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

DISCUSSION PAPER

NACC/WG/4 — DP/03
26/03/14

Fourth North American, Central American and Caribbean Working Group Meeting (NACC/WG/4)

Ottawa, Canada, 24 to 28 March 2014

Agenda Item 3: **Follow-up on the progress of the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (NAM/CAR RPBANIP)**
3.3 ANI/WG progress report and other regional group progress reports

ANI/WG AIDC TASK FORCE PROGRESS REPORT

(Presented by the AIDC TF Rapporteur)

EXECUTIVE SUMMARY	
This working paper presents the progress achieved by the AIDC Task Force since its creation in the ANI/WG/01 Meeting. Following the work programme of the Task Force and its deliverables, the note includes a conclusion to be considered by the Meeting.	
Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency • Environmental Protection
References:	• RPBANIP • First NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/1), Mexico City, Mexico, 29 July to 1 August 2013 • AIDC TF teleconferences

1. Introduction

1.1 During the ANI/WG/01 Meeting and based on the ANI/WG ToRs and Work Programme, the Meeting considered the existence of the various existing Ad hoc Groups that were working in support of the implementation working groups, such as the ADS-B Ad hoc Group, the AMHS Implementation Group, etc., and considered necessary to group them under the ANI/WG structure, including any other specific implementation task group, with the aim of providing continuity. In this regard, seven topics that shall be developed through Task Forces under the ANI/WG were identified.

1.2 An initial Terms of Reference (ToRs), preliminary membership and Rapporteurs for each Task Force were agreed in the ANI/WG/01 Meeting. In this regard DECISIÓN ANI/WG/1/3 Terms of Reference, Work Programme and Membership of the ANI/WG Task Forces was formulated.

2. AIDC TF Progress and results

Review of ToR and final workprogramme

2.1 The Terms of Reference of the Task Force was reviewed and approved during the first teleconference on October 29, 2013. These Terms of Reference can be found in Appendix A of this working paper. A tentative work programme was approved on the second teleconference on December 3, 2013, and has been updated to reflect the state of finished and pending tasks. This work programme can be found in Appendix B of this working paper.

2.2 The membership of the task force was modified with the inclusion of Mexico, as a result of an action item from the first teleconference. This proposal was based on the experience of Mexico with AIDC, which they have been using with the United States.

Activities carried out

2.3 There have been four teleconferences held by the Task Force, in which an Ad-hoc group was formed to analyse and propose solutions to the issue of duplicate and erroneous flight plans.

Deliverables and results

2.4 According to the work programme, the most relevant deliverables to be obtained from the Task Force are as follows:

- Update of the AIDC Regional Plan. The CPL-LAM implementation table has been updated to reflect to most recent information regarding readiness of States for AIDC trials. To date, Cuba, Mexico, United States, and Dominican Republic have stated to be ready this year for trials, the first three having implemented AIDC before. This table is included as Appendix C, and will be an ongoing task as States prepare to implement AIDC.
- AIDC Trials and operational activities
    - Evaluation of ICDs and comments for most appropriate ICD to adopt, and final recommendation of ICD Doc. A comparison of the NAM ICD and the CAR/SAM ICD was done, and the differences presented in the table included in Appendix D. It was observed that the differences were not significant, and after discussion the Task Force agreed to adopt the NAM as preferred ICD, but not precluding the use of any other ICD considering the circumstances, as is the APAC (PAN) ICD for oceanic regions.
    - Evaluation-recollection of AIDC requirements from each ATC Unit. States were asked to provide any requirements considered relevant for the implementation of AIDC. This is a pending deliverable.
    - Recommendation and operation suggestions for trials/implementation of AIDC. A Draft Automated Data Exchange Implementation Plan Overview was introduced to the Task Force by the United States, which proposes a list of activities for the successful implementation of AIDC by the States. This document will be discussed and updated and a final version will be put to practice in the scheduled trials and implementation.

- Missing/ duplication of FPLs
  - Recollection of results and lesson learned from FPL solutions carried out in E/CAR, CA and USA-Cuba / Evaluations, results and observations to Rapporteur. The ad-hoc group formed to follow up on the issue of erroneous flight plans presented an analysis of the statistics collected from Cuba, the E/CAR region, COCESNA and Costa Rica, included in Appendix E. In this analysis there are several recommendations, including the formation of an FPL monitoring group to oversee the implementation of mitigation/corrective measures. This monitoring group will be and ad-hoc group of the AIDC Task Force. The remaining details of this monitoring group will be defined at the next AIDC Task Force meeting.
  - Draft Action plan. A draft action plan will be created based on the recommendations of the document mentioned above, to be discussed at the next teleconference. This is a pending task.

