CODE/, DLE/, OPR/, ORGN/, PER/, ALTN/, RALT/, TALT/, RIF/ and RMK/.

The aforementioned sequence shall be followed when completing FPL Item 18. Use of an indicator not specified by the Amendment may result in rejection, incorrect processing or loss of information.

The special character “hyphen” may not be used in Item 18, and the slash (/) may only be used following each indicator.

2.3.7.1 STS INDICATOR

The following reasons for special treatment by an ATS unit may be stated after the STS indicator; other reasons shall be specified using the RMK indicator:

- a) ALTRV: flight operated in keeping with an altitude reservation;
- b) ATFMX: Flight cleared and exempt from ATFM measures by the appropriate ATS authority;
- c) FFR: fire-fighting;
- d) FLTCK: flight check;
- e) HAZMAT: flight carrying hazardous material;
- f) HEAD: flight with Head of State status;
- g) HOSP: medical flight declared by the medical authorities;
- h) HUM: flight on a humanitarian mission;
- i) MARSA: flight for which a military entity assumes the responsibility for separation from military aircraft;
- j) MEDEVAC: life-critical emergency medical evacuation;
- k) NONRVSM: non-RVSM flight intending to operate in RVSM airspace;
- l) SAR: flight participating in a search and rescue mission; and
- m) STATE: flight participating in military, customs or police services.

2.3.7.2 PBN INDICATOR

The following RNAV and RNP capabilities may be stated after the PBN indicator:

- | | | |
|----|----|----------------------------|
| a) | A1 | RNAV 10 (RNP 10) |
| b) | B1 | RNAV 5 all sensors allowed |
| c) | B2 | RNAV 5 GNSS |
| d) | B3 | RNAV 5 DME/DME |
| e) | B4 | RNAV 5 VOR/DME |
| f) | B5 | RNAV 5 INS or IRS |
| g) | B6 | RNAV 5 LORANC |
| h) | C1 | RNAV 2 all sensors allowed |
| i) | C2 | RNAV 2 GNSS |
| j) | C3 | RNAV 2 DME/DME |

- k) C4 RNAV 2 DME/DME/IRU
- l) D1 RNAV 1 all sensors allowed
- m) D2 RNAV 1 GNSS
- n) D3 RNAV 1 DME/DME
- o) D4 RNAV 1 DME/DME/IRU
- p) L1 RNP 4
- q) O1 Basic RNP 1 all sensors allowed
- r) O2 Basic RNP 1 GNSS
- s) O3 Basic RNP 1 DME/DME
- t) O4 Basic RNP 1 DME/DME/IRU
- u) S1 RNP APCH
- v) S2 RNP APCH with BARO-VNAV
- w) T1 RNP AR APCH with RF (special authorisation required)
- x) T2 RNP AR APCH without RF (special authorisation required)

2.3.7.3 NAV INDICATOR

Other data concerning navigation equipment, in addition to that specified in the PBN/ indicator, as required by the corresponding ATS authority, may be stated after NAV/, like; for example, GNSS augmentation resources, using space to separate two or more augmentation methods.

2.3.7.4 COM INDICATOR

Communication applications or capabilities not specified in Item 10 must be stated after the COM indicator.

2.3.7.5 DAT INDICATOR

Data applications or capabilities not specified in Item 10 must be stated after the DAT indicator.

2.3.7.6 SUR INDICATOR

Surveillance applications or capabilities not specified in Item 10 must be stated after the SUR indicator.

2.3.7.7 DEP INDICATOR

For take-off aerodromes not listed in the Aeronautical Information Publication, the take-off location must be stated after the DEP indicator, according to the cases defined in Amendment 1.

2.3.7.8 DEST INDICATOR

For destination aerodromes not listed in the Aeronautical information Publication, the take-off location must be stated after the DEST indicator, according to the cases defined in Amendment 1.

2.3.7.9 DOF INDICATOR

For processing flight plans filed more than 24 hours and up to 120 hours in advance, the date of flight (YYMMDD) must be stated after the DOF indicator, where YY, MM and DD refer, respectively, to the year, month and day.

2.3.7.10 DLE INDICATOR

For en-route delays or holding, the significant point on the route where the delay is expected to occur shall be indicated, followed by the duration of such delay in hours and minutes (hhmm).

2.3.7.11 ORGN INDICATOR

For the insertion of the 8-letter AFTN address of the FPL originator or other appropriate contact details, when the flight plan originator cannot be easily identified, as established by the corresponding ATS authority.

2.3.7.12 PER INDICATOR

For the insertion of aircraft performance data, using a single letter, as specified in the Procedures for Air Navigation Services - Aircraft Operations (PANS-OPS, Doc 8168), Volume I – Flight Procedures, if required by the appropriate ATS authority.

2.3.7.13 TALT INDICATOR

For the insertion of the aerodrome 4-letter indicator or name, if there is no published indicator, of the alternate take-off aerodrome in which the aircraft can land if, for technical or operational reasons, an unforeseen (emergency) landing is required immediately after take-off and it is not possible to use the aerodrome of departure.

2.3.8 DRAFTING OF ATS MESSAGES

Item 18 is used for drafting the following ATS messages: DLA, CNL, CHG, DEP, RQP and RQS. The EOBT must also be inserted in Item 13 in ARR, CHG, CNL and RQS messages.

