

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

List of Contents

| Contents | | Page |
|----------|---|-------|
| Index | | i-1 |
| Histo | rical | ii-1 |
| ii.1 | Place and Date of the Meeting | ii-1 |
| ii.2 | Opening Ceremony | ii-1 |
| ii.3 | Officers of the Meeting | ii-1 |
| ii.4 | Working Languages | ii-2 |
| ii.5 | Schedule and Working Arrangements | ii-2 |
| ii.6 | Agenda | ii-2 |
| ii.7 | Attendance | ii-3 |
| ii.8 | List of Decisions | ii-3 |
| ii.9 | List of Working and Information Papers and Presentations | ii-4 |
| List o | f Participants | iii-1 |
| | Contact Information | iv-1 |
| Agen | da Item 1 | 1-1 |
| | tion of the Provisional Agenda and Schedule | |
| Agen | da Item 2 | 2-1 |
| Joint | Meeting with the ANI/WG AIM Task Force | |
| Agen | da Item 3 | 3-1 |
| NAM | /CAR Pending AIDC Implementation Process | |
| Agen | da Item 4 | 4-1 |
| NACO | Strategic Objectives | |
| Agen | da Item 5 | 5-1 |
| | Implementation Objectives with Respect to the New Version of the Global Air gation Plan (GANP) | |
| Agen | da Item 6 | 6-1 |
| ANI/ | WG AIDC Task Force Regional Work Plan Update | |
| • | da Item 7 r Business | 7-1 |

HISTORICAL

ii.1 Place and Date of the Meeting

The Third NAM/CAR Air Traffic Services Inter-facility Data Communication (AIDC) and North American Interface Control Document (NAM/IDC) Implementation Follow-up Meeting (AIDC/NAM/ICD/3) was held in the ICAO NACC Regional Office in Mexico City, Mexico, from 25 to 28 February 2020.

ii.2 Opening Ceremony

Mr. Julio Siu, Deputy Regional Director of the North American, Central American and Caribbean (NACC) Regional Office of the International Civil Aviation Organization (ICAO) welcomed the participants, highlighting the importance of the AIDC and NAM/IDC and the operational benefits of its implementation.

Mr. Siu indicated last year's results of the 40th Session of the ICAO Assembly on the approval of the Sixth edition of the Global Air navigation Plan (GANP), introducing the evolution of the global air navigation system, support implementation, Basic Building Block (BBB) Aviation System Block Upgrade (ASBU) Global framework, web-based application reports, performance-based approach, performance-based decision making method for defining implementation strategies and the Key Performance Indicator (KPI) Catalogue.

Mr. Siu also stressed the importance of the activities carried out by the NAM/CAR Air Navigation Implementation Working Group AIDC Task Force since the automated protocols NAM/ICD and Air Traffic Services Inter-facility Data Communication (AIDC)/PAC are implementations that support efficiency and increase the capacity of operations in the region, raising situational awareness and operational safety.

Mr. Siu invited all the participants to take an active approach on this implementation, committing to its success and demanding from ICAO all the support and necessary actions for the benefit and positive impact for the States and the region.

Mr. Fernando Cassó, Rapporteur of the AIDC Task Force thanked the support of the TF members for the development of the AIDC implementation and officially opened the meeting.

ii.3 Officers of the Meeting

The AIDC/NAM/ICD/3 Meeting was chaired by the AIDC TF Rapporteur, Fernando Cassó from Dominican Republic. Mrs. Mayda Ávila, Regional Officer, Communications, Navigation and Surveillance of the ICAO NACC Regional Office, served as Secretary of the Meeting.

ii – 2

ii.4 Working Languages

The working language of the Meeting was English. The working papers, information papers and report of the meeting were available to participants in English. The presentations were only available in the language they were presented.

ii.5 Schedule and Working Arrangements

It was agreed that the working hours for the sessions of the meeting would be from 9:00 to 16:00 hours daily with adequate breaks.