DRAFT
CONCLUSION
NACC/WG/4/xx

That the NAM ICD be adopted as the preferred ICD in the CAR region, not precluding the use of other ICDs under circumstances favourable to the latter.

3. Suggested Actions

3.1 The Meeting is invited to:

a) Review and approve the AIDC TF´s Terms of Reference and work programme;
b) Evaluate the progress of the AIDC TF;
c) Update and complete the data of the AIDC Regional Plan;
d) Approve the draft conclusions suggested by the TF; and
e) Propose any other action or task as deemed necessary

4. Discussion

- The discussion was attended by
  - Dan Eaves, United States
  - Marco Vidal, IATA
  - Jorge Chades, United States
  - Julio Mejía, Dominican Republic
  - Orlando Nevot González, Cuba
  - Mauricio Espinoza, Costa Rica
  - Charles Anthony Meade, E/CAR
  - Fernando Cassó, Rapporteur

- FPL error/duplication
  - Working paper 36 was discussed, considering its impact on the issue of duplication and erroneous of flight plans. IATA proposed that the airlines be delegated the task of originating their flight plans, so to reduce duplicates. Cuba explained their case, in which airlines file the flight plan, and the system filters those with errors and rejects them

before they are transmitted to the destination addresses. It was stressed that there should be only one originator, and the flight plan should be acted upon using change (CHG), delay (DLA) and cancel (CNL) messages afterwards. Both IATA and United States expressed favour of testing this method in some States as a form of mitigating duplicates and erroneous flight plans. To this end, there were several actions:

- This Task Force will evaluate the working paper, and especially the sample AIC included within, and discuss how this testing will be done during the next Task Force teleconference on April 9th,
- Distribute a simple, easy to understand guide to the airlines explaining the use of the CHG, DLA and CNL messages when there are variations to the original flight plan, instead of retransmitting it, also to be discussed at the next Task Force teleconference.

- The FPL monitoring group was discussed, clarifying its purpose, which is to report on error situations and follow up on action items in each State regarding the mitigation of flight plan errors. This group will be a branch of the AIDC Task Force, and as such will report progress and any other situations to the Task Force. The consensus on this item was to select an initial membership during this Workgroup meeting, and complete later on, with the approval of the directors, so the following action item was agreed:
  - The meeting is invited to nominate candidates from each State for the FPL monitoring group.
- The use or omission of the alternate aerodrome was also discussed, as presented in working paper 28. There is a contradiction between Document 4444, which does not establish the alternate aerodrome as optional, and Annex 6, which establishes conditions that permit the omission of an alternate aerodrome. Dominican Republic indicated that most systems are constructed using Document 4444 as a base for validation of movement messages, and so enforce the alternate aerodrome. The item for Document 4444 has a double asterisk which indicates that the alternate aerodrome can be optional under regional agreements, so the following draft conclusion was agreed:
  - That there be a regional agreement reached establishing the alternate aerodrome as optional, therefore resolving the conflict between the two documents.

- AIDC
  - United States brought to attention that the term AIDC in practice is applied to the APAC/NAT ICD in particular. The NAM ICD, even though it falls under the category of the ATN application AIDC, for the purpose of avoiding confusion with the APAC/NAT ICD, should be specifically referred to as NAM and not AIDC in pertinent documentation.

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APPENDIX A
TASK FORCE ON AIR TRAFFIC SERVICES INTER-FACILITY DATA COMMUNICATION (AIDC) IMPLEMENTATION
TERMS OF REFERENCE

1. Background

During the first ANI/WG meeting, an AIDC Implementation Task Force was formed in order to streamline related air navigation implementation activities. This Task Force shall complete AIDC implementation in accordance with the Regional AIDC Implementation Plan as well as update and report progress to the ANI/WG based on the action plan for these tasks.