2.3.9 COMMUNICATION BETWEEN SYSTEMS

The application of Amendment 1 to automated ATC systems creates the need to review the specifications of the applications and protocols used for the exchange of data between systems, namely: AIDC Protocol (ATS interfacility data communication), OLDI Protocol (on-line data interchange) and ADEXP format (ATS data exchange presentation).

2.3.10 AMHS (ATS MESSAGE HANDLING SYSTEM)

The aeronautical message handling system, as implemented, provides standard displays and formats, even in terms of the field size of each item. Therefore, changes resulting from Amendment 1 must be assessed. Likewise, considering the AFTN operational continuity hypothesis, the impact on that network must be assessed.

2.3.11 CTMS AND TATIC

The systems currently in existence in the control tower, especially CTMS and TATIC, as implemented, display standard formats, even in terms of field size, for the display and insertion of data concerning items in some ATS messages. Consequently, the corresponding changes resulting from Amendment 1 must be introduced.

2.4 TRANSITION SCENARIO

ICAO State Letter AN13/2.1-09/9, of 6 February 2009, provides guidance supporting global coordination efforts during the transition period, with a view to a coordinated and successful transition ending on the effective date of Amendment 1, on 15

November 2012.

The action taken during this transition phase, as established in the strategy approved by CAR/SAM States, must:

- a) follow GREPECAS guidance;
- b) comply with ICAO directives contained in State Letter AN13/2.1-09/9;
- c) be coordinated with the implementation coordinator;
- d) involve the activities foreseen in the action plans to mitigate technical and operational impact; and
- e) recognise that the advantages for airspace users will be fully realised only through joint implementation of the changes in all States.

In the CAR/SAM Regions, the transition period during which air navigation service providers must be capable of processing the two flight plan formats (CURRENT and NEW) has been defined between 1 July and 15 November 2012.

The period between 1 January and 31 March 2012 must be used for software implementation and internal testing of the NEW flight plan format. The period between 1 April and 30 June 2012 must be devoted to external testing of interfaces with other centres, functionality testing and testing the conversion between the NEW and CURRENT formats.

In order to meet this deadline and harmonise the implementation with other ICAO Regions, the changes that need to be introduced in the systems must be completed by 30 June 2012.

Likewise, airspace users must make sure that their systems comply precisely and correctly with Amendment 1, respecting the established transition period, during which the NEW and CURRENT flight plans are expected to co-exist.

In order to expedite technical and operational coordination, each State must designate a point of contact during the transition phase to coordinate the implementation of the changes to the flight plan format with ICAO and the other States.

In this regard, the ICAO SAM Office sent letter SA224, dated 14 April 2010, to all SAM States, requesting the name of their point of contact by 7 May 2010.

In addition to this immediate action, the final report of the SAM/IG/5 meeting requests States to assign priority to the creation of a national committee, made up by air navigation service providers and users, to coordinate the implementation of the new flight plan format through coordination meetings.

In order to assist in the coordination, ICAO Headquarters has created a website called Flight Plan Implementation Tracking System (FITS), which will record the status of implementation in all Flight Information Regions (FIR), together with other information on this topic.

3 IMPLEMENTATION STRATEGY

3.1 OBJECTIVE

The main objective of this Action Plan is the implementation of the new flight plan format in the SISCEAB, pursuant to the requirements of Amendment 1 to the 15th edition of the ICAO PANS-ATM (Doc 4444), effective 15 November 2012, and pursuant to DECEA standards and criteria.

3.2 CRITERIA AND METHOD

According to this Action Plan, the implementation of the new flight plan format in the SISCEAB will be divided into four action fronts, called modules:

MODULE 1 – LEGISLATION

Module 1 contains the actions aimed at reviewing the existing Brazilian legislation, as well as the operational models of national ATC bodies, as applicable, in light of the changes introduced by Amendment 1 to the 15th edition of the ICAO PANS-ATM (Doc 4444).

MODULE 2 – SAFETY ASSESSMENT

Module 2 is devoted to actions related to the Safety Assessment, taking into account the possible impact of the changes on the operation--which will be assessed--and the associated risks, which might require mitigation measures and the establishment of contingency plans.

MODULE 3 – AUTOMATED SYSTEMS

This Module addresses actions related to the updating of automated systems, including the impact studies to be conducted for sizing the effort required for adjusting the systems to the changes defined in the cited Amendment.

MODULE 4 – TRAINING

Module 4 contemplates actions involving the development of a training plan for human resources that need to know and apply the modified concepts, especially air traffic controllers and AIS operators.

The structure of this plan has been established based on a quality tool used for planning the action to be taken, and which also serves to monitor progress, using colour coding to show the implementation status of the measure or action.

The method, called 5W1H, consists of a small checklist that contains the six main points of the action plan. It originates from six words in English:

WHAT – WHEN – WHO – WHY – WHERE – HOW

In Portuguese:

O QUE – QUANDO – QUEM – POR QUE – ONDE – COMO

This document is presented in the form of a template (Annex A), which will be used to coordinate, maintain and control the actions that need to be taken within a period of time to achieve the defined objective.

3.3 ACTIONS, RESPONSIBILITIES AND DEADLINES

In order to expedite technical and operational coordination, each State must designate a point of contact for coordination with ICAO and the other States during the transition phase, for the implementation of the changes to the flight plan format, as requested in letter SA224, dated 14 April 2010, sent by the ICAO SAM Regional Office to all SAM States, requesting such designation by 7 May 2010.