| ii.6 | Agenda |
|----------------|---|
| Agenda Item 1: | Adoption of the Provisional Agenda and Schedule |
| Agenda Item 2: | Joint Meeting with the ANI/WG AIM Task Force |
| Agenda Item 3: | NAM/CAR Pending AIDC Implementation Process |
| Agenda Item 4: | NACC Strategic Objectives |
| Agenda Item 5: | AIDC Implementation Objectives with Respect to the New Version of the Global Air Navigation Plan (GANP) |
| Agenda Item 6: | ANI/WG AIDC Task Force Regional Work Plan Update |
| Agenda Item 7: | Other Business |

ii.7 Attendance

The Meeting was attended by 11 States/Territories from the NAM/CAR/SAM Regions, 2 International Organizations and 2 companies from the industry, totalling 30 delegates as indicated in the list of participants.

ii.8 List of Draft Conclusions/Decisions

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

DRAFT

CONCLUSIONS: Activities requiring endorsement by the NAM/CAR Air Navigation Implementation Working Group (ANI/WG).

DRAFT

DECISIONS: Internal activities requiring endorsement by the NAM/CAR Air Navigation Implementation Working Group (ANI/WG).

| Number | Title | Page |
|------------------|---|------|
| Draft Decision | COORDINATE TELECONFERENCES BETWEEN AIRSPACE USERS AND | 2-2 |
| AIDC/NAM/ICD/3/1 | STATE PERSONNEL FOR DISCUSSING AND CORRECTING FLIGHT PLAN | |
| | ERRORS | |
| Draft Conclusion | DEVELOP A WEB PAGE UNDER THE ICAO WEB PAGE DEDICATED TO | 3-1 |
| AIDC/NAM/ICD/3/2 | INFORMATION RELATIVE TO AIDC IMPLEMENTATION | |
| Draft Decision | OBTAIN A LIST OF CONTACTS OF THE RESPONSIBLE ENTITIES FOR | 3-2 |
| AIDC/NAM/ICD/3/3 | AIDC PROTOCOL DEVELOPMENT | |
| Draft Conclusion | STATES' AND INDUSTRY AIDC SUBJECT MATTER EXPERTS CONTACT | 3-3 |
| AIDC/NAM/ICD/3/4 | LIST | |
| Draft Decision | DEVELOPMENT OF AN AIDC TRAINING PROFILE FOR THE NACC | 3-4 |
| AIDC/NAM/ICD/3/5 | REGION | |
| Draft Conclusion | IDENTIFICATION OF ATC AND FLIGHT PLAN SYSTEMS' DIFFICULTIES | 6-1 |
| AIDC/NAM/ICD/3/6 | FOR DATABASE UPDATES | |

ii.9 List of Working and Information Papers and Presentations

Refer to the Meeting web page:

https://www.icao.int/NACC/Pages/meetings-2020-aidc.aspx

AIDC/NAM/ICD/3 Historical

ii – 4

LIST OF WORKING AND PRESENTATIONS

| WORKING PAPERS | | | | |
|----------------|----------------|---|----------|--|
| Number | Agenda Item | Title | Date | Prepared and Presented by |
| WP/01 | 1 | Provisional Agenda and Schedule | 24/02/20 | Secretariat |
| - | | | | |
| WP/02 | 2 | FPL Monitoring Group Data Collection Analysis, 2019-2 | 24/02/20 | FPL Monitoring Group Rapporteur |
| WP/03 | 2 | Flight Plan Errors due to human factors | 24/02/20 | Secretariat. |
| WP/04 | 3 | AIDC Regional Plan Review | 24/02/20 | AIDC Task Force Rapporteur |
| WP/05 | 6 | AIDC Work Programme Review | 24/02/20 | AIDC Task Force Rapporteur |
| WP/06 | 2 | Abstract on the effectiveness of Flight Plans in the MUFH FIR | 24/02/20 | Cuba |
| WP/07 | 2 | Validation of the Flight Plan Format in the ATC System | 24/02/20 | Secretariat |
| WP/08 | 3 | Flight Planning Quality Improvement Initiative in the North American, Central American and Caribbean Region | 25/02/20 | United States |
| WP/09 | 3 | The United States Automated Data Exchange Interface and Cross Border Hand Off within the North American, Central American and Caribbean (NACC) Region – 2020 Update | 26/02/20 | Cuba |
| WP/10 | 3 | AIDC Implementation Process | 26/02/20 | Secretariat |