2. Responsibilities

The Task Force is responsible for:

a) Work Programme Management
b) Analyzing and coordinating mitigation/solution actions for duplicate/missing FPLs
c) Coordinating, implementation, and trials for AIDC implementation (Regional Plan)

3. Working Methods

The Task Force will:

a) Present its work programme containing activities in terms of objectives, responsibilities deliverables and timelines
b) Avoid duplicating work within the ANI/WG and maintain close coordination among the existing entities to optimize use of available resources and experience
c) Designate, as necessary, Ad hoc Groups to work on specific topics and activities and organize clearly defined tasks and activities
d) Coordinate tasks to maximize efficiency and reduce costs via electronic means including emails, telephone and teleconference calls, and convene meetings as necessary
e) Report on and coordinate the progress of assigned tasks to the ANI/WG

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TASK FORCE ON AIR TRAFFIC SERVICES INTER-FACILITY DATA COMMUNICATION (AIDC) IMPLEMENTATION WORK PROGRAMME

TASKS	DELIVERABLES	Start Date	End Date	Responsible	Remarks
Review by each Member of ToR and draft work programme	Comments to AIDC TF	28/Oct/13	12/Nov/13	All Members	Completed
Final Review and definition of Work Programme	Comments to ToR and Work Programme to ICAO	12/Nov/13	15/Nov/13	AIDC TF Rapporteur	Completed
Comments to Rapporteur on Regional AIDC Plan	Update of AIDC Region Plan	28/Oct/13	25/Dec/13	AIDC TF Rapporteur	Completed
AIDC Trials and operational activities	Evaluation of ICDs and comments for most appropriate ICD to adopt	29/Oct/13	16/Dec/13	USA/CUBA	Completed
	Final recommendations for adoption of ICD Doc	28/Oct/13	27/Jan/14	All Members	Completed
	Evaluation-recollection of AIDC requirements from each ATC Unit	17/Dec/13	14/Jan/14	All Members	Rescheduled for 21 Feb 2014
	Recommendation and operation suggestions for trials/implementation of AIDC	17/Dec/13	14/Jan/14	All Members	Ongoing
	Testing and implementation procedures	18/Mar/14	30/Abr/14	All Members	
	AIDC trials and implementations carried out	01/May/14	31/Dec/15	All Members	
AIDC TF Meeting	Review progress and TF activities	25/Apr/14	25/Apr/14	AIDC TF Rapporteur- All Members	
Missing/ duplication of FPLs	Recollection of results and lessons learned from FPL solutions carried out in E/CAR, CA and USA-Cuba	29/Oct/13	25/Jan/14	COCESNA, USA, Cuba, Trinidad and Tobago, Dom. Rep.	Completed
	Evaluations, results and observations to Rapporteur	30/Jan/14	30/Jan/14	All Members (or Ad Hoc group)	Completed
	Draft Action plan	31/Jan/14	26/Mar/14	AIDC TF Rapporteur	Ad-Group: 28 Feb 2014
	Approved action plan	9/Apr/14	18/Apr/14	All Members	
	Executed action plan	9/Apr/14	31/Dec/15	All Members	
2nd AIDC TF Teleconf	Follow-up TF activities	3/Dec/13	3/Dec/13	All Members	Completed
3rd AIDC TF Teleconf	Track actions and follow up on activities	17/Jan/14	17/Jan/14	All Members	Completed
4th AIDC TF Teleconf	Track actions and preparation of NACC AIDC TF Meeting	18/Feb/14	18/Feb/14	All Members	Completed
5th AIDC TF Teleconf	Track actions and review for NACC Meeting	March 18 2014	March 18 2014	All Members	
Coordination of progress within TF Members	Inputs to ANI/WG Rapporteur for presentation to NACC/WG/04 Meeting	31/Jan/14	31/Jan/14	AIDC TF Rapporteur	Completed