In this respect, the DECEA has designated Lt. CTA Jorge Wilson de **Avila** Ferreira Penna, Assistant to the Chief of the Planning Subdivision of the Air Navigation Management Unit of SDOP, as the point of contact for ICAO.

Also, as stated in the final report of the SAM/IG/5 meeting, States must give priority to the creation of a national committee, made up by air navigation service providers and users, to coordinate the implementation of the new flight plan format through coordination meetings.

In order to achieve the objectives foreseen in this action plan, the following immediate action must be taken, which will serve as the basis for the other listed items:

Immediate action – Establishment of the Committee for the Implementation of Amendment 1 (Doc 4444), made up by representatives of the various segments involved (sub-departments, regional bodies, CISCEA, CGNA, ICEA, PAME, ANAC, INFRAERO, ATECH, EMPRESAS AÉREAS, SNEA, SNETA, ABAG, etc).

Deadline: Immediately, to be included in the agenda of the first meeting on 14/10/10.

Responsible party: VICEA.

Based on these initial actions, this plan establishes the following actions to be carried out under the four modules:

3.3.1 MODULE 1 – LEGISLATION

Module manager: Maj. Av Miguel (nor@decea.gov.br)

Item 1.1 – Updating of the national legislation affected by Amendment 1 to the 15th edition of ICAO PANS-ATM (Doc 4444).

Item 1.1.1 Action: Analyse the contents of the aforementioned Amendment and assess its impact on national legislation through internal meetings of the Standards Sub-Division (NOR1, NOR2 and NOR4).

Deadline: 27/08/10.

Responsible party: SDOP (NOR).

Item 1.1.2 Action: Prepare a preliminary report to document the topics identified, as guidance for the working group in its task of updating the standards, through a brief description of the topics affected.

Deadline: 03/09/10.

Responsible party: SDOP (NOR).

- Item 1.1.3 Action: Submit the conclusions of the report and the guiding action to the working group, in order to guide the work of the group through meetings between the WG and the other areas involved.
Deadline: 10/09/10.
Responsible party: SDOP (NOR).
- Item 1.1.4 Action: Develop proposals of amendment to relevant legislation, including updates to national legislation on the topic, through a working group made up by representatives of NOR, CINDACTA/SRPV and CGNA.
Deadline: 31/03/11.
Responsible party: SDOP (NOR).
- Item 1.1.5 Action: Submit the proposals of amendment developed, with a view to communicating the changes to the standards resulting from the Amendment, through a meeting with the heads of the DOs of CINDACTA/SRPV and CGNA.
Deadline: 29/04/11.
Responsible party: SDOP (DGNA).
- Item 1.1.6 Action: Update the operational models, as applicable, in relation to the parts affected by the amendments to national norms, taking into account that the aforementioned operational models may contain information that will be affected by the changes to be introduced, through a working group made up by representatives of the DOs of CINDACTA/SRPV.
Deadline: 29/07/11.
Responsible party: Heads of the DOs (CINDACTA/SRPV).
- Item 1.1.7 Action: Submit the proposed changes to the operational models in the areas affected by the proposals of amendment developed, trying to consolidate the changes to be introduced in the respective models, through a working group made up by representatives of the DOs of CINDACTA/SRPV.
Deadline: 17/08/11.
Responsible party: Heads of the DOs (CINDACTA/SRPV).
- Item 1.1.8 Action: Publish changes to the relevant legislation, taking into account the transition phase, trying to update the national legislation on the topic, by sending to PAME the changes to be published for implementation on 1 July 2012.
Deadline: 01/02/12.
Responsible party: SDOP (NOR).
- Item 1.1.9 Action: Publish changes to relevant legislation, taking into account the transition phase, trying to update the national legislation on the topic, by sending to PAME the changes to be published for implementation on 15 Nov 2012.
Deadline: 20/07/12.
Responsible party: SDOP (NOR).

3.3.2 MODULE 2 – SAFETY ASSESSMENT

Module manager: Capt. Nobre (asegcea-4@decea.gov.br)

Item 2.1 – Conduction of the safety assessment, taking into account the changes resulting from Amendment 1 to the 15th edition of ICAO PANS-ATM (Doc 4444).

Item 2.1.1 Action: Describe the system, trying to establish the current and future scenarios, by analysing the changes to be introduced.

Deadline: 01/10/10.

Responsible party: ASEGCEA.

Item 2.1.2 Action: Identify the hazards, trying to define the areas that may be a source of hazards, through meetings with the experts in the areas involved in the analysis (risk management team).

Deadline: 15/10/10.

Responsible party: ASEGCEA.

Item 2.1.3 Action: Conduct a preliminary risk assessment, trying to make a preliminary classification of risks associated to the transition, through meetings with the experts in the areas involved in the analysis (risk management team).

Deadline: 22/10/10.

Responsible party: ASEGCEA.

Item 2.1.4 Action: Develop a preliminary report to document the topics analysed, trying to orient the assessment by giving a brief description of the topics analysed.

Deadline: 29/10/10.

Responsible party: ASEGCEA.

Item 2.1.5 Action: Submit the conclusions of the report and the guiding action, trying to standardise the actions of the assessment process, through a meeting with personnel from SGSO and the other areas involved in the analysis.

Deadline: 04/11/10.

Responsible party: ASEGCEA.

Item 2.1.6 Action: Establish mitigating measures, trying to maintain risk at an acceptable level, through meetings with the experts in the areas involved in the analysis (risk management team).

Deadline: 10/12/10.