| Presentations | | | | |
|---------------|----------------|---|--------------------|--|
| Number | Agenda Item | Title | Presented by | |
| 1 | 7 | ATM automation and integration | INDRA | |
| 2 | 7 | FDP Overview | Thales | |
| 3 | 3 | Dominican Republic AIDC Implementation Status | Dominican Republic | |
| 4 | 3 | Flight Planning Quality Improvement Initiative in the North American, Central American and Caribbean Region - Problem Analysis and Resolution of Automated Data Exchange Flight Plan Disparities at Miami ARTCC | United States | |

ii – 5

| Presentations | | | | |
|---------------|----------------|--|---------------------|--|
| Number | Agenda Item | Title | Presented by | |
| 5 | 3 | North American Common Coordination Interface Control Document (NAM ICD) Update - United States Automated Data Exchange Interface and Cross Border Handoff – 2020 | United States | |
| 6 | 3 | AIDC Implementation Experiences | Thales | |
| 7 | 3 | AIDC/NAM Coordination status | COCESNA | |
| 8 | 3 | Action Plan for AIDC implementation | Trinidad and Tobago | |
| 9 | 4 | Global Air Navigation Plan ASBU Framework | Secretariat | |
| 10 | 5 | ASBU Elements - CNS Technology and Other Services | Secretariat | |

LIST OF PARTICIPANTS

COSTA RICA

- 1. Jeffrey Ríos Córdoba
- 2. Asdrubal Sanders Varela
- 3. Warren Quirós Castillo
- 4. Asdrubal Sanders Varela

CUBA

- 5. Yamilaine Mercedes Trujillo Fonseca
- 6. Susana de los Ángeles Orta Alvarez

DOMINICAN REPUBLIC

7. Fernando A. Cassó Rodrígue

EL SALVADOR

8. Luis Roberto Reyes

ΗΑΙΤΙ

- 9. Jean-Claude Pierre
- 10. Ernso Edmond
- 11. Emmanuel Jacques
- 12. Reginald Guignard

HONDURAS

13. Samuel Palma

JAMAICA

- 14. Omar Edwards
- 15. Courtney Malcolm

Μεχιζο

- 16. Daniel Conrado Castañeda Cruz
- 17. Oscar Vargas Antonio
- 18. Margarita Rangel

NICARAGUA

19. Martha Hernández Reyes

TRINIDAD AND TOBAGO

- 20. Kent Ramnarace-Singh
- 21. Andrew Ramkissoon

UNITED STATES

- 22. Rudolph Lawrence
- 23. Dan Eaves

COCESNA

- 24. Jesús Sevilla
- 25. Reybin Sanabria

INDRA

- 26. Rodrigo San Martín Muñoz
- 27. Guillermo Roselló Massa

THALES

- 28. Govind Vekaria
- 29. Pedro Velasco

ICAO

30. Mayda Ávila

AIDC/NAM/ICD/3 List of Participants – Contact Information

iv – 1

CONTACT INFORMATION

| Name / Position | Administration / Organization | Telephone / E-mail | | | |
|--|---|---|--|--|--|
| Costa Rica | | | | | |
| Jeffrey Ríos Córdoba Jefe Centro de Control de Radar AIJS | DGAC | Tel. +506 21069090 E-mail jrios@dgac.go.cr | | | |
| Warren Quirós Castillo Gestor CNS | Dirección General de Aviación Civil | Tel. +1 506 8402-7381 E-mail wquiros@hotmail.com | | | |
| Asdrubal Sanders Varela Supervisor Centro de Control Radar | Dirección General de Aviación Civil | Tel. +50684602828 E-mail asanders@yahoo.c om | | | |
| Asdrubal Sanders Varela Supervisor Centro de Control Radar | Dirección General de Aviación Civil | Tel. +50684602828 E-mail asanders@yahoo.c om | | | |
| | Cuba | 4 | | | |
| Susana de los Ángeles Orta Alvarez Supervisora Técnica Operacional - Especialista