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APPENDIX B

TASK FORCE ON AIR TRAFFIC SERVICES INTER-FACILITY DATA COMMUNICATION (AIDC) IMPLEMENTATION

AIDC IMPLEMENTATION REGIONAL PLAN

State	1 **Does your current Flight Data Processing System (FDP) have the capacity to process CPL-LAM messages? (Y/N) If not, when will your FDP have this capacity? Indicate date If yes, please indicate FDP model, manufacturer and any relevant equipment information to identify the system.**	2 **Indicate with what adjacent FIR/ATS Unit is the CPL-LAM implementation required:**	3 **Please indicate intended date for CPL-LAM testing and implementation:**	4 **Please provide Point of Contact for further CPL-LAM coordination (name, title, e-mail, phone number)**	5 **If CPL-LAM has been implemented, please provide bilateral agreement(s) for its operation, if applicable (for example ICD document)**	6 **CPL-LAM messages are transmitted through AFTN circuits, what is the current AFTN circuit speed and, if any, upgrade for CPL-LAM implementation:**	7 **Provide comment or concerns for CPL-LAM implementation**
Cuba	yes - Oracle Version 9 modified by LITA-CUBA	FIR Miami	With Miami was started in 15 December 2011. Merida started in 9 March 2012.	Manuel Vega Rodríguez, Operations Management Havana ACC (537) 649-7281 manuelvega@aeronav.ecasa.avianet.cu, Víctor Manuel Machado Sánchez, Operation Management Havana ACC (537)-649-7281, email: victormachado@aeronav.ecasa.avianet.cu	NAM-ICD Version D	19200 BPS	We received many mistakes from the users in the FPL, in almost all fields. We have detected changes in the FPL forwarded by ACC´s or ANSP offices related to FPL´s presented by operators
		FIR Merida					
		FIR Kingston	TBD				
		FIR CENAMER	Segundo semestre del 2014				
		FIR Haiti	TBD				
Dominican Republic	Yes - For mid 2013 yes-TopSky-ATC, Thales ATM	KZMA/Miami ARTCC	Q2 - Ready to test	Julio Cesar Mejia A. Enc. ATM, jmejia@idac.gov.do, 809 274-4322. Ext. 2103 + Fernando Casso,fcasso@idac.gov.do	NAM-ICD Versión D	AMHS: 64 Kbps	
		TJZS/San Juan CERAP	Q2 - Ready to test				
		TNCF/Curazao ACC	Q2 - Ready to test				
		MTEG/Port au Prince ACC	TBD				
Mexico	Yes- FDP=EUROCAT-X.V3 Model, Producer= THALES ATM, INFO= Four Control Centres, all Mexico covered	Central America (COCESNA/CENAMER)	Mexico FDP system available	Ing. Jose de Jesus Jimenez Director de Sistemas Digitales SENEAM/SCT/MÉXICO xxxxx@sct.gob.mx 55 57 86 55 32	NAM-ICD Versión D	19200 bps	Mexico already counts with the implementation of CPL/LAM information exchange between: MZT ≤ ≥ LAX, MZT ≤ ≥ ABQ, MTY ≤ ≥ABQ, MTY ≤ ≥HOU, MID ≤ ≥ HOU, MID ≤ ≥ HAB

APPENDIX B

United States	Yes - The domestic FDP is integrated into the Host Automation / En Route Automation Modernization (ERAM) systems. Lockheed-Martin (LMCO) is the prime contractor for the Host/ERAM system. The flight data function of the San Juan Combined Center / Radar Approach Control (CERAP) is integrated into the Miami Air Route Traffic Control Center (ARTCC) Host/ERAM. Ocean21 provides its own FDP processing in the oceanic environment. LMCO is also the contractor for Ocean21.	Current United States Domestic North American interfaces which have been implemented include: Canada (Seattle ARTCC-Vancouver ACC; Salt Lake ARTCC-Edmonton ACC/Winnipeg ACC; Minneapolis ARTCC-Winnipeg ACC/Toronto ACC; Cleveland ARTCC-Toronto ACC/Mazatlan ACC; Los Angeles ARTCC-Mazatlan ACC Cuba – Miami ARTCC – Havana ACC.ACC; Boston ARTCC-Montreal ACC/Moncton ACC. Mexico – Houston ARTCC-Merida ACC/Monterrey ACC; Albuquerque ARTCC-Monterrey. Class I Miami ARTCC interface with Havana ACC operational.	Future initiatives being evaluated: - Additional NAM ICD Phase II message set enhancements (beyond CPL & LAM) of the Miami ARTCC – Havana ACC interface are being planned airspace/system capabilities for potential interfaces: Cuba Upgrade, Nassau FIR and Santo Domingo FIR tentatively beginning development in 2014. - Analysis of Caribbean and oceanic airspace/system capabilities for potential interfaces.	Dan Eaves, Federal Aviation Administration Air Traffic Control Specialist, Dan.Eaves@FAA.gov, 202-385-8492	NAM-ICD Versión D	US- Mexico: NADIN/AFTN 64 kbps X.25 US- Cuba : MEVA II 19.2 kbps connection to NADIN	None
COCESNA (CENAMER)	FDP System to be upgraded in 2013	Merida, Panama (in the future analyses connection with Havana, kingston, Bogota and Guayaquil)	COCESNA still does not has date for testing and implementation	Juan Carlos Trabanino, Director ACNA, juan.trabanino@cocesna.org, (504) 2234 3360 ext. 1510 Roger Perez (roger.perez@cocesna.org) Mauricio Matus (mauricio matus@cocesna.org) Carlos Carbajal (carlos.carbajal@cocesna.org)	NAM-ICD Version D	N/A (the current AFTN circuit speed is 1.2 kbps internally and 9.6 kbps the internationals)	The ability to process this type of messages will be complete once COCESNA have installed the New Control Centre. The required bandwith must be analyzed prior to the implementation of this type of messages, however, considering only text messages we estimated that the actual bandwith wia AFTN is sufficient.
		Havana					
		Panama					
		Merida					
		Kingston					