Responsible party: ASEGCEA.

Item 2.1.7 Action: Conduct the preliminary assessment with the support of SGSO, focusing on possible contingency measures, in order to measure the

effort involved in the mitigating measures.

Deadline: 31/03/11.

Responsible party: ASEGCEA.

Item 2.1.8 Action: Submit the preliminary safety assessment resulting from the aforementioned Amendment for its dissemination, by meeting with the heads of the DOs of CINDACTA/SRPV.

Deadline: 29/04/11.

Responsible party: ASEGCEA.

Item 2.1.9 Action: Plan the implementation of mitigating measures, trying to define deadlines and the parties responsible, through meetings with the experts in the areas involved in the analysis (risk management team).

Deadline: 27/05/11.

Responsible party: ASEGCEA.

Item 2.1.10 Action: Develop the Safety Risk Management Document (DGRSO) to finalise the safety assessment process, through meetings with the experts in the areas involved in the analysis (risk management team).

Deadline: 29/07/11.

Responsible party: ASEGCEA.

Item 2.1.11 Action: Submit the safety assessment to communicate the risks identified and the mitigating measures, including contingencies, by meeting with the heads of the DOs of CINDACTA/SRPV.

Deadline: 17/08/11.

Responsible party: ASEGCEA.

Item 2.1.12 Action: Disseminate the DGRSO in order to communicate the results of the safety assessment done for the implementation of the cited Amendment, by officially sending it to the organisations and sectors involved in the implementation of the mitigating actions.

Deadline: 30/08/11.

Responsible party: ASEGCEA.

3.3.3 MODULE 3 – AUTOMATED SYSTEMS

Module manager: Maj. Eng Santoro (ddte7@decea.gov.br)

Item 3.1 – Updating of automated systems affected by Amendment 1 to the 15th edition of ICAO PANS-ATM (Doc 4444).

Item 3.1.1 Action: Analyse the contents of the aforementioned Amendment in order to assess the scope of the changes to be introduced, through internal meetings with the participation of SDTE and CISCEA representatives.

Deadline: 25/08/10.

Responsible party: SDTE.

Item 3.1.2 Action: Identify the possible impact of implementing the new flight plan

format in order to list the systems to be updated as a result of the Amendment, through meetings with the various areas concerned (developers, maintenance personnel, system providers, etc.).

Deadline: 26/08/10.

Responsible party: SDTE.

Item 3.1.3 Action: Develop a report on possible impacts, to substantiate the response to the query of the ICAO SAM Office, by means of a brief description of the items and by filling the Impact Assessment template prepared by Project C3.

Deadline: 30/08/10.

Responsible party: SDTE.

Item 3.1.4 Action: Assess current and future flight plan processing capabilities with respect to Amendment 1, trying to define the effort required for updating automated systems, by collecting information together with the various areas involved (developers, maintenance personnel, system providers, etc.).

Deadline: 20/12/10.

Responsible party: CISCEA.

Item 3.1.5 Action: Specify and contract the necessary system updates, by developing the relevant contracting requirements and instruments.

Deadline: 31/03/11.

Responsible party: CISCEA.

Item 3.1.6 Action: Develop the necessary application updates for the conduction of trials, with a view to the implementation of the Amendment, through a methodology for the development of critical applications.

Deadline: 30/12/11.

Responsible party: CISCEA.

Item 3.1.7 Action: Conduct trials between systems capable of processing the new flight plan in order to assess software changes in advance and make the necessary adjustments, through the development of a prototype, trials and validation meetings.

Deadline: 30/06/12.

Responsible party: CISCEA.

Item 3.1.8 Action: Define the transition steps, based on the systems capable of processing the current and new flight plan formats, with a view to informing users and other stakeholders of the transition action to be taken, through meetings with the various areas involved (developers, maintenance personnel, system providers, etc.).

Deadline: 30/06/11.

Responsible party: SDOP.

Item 3.1.9 Action: Implement the actions foreseen for the transition to the new format, by monitoring the steps that have been agreed and communicated.

Deadline: 31/07/12.

Responsible party: DECEA Committee.

Item 3.1.10 Action: Discontinue the systems that support the current format with a view to completing the implementation of the new format, by updating the applications involved for the use of the new format alone.

Deadline: 28/12/12.

Responsible party: CISCEA.

3.3.4 MODULE 4 – TRAINING

Module manager: Air Force Lieutenant Colonel Moraes (pln@decea.gov.br)

Item 4.1 – Training on the national norms affected by Amendment 1 to the 15th edition of ICAO PANS-ATM (Doc 4444).

Item 4.1.1 Action: Submit the changes to national regulations resulting from Amendment 1 to the PANS-ATM for their dissemination, through meetings with the users, representatives of regional bodies and other stakeholders.

Deadline: 05/05/11.

Responsible party: SDOP (DGNA).

Item 4.1.2 Action: Schedule internal seminars for dissemination to the internal public, especially the ATM, AIS and COM areas, through the creation of a working group, made up by SDOP representatives, tasked with the development of the material required for the seminars.

Deadline: 17/06/11.

Responsible party: SDOP (PLN).

Item 4.1.3 Action: Schedule external seminars for dissemination to the external public (civil and military users), through the creation of a working group, made up by SDOP representatives, tasked with the development of the material required for the seminars.

Deadline: 17/06/11.

Responsible party: SDOP (PLN).

Item 4.1.4 Action: Conduct a seminar to train the internal public of CINDACTA 1, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 01/09/11.

Responsible party: Head of the DO (CINDACTA 1).

Item 4.1.5 Action: Conduct a seminar to train the internal public of CINDACTA 2,

especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 15/09/11.

Responsible party: Head of the DO (CINDACTA 2).

Item 4.1.6 Action: Conduct a seminar to train the internal public of CINDACTA 3, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 29/09/11.

Responsible party: Head of the DO (CINDACTA 3).

Item 4.1.7 Action: Conduct a seminar to train the internal public of CINDACTA 4, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 20/10/11.

Responsible party: Head of the DO (CINDACTA 4).

Item 4.1.8 Action: Conduct a seminar to train the internal public of SRPV SP, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 10/11/11.

Responsible party: Head of the DO (SRPV SP).

Item 4.1.9 Action: Conduct a seminar at DECEA to train the external public (civil and military users), with the participation of SDOP representatives.

Deadline: 28/11/11.

Responsible party: SDOP (DGNA).

Item 4.1.10 Action: Conduct a seminar in the city of Sao Paulo to train the external public (civil and military users), with the participation of representatives of the Operations Division of SRPV SP.

Deadline: 01/12/11.

Responsible party: Head of the DO (SRPV SP).

Item 4.1.11 Action: Conduct a seminar focusing on aspects related to the transition phase and contingency measures, to train the internal public of CINDACTA 1, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 01/03/12.

Responsible party: Head of the DO (CINDACTA 1).

Item 4.1.12 Action: Conduct a seminar focusing on aspects related to the transition phase and contingency measures, to train the internal public of CINDACTA 2, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 08/03/12.

Responsible party: Head of the DO (CINDACTA 2).

Item 4.1.13 Action: Conduct a seminar focusing on aspects related to the transition phase and contingency measures, to train the internal public of CINDACTA 3, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 15/03/12.

Responsible party: Head of the DO (CINDACTA 3).

Item 4.1.14 Action: Conduct a seminar focusing on aspects related to the transition phase and contingency measures, to train the internal public of CINDACTA 4, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 22/03/12.

Responsible party: Head of the DO (CINDACTA 4).

Item 4.1.15 Action: Conduct a seminar focusing on aspects related to the transition phase and contingency measures, to train the internal public of SRPV SP, especially the ATM, AIS and COM areas, with the participation of representatives of the Operations Division of the regional body.

Deadline: 29/03/12.

Responsible party: Head of the DO (SRPV SP).

Item 4.1.16 Action: Conduct a seminar at DECEA, focusing on aspects related to the transition phase and contingency measures, to train the external public (civil and military users), with the participation of SDOP representatives.

Deadline: 02/04/12.

Responsible party: SDOP (DGNA).

Item 4.1.17 Action: Conduct a seminar in the city of Sao Paulo, focusing on aspects related to the transition phase and contingency measures, to train the external public (civil and military users), with the participation of SRPV SP representatives.

Deadline: 05/04/12.

Responsible party: Head of the DO (SRPV SP).

Item 4.1.18 Action: Conduct specific training at the headquarters of regional bodies to strengthen the operational aspects of the transition phase and the contingency measures, to train the internal public, especially the ATM, AIS and COM areas, designating representatives of the regional body to provide training to the operational personnel in a seminar format.

Deadline: 28/06/12.

Responsible party: Heads of DOs.

4 FINAL PROVISIONS

4.1 Provided the operational requirement, the technical conditions and the resources are in place, the action modules may be implemented before schedule.

4.2 Action priorities proposed in this Plan may be modified based on operational requirements and available resources.


4.3 Cases not contemplated in this Action Plan will be submitted to the consideration of the Director General of DECEA.

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- BRAZIL. Aeronautics Command. Airspace Control Department. *Rules of the Air and Air Traffic Services: ICA 100-12*. [Rio de Janeiro], 2009.
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- CNS/ATM/SG/1. *Final report of the First Meeting of the Communications, Navigation and Surveillance/Air Traffic Management Subgroup of GREPECAS*. [Lima], 2010.
- ICAO. *Air Traffic Services: Annex 11 to the Convention on International Civil Aviation*. [Montreal], 2001.

ANNEX A

CONTROL TEMPLATE

 <p>DEPARTAMENTO DE CONTROL DEL ESPACIO AÉREO SUBDEPARTAMENTO DE OPERACIONES</p> <p>Av. General Justo nº 160 Castelo Rio de Janeiro RJ Cep 20021-130</p>		ACTION PLAN									
		Nº 001				/SDOP				DATE: 30 / 07 / 10	
		IMPLEMENTATION OF THE NEW FLIGHT PLAN FORMAT PURSUANT TO AMENDMENT 1 TO THE 15TH EDITION OF ICAO PANS-ATM (DOC 4444) LEGISLATION									
STATUS CONTROL: NOT STARTED YET <input type="checkbox"/> IN DER WAY <input type="checkbox"/> DELAYED <input type="checkbox"/> FINALISED <input type="checkbox"/>											
ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS		
						START	END				
MODULE 1 - LEGISLATION											
1.1	Updating of national legislations affected by Amendment 1 to the 15 th Edition of ICAO PANS-ATM (Doc 4444)										
1.1.1	Analyse the contents of the cited Amendment	Assess the impact on national legislations	SDOP NOR	Internal meetings of the Standards Sub-Division (NOR1, NOR2 and NOR4)	DECEA	23/08/10	27/08/10				
1.1.2	Prepare preliminary report	Document the topics identified, with a view to guiding the work of the WG in terms of updating the regulations	SDOP NOR	Brief description of the affected topics	DECEA	30/08/10	03/09/10				
1.1.3	Submit the conclusions of the report and the guiding actions to the WG	Guide the actions of the WG	SDOP NOR	Meeting with the WG and personnel from the other areas involved, as necessary	DECEA	09/09/10	10/09/10				
1.1.4	Develop proposals of amendment to the relevant legislation	Propose the updating of the national legislation on the topic	SDOP NOR	Working group made up with representatives of the NOR of CINDACTA/SRPV and the CGNA	DECEA	20/09/10	31/03/11				
1.1.5	Submit the proposals of amendment that have been developed	Disseminate the changes to the regulations resulting from the cited Amendment	SDOP DGNA	Meeting with heads of the DOs of CINDACTA/SRPV and the CGNA	DECEA	28/04/11	29/04/11				