		Bogota					
		Guayaquil					
Nassau					NAM-ICD Version D		
Port-au-Prince					NAM-ICD Version D		
PIARCO	Yes. Flight Data Processing Sub-System integrated within the Selex Air Traffic Control Automatic System supplied by SELEX S.I S.p.A.	SANTA MARIA ACC	Currently testing system capability with a goal to implement by 3rd quarter 2014.	Alexis Brathwaite Manager ATS, TTCAA, abrathwaite@caa.gov.tt 1 868 668 8222	NAT ICD	Current AFTN Circuit Speed is 9600 bps	
		NY ARTCC	Currently testing system capability with a goal to implement by 3rd quarter 2014.		NAT CD		
		SAL, French Guyanne, Maiquetia, San Juan	TBD		TBD		
Curacao		Maiquetia ACC		Jacques Lasten, ATS Manager, DC-ANSP, j.lasten@dc-ansp.org			
		Kingston ACC			NAM-ICD Version D		
Costa Rica	No - FDP Server must upgrade	FIR CENAMER	TBD	Fernando Naranjo Elizondo fer_nar_eli@hotmail.com Warren Quirós navegacionaerea.cns@dgac.go.cr +50622314924	NAM-ICD Version D	1200 bps	AIDC may be implemented until the upgrade of El Coco Center
		FIR MANAGUA	TBD				
		FIR PANAMA	TBD				

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APPENDIX D
TASK FORCE ON AIR TRAFFIC SERVICES INTER-FACILITY DATA COMMUNICATION (AIDC) IMPLEMENTATION
NAM ICD AND CAR/SAM ICD COMPARISON TABLE

NAM ICD	CAR/SAM ICD
Changes made through the C/M/U Task Force	Changes made through GREPECAS
Only IFR included, and exchange only between ACCs	No restriction to type of flight, includes terminal and ATFM facilities
Identifies two phases, I and II. Phase II includes FPL, EST, MOD, CHG, CNL, MIS, LRM, IRQ, IRS, TRQ, TRS messages	Includes MOD, MIS, LRM, IRQ, IRS, TRQ, TRS messages
Specifies candidate messages for future use	Does not explicitly define candidate messages
Geographic positions: item d) specifies 2 to 5 characters	Geographic positions: item d) specifies 2 to 3 characters
Altitude can be specified using F, A, S, M	Altitude can only be specified using F, A
Speed can be specified using N, M, K	Speed can be specified using N, M
Facilities Identification based on 7910, with exceptions treated by means of boundary agreements	Facilities Identification based on 7910, with exceptions treated by means of boundary agreements
Field 03, message type, number and reference: exceptions noted in boundary agreements for ATS unit identifiers	Field 03, message type, number and reference: no exceptions to 4 letters for ATS unit identifiers
Field 07: "TTT" prefix for testing	Field 07: "TEST" prefix for testing
Field 09: additional aircraft type designators can be agreed upon between States	Field 09: only as ICAO Doc. 4444
Field 15: no metric information permitted in fields 15a or 15b	Field 15: no metric information permitted in fields 15a or 15b
Field 18: DOF may be sent for CHG, CNL, DLA, DEP and RQS messages but not required, depending on boundary agreements. Indicators other than the ones specified may be used, under boundary agreements.	Field 18: Indicators other than the ones specified in Doc. 4444 may be used.
CHG message requires 13b, 18a	CHG message does not require 13b, 18a
CNL message requires 13b, 18a	CNL message does not require 13b, 18a
Specifies two set of tests to be completed before an interface becomes operational.	Specifies three set of tests to be completed before an interface becomes operational. Specifies a document with test purpose, procedures and data.

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APPENDIX E
TASK FORCE ON AIR TRAFFIC SERVICES INTER-FACILITY DATA COMMUNICATION (AIDC) IMPLEMENTATION
ANALYSIS OF STATISTICS, ERRONEOUS/DUPLICATE FLIGHT PLANS

CORPORACIÓN CENTROAMERICANA DE SERVICIOS DE NAVEGACIÓN AÉREA

Organismo Internacional de Integración Centroamericana

RESUMEN DE LOS ESTUDIOS DE PLANES DE VUELO DUPLICADOS EN LA REGIÓN NAM/CAR

Fecha Edición Original	18 Febrero 2014
Fecha Edición Vigente	18 Febrero 2014
Versión	Final
Ubicación Electrónica	OACI, Cuba, Costa Rica, Trinidad y Tobago, COCESNA

SUMMARY OF STUDIES OF FLIGHT PLANS IN DUPLICATE THE NAM / CAR REGION

INTRODUCTION

This executive summary is based on the Flight Plan problem analysis performed by the States of Cuba , Trinidad & Tobago , Costa Rica and COCESNA .
COCESNA, has made several previous analysis procedures. For this case in particular the analysis included the flight plans throughout the month of December 2013. The results confirmed previous studies and certified the findings made by other states and are summarized below:

PROBLEMS

1. **FPL Duplication**.

- Receiving flight plans for the same operation from both the AIS operators and airlines. These messages have the following characteristics :

· messages of flights with the same information, both AIS operators such as airlines send the same information for an operation.

· messages with different information , information on flight plans AIS operators differ flight plan submitted by the airlines , which are mostly presented differences in the route , aircraft type . Usually the information from the airlines is correct.

- The lack of standardize ATS messages use by AIS operators and airlines, causing that under any change in the flight plan , another flight plan is sent again with the new information (other flight plan) , omitting the use of CNL , DLA and CHG .

2. **Messages rejected by errors in the flight plan format .**

- A high percentage of flight plan messages that are rejected due to infringements of the provisions of Appendix 2, Appendix 3 of the document 4444 " Air Traffic Management " of ICAO concerning the information contained in the flight plan, errors exist in:

a) Inconsistency between fields 10 and 18
b) Problem with the description of aircraft equipment
c) Problem with PBN information
d) Inconsistency between speed and level and type of aircraft
e) Do not declare the ability RVSM
f) Others

In the case of exchange of messages between the flight plan ATC, the updated FPL is not being shared.

3 **. Problems in Automated Systems .**

In addition to the problems listed above, many flight plans remain in correction queue , the main reason is that the ATC system cannot process the flight plans received , mainly due to two factors:

1. Errors in the route filling, causing inconsistency in the route so the system rejects them.
2 . Lack of standardization of databases ATS systems .
Example: In the case of ATS routes defined in ICAO arrival or departure from an aerodrome , it is encrypted 2-7 characters , though several states all have it designated biggest names to 7 characters in these procedures , resulting in each ATC base is placed according to local criteria , defining a name for arrival or departure , different names , each depending on where ATC is configured.

CONCLUSIONS

1. Flight plan duplicity and rejection in ATC systems are the result of various factors on which each of the involve contributes .

2 . AIS carriers are those that cause the most problems .

3 . Flight plans submitted by the airlines present correct and updated information , however they are not following the rules of ATS messages when they delay , change or cancel a flight plan .

4 . Many errors comment on the exchange of information between ATC .

5 . Greatly increased operational workload due to the correction of flight plan messages that are incorrect or are rejected by the ATC systems.

RECOMMENDATIONS

The solution of these problems depend on the joint work of all involved and that sense taken into account the problems listed above and the work done in the region the following are recommended:

1. The creation of a FPL monitoring group, that will identify which and where the errors are committed by the operators AIS is identified, and will continuously report the message originator flight plan on the mistake, providing an opportunity for improvement . This should be an ongoing process that must be permanent.

2. That each State identify the problems of flight plan rejection in its ATC , and identify those that are rejected due to the configuration of the database system , this will identify the data , names, paths, or others who need be updated or changed to comply with ICAO standards and standardize databases.

3. States must update their documents of agreement with their adjacent and include this information in databases, and must publish this information in the appropriate means, so that the information is known by the airlines.

4 . It is necessary to involve the airlines in the process.

5 . It is necessary to implement the AIDC lines between the ATC to ensure correct information sharing and avoid relay flight plans between the ATC .

6. Training is a must for AIS operators and airlines regarding flight plan compliance.

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