STATUS CONTROL: NOT STARTED YET UNDER WAY DELAYED FINALISED

ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS
						START	END		
MODULE 1 - LEGISLATION									
1.1	Updating of national legislations affected by Amendment 1 to the 15 th Edition of the ICAO PANS-ATM (Doc 4444)								
1.1.6	Update the operational models as necessary, with respect to those parts affected by changes to national regulations	The operational models may contain information that is affected by the changes to be implemented	CINDACTA 1 DO	Working group with representatives of the DO of CINDACTA/SRPV	CINDACTA 1	16/05/11	29/07/11		
			CINDACTA 2 DO		CINDACTA 2	16/05/11	29/07/11		
			CINDACTA 3 DO		CINDACTA 3	16/05/11	29/07/11		
			CINDACTA 4 DO		CINDACTA 3	16/05/11	29/07/11		
			SRPVSP DO		SRPVSP	16/05/11	29/07/11		
1.1.7	Submit the proposals of modification of the operational models in those areas affected by the proposals of amendment developed	Consolidate the changes that will be introduced to the operational models	CINDACTA 1 DO	Working group with representatives of the OD of CINDACTA/SRPV	DECEA	16/08/11	17/08/11		
			CINDACTA 2 DO						
			CINDACTA 3 DO						
			CINDACTA 4 DO						
			SRPVSP DO						
1.1.8	Publish the changes to the relevant legislation during the transition phase	Update the national legislation on the topic	SDOP NOR	Send to PAME the changes to be published for implementation on 1 July 2012	DECEA	01/02/12	01/02/12		
1.1.9	Publish the changes to the relevant legislation once completed the transition phase	Update the national legislation on the topic	SDOP NOR	Send to PAME the changes to be published for implementation on 15 Nov 2012	DECEA	20/07/12	20/07/12		



DEPARTAMENTO DE CONTROL DEL ESPACIO AÉREO
SUBDEPARTAMENTO DE OPERACIONES

Av. General Justo nº 160 Castelo
Rio de Janeiro RJ Cep 20021-130

ACTION PLAN

Nº 002 /SDOP DATE: 30 / 07 / 10

IMPLEMENTATION OF THE NEW FLIGHT PLAN FORMAT PURSUANT TO AMENDMENT
1 TO THE 15TH EDITION OF ICAO PANS-ATM (DOC 4444)
SAFETY ASSESSMENT

STATUS CONTROL: NOT STARTED YET UNDER WAY DELAYED FINALISED

ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS
						START	END		
MODULE 2 – SAFETY ASSESSMENT									
2.1	Conduction of the safety assessment, taking into account the changes resulting from Amendment 1 to the 15 th edition of ICAO PANS-ATM (Doc 4444)								
2.1.1	Describe the system	Establish the current and future scenarios to be considered	ASEGCEA	Analysis of the changes to be introduced	DECEA	13/09/10	01/10/10		
2.1.2	Identify the hazards	Identify the areas that may be sources of hazard	ASEGCEA	Meetings with the team of experts from the areas involved in the analysis (risk management team)	DECEA	04/10/10	15/10/10		
2.1.3	Conduct a preliminary risk assessment	Preliminary classification of the risks associated to the change	ASEGCEA	Meetings with the team of experts from the areas involved in the analysis (risk management team)	DECEA	18/10/10	22/10/10		
2.1.4	Draft preliminary report	Document the topics analysed, providing guidance for the assessment work	ASEGCEA	Brief description of the topics analysed	DECEA	25/10/10	29/10/10		
2.1.5	Submit the conclusions of the report and guiding actions	Standardise the assessment process	ASEGCEA	Meeting with staff of SGSO and other areas involved in the analysis	DECEA	03/11/10	04/11/10		
2.1.6	Establish mitigating measures	Maintain risk at acceptable levels	ASEGCEA	Meetings with the team of experts from the areas involved in the analysis (risk management team)	DECEA	16/11/10	10/12/10		
2.1.7	Conduct a preliminary assessment, focusing on possible contingency measures	Preliminary assessment of the effort required to implement mitigating measures	ASEGCEA	Preliminary analysis with the support of SGSO resources	DECEA	13/12/10	31/03/11		
2.1.8	Submit the preliminary safety assessment	Disseminate the preliminary assessment of the impact of the cited Amendment	ASEGCEA	Meeting with the heads of the DO of CINDACTA/SRPV	DECEA	28/04/11	29/04/11		
2.1.9	Plan the implementation of mitigating measures	Define deadlines and the parties responsible for the implementation of mitigating measures	ASEGCEA	Meetings with the team of experts from the areas involved in the analysis (risk management team)	DECEA	02/05/11	27/05/11		

STATUS CONTROL: NOT STARTED YET  UNDER WAY  DELAYED  FINALISED 

ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS
						START	END		
MODULE 2 – SAFETY ASSESSMENT									
2.1	Conduction of the safety assessment, taking into account the changes resulting from Amendment 1 to the 15 th edition of ICAO PANS-ATM (Doc 4444)								
2.1.10	Draft the safety risk management document (DGRSO)	Finalise the safety assessment	ASEGCEA	Meetings with the team of experts from the areas involved in the analysis (risk management team)	DECEA	30/05/11	29/07/11		
2.1.11	Submit the safety assessment	Disseminate the results of the work, with the risks and mitigating measures that have been identified, including contingencies	ASEGCEA	Meeting with the heads of the DO of CINDACTA/SRPV	DECEA	16/08/11	17/08/11		
2.1.12	Disseminate the DGRSO	Disseminate the safety assessment done for the implementation of the cited Amendment	SDOP	Officially submit it to the organisations and sectors involved in the implementation of the mitigating measures	DECEA	30/08/11	30/08/11		



DEPARTAMENTO DE CONTROL DEL ESPACIO AÉREO
SUBDEPARTAMENTO DE OPERACIONES

Av. General Justo nº 160 Castelo
Rio de Janeiro RJ Cep 20021-130

ACTION PLAN

Nº 003 /SDOP DATE: 30 / 07 / 10
IMPLEMENTATION OF THE NEW FLIGHT PLAN FORMAT PURSUANT TO AMENDMENT 1
TO THE 15TH EDITION OF ICAO PANS-ATM (DOC 4444)
AUTOMATED SYSTEMS

STATUS CONTROL: NOT STARTED YET UNDER WAY DELAYED FINALISED

ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS
						START	END		
MODULE 3 – AUTOMATED SYSTEMS									
3.1	Updating of automated systems affected by Amendment 1 to the 15 th Edition of ICAO PANS-ATM (Doc 4444)								
3.1.1	Analyse the contents of the cited Amendment	Assess the scope of the changes to be made	SDTE	With the participation of representatives of SDTE and CISCEA	SDTE	16/08/10	25/08/10		
3.1.2	Identify possible impacts of the implementation of the new flight plan format	Identify the systems to be updated as a result of the Amendment	SDTE	Meetings with the various areas involved (developers, maintenance personnel, system providers, etc.)	SDTE	23/08/10	26/08/10		
3.1.3	Draft report on the likely impacts that have been identified	Substantiate response to the query by the ICAO Regional Office in Lima	SDTE	Brief description of topics, and filling of the impact assessment template developed by Project C3	SDTE	27/08/10	30/08/10		
3.1.4	Assess current and future flight plan processing capabilities in relation to the contents of Amendment 1	Define the effort required for updating the affected automated systems	CISCEA	Data collection, together with the various areas involved (developers, maintenance personnel, system providers, etc.)	CISCEA	08/09/10	20/12/10		
3.1.5	Specify and contract the required system updates	Allow for the required system updates	CISCEA	Specification of the relevant contracting requirements and instruments	CISCEA	10/01/11	31/03/11		
3.1.6	Develop the required application updates	Allow for the conduction of trials with a view to the implementation of the Amendment	CISCEA	Methodology for the development of critical applications	CISCEA	04/04/11	30/12/11		

STATUS CONTROL: NOT STARTED YET UNDER WAY DELAYED FINALISED

ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS
						START	END		
MODULE 3 – AUTOMATED SYSTEMS									
3.1	Updating of automated systems affected by Amendment 1 to the 15 th Edition of ICAO PANS-ATM (Doc 4444)								
3.1.7	Conduct trials between systems capable of processing the new flight plan	Assess software changes in advance, allowing for the necessary adjustments	CISCEA	Prototype development, trials and validation meetings	CISCEA	18/07/11	30/06/12		
3.1.8	Define the transition steps, based on the systems: a) capable of processing both formats (current and new); b) that will be modernised and implemented before 2012 and will be capable of processing the new flight plan format	Publish the transition steps to be taken, for information of users and other stakeholders	SDOP	Meetings with the various areas involved (developers, maintenance personnel, system providers, etc.)	DECEA	24/01/11	30/06/11		
3.1.9	Implement the transition actions as pre-defined	Conduct the transition to the new format	Committee	Monitor the implementation of the steps agreed for the transition phase	DECEA	01/04/12	31/07/12		
3.1.10	Discontinue the systems that support the current format	Complete the implementation of the new format	CISCEA	Update the applications involved to allow for the use of the new format alone	CISCEA	17/12/12	28/12/12		



DEPARTAMENTO DE CONTROL DEL ESPACIO AÉREO
SUBDEPARTAMENTO DE OPERACIONES

Av. General Justo nº 160 Castelo
Rio de Janeiro RJ Cep 20021-130

ACTION PLAN

Nº 004 /SDOP DATE: 30 / 07 / 10
IMPLEMENTATION OF THE NEW FLIGHT PLAN FORMAT PURSUANT TO AMENDMENT 1 TO THE 15TH EDITION OF ICAO PANS-ATM (DOC 4444) TRAINING

STATUS CONTROL: NOT STARTED YET UNDER WAY DELAYED FINALISED

ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS
						START	END		
MODULE 4 – TRAINING									
4.1	Training related to the national regulations affected by changes resulting from Amendment 1 to the 15 th Edition of ICAO PANS-ATM (Doc 4444)								
4.1.1	Submit the changes to the national legislation	Disseminate the changes to national legislations resulting from Amendment 1 to the PANS-ATM	SDOP DGNA	Meeting with the users, representatives of regional bodies and other stakeholders	DECEA	05/05/11	05/05/11		
4.1.2	Schedule internal seminars	Plan the dissemination to the internal public, especially the ATM, AIS and COM areas	SDOP PLN	Working group with SDOP representatives to develop the material required for the seminars	DECEA	13/06/11	17/06/11		
4.1.3	Schedule external seminars	Plan the dissemination to the external public (civil and military users)	SDOP PLN	Working group with SDOP representatives to develop the material required for the seminars	DECEA	13/06/11	17/06/11		
4.1.4	Conduct seminar (internal public)	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 1 DO	Designate DO representatives to train the operational personnel of the regional entity, in the form of a seminar	CINDACTA 1	30/08/11	01/09/11		
4.1.5	Conduct seminar (internal public)	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 2 DO	Designate DO representatives to train the operational personnel of the regional entity, in the form of a seminar	CINDACTA 2	13/09/11	15/09/11		
4.1.6	Conduct seminar (internal public)	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 3 DO	Designate DO representatives to train the operational personnel of the regional entity, in the form of a seminar	CINDACTA 3	27/09/11	29/09/11		
4.1.7	Conduct seminar (internal public)	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 4 DO	Designate DO representatives to train the operational personnel of the regional entity, in the form of a seminar	CINDACTA 4	18/10/11	20/10/11		
4.1.8	Conduct seminar (internal public)	Train the internal public, especially the ATM, AIS and COM areas	SRPV SP DO	Designate DO representatives to train the operational personnel of the regional entity, in the form of a seminar	SRPV SP	08/11/11	10/11/11		

STATUS CONTROL: NOT STARTED YET  UNDER WAY  DELAYED  FINALISED 

ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS
						START	END		
MODULE 4 – TRAINING									
4.1	Training related to the national regulations affected by changes resulting from Amendment 1 to the 15 th Edition of ICAO PANS-ATM (Doc 4444)								
4.1.9	Conduct seminar for users (external public)	Train the external public (civil and military users)	SDOP	Designate SDOP representatives to train users, in the form of a seminar	DECEA	28/11/11	28/11/11		
4.1.10	Conduct seminar for users (external public)	Train the external public (civil and military users)	SRPV SP DO	Designate DO representatives to train users, in the form of a seminar	São Paulo	30/11/11	01/12/11		
4.1.11	Conduct seminar, focusing on aspects related to the transition phase and contingency measures (internal public)	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 1 DO	Designate DO representatives to train the operational personnel of the regional body, in the form of a seminar	CINDACTA 1	28/02/12	01/03/12		
4.1.12	Conduct seminar, focusing on aspects related to the transition phase and contingency measures (internal public)	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 2 DO	Designate DO representatives to train the operational personnel of the regional body, in the form of a seminar	CINDACTA 2	06/03/12	08/03/12		
4.1.13	Conduct seminar, focusing on aspects related to the transition phase and contingency measures (internal public)	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 3 DO	Designate DO representatives to train the operational personnel of the regional body, in the form of a seminar	CINDACTA 3	13/03/12	15/03/12		
4.1.14	Conduct seminar, focusing on aspects related to the transition phase and contingency measures (internal public)	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 4 DO	Designate DO representatives to train the operational personnel of the regional body, in the form of a seminar	CINDACTA 4	20/03/12	22/03/12		
4.1.15	Conduct seminar, focusing on aspects related to the transition phase and contingency measures (internal public)	Train the internal public, especially the ATM, AIS and COM areas	SRPV SP DO	Designate DO representatives to train the operational personnel of the regional body, in the form of a seminar	SRPV SP	27/03/12	29/03/12		
4.1.16	Conduct seminar for users (external public), focusing on aspects related to the transition phase and contingency measures	Train the external public (civil and military users)	SDOP	Designate SDOP representatives to train users, in the form of a seminar	DECEA	02/04/12	02/04/12		
4.1.17	Conduct seminar for users (external public) focusing on aspects related to the transition phase and contingency measures	Train the external public (civil and military users)	SRPV SP DO	Designate DO representatives to train users, in the form of a seminar	Sao Paulo	04/04/12	05/04/12		

STATUS CONTROL: NOT STARTED YET  UNDER WAY  DELAYED  FINALISED 

ITEM	WHAT	WHY	WHO	HOW	WHERE	WHEN		STATUS	REMARKS
						START	END		
MODULE 4 – TRAINING									
4.1	Training related to the national regulations affected by changes resulting from Amendment 1 to the 15 th Edition of ICAO PANS-ATM (Doc 4444)								
4.1.18	Provide specific training, reinforcing operational aspects of the transition phase and contingency measures	Train the internal public, especially the ATM, AIS and COM areas	CINDACTA 1 DO	Designate representatives of the regional body to train the operational personnel, in the form of a seminar	CINDACTA 1	26/06/12	28/06/12		
			CINDACTA 2 DO		CINDACTA 2				
			CINDACTA 3 DO		CINDACTA 3				
			CINDACTA 4 DO		CINDACTA 4				
			SRPVSP DO		SRPV SP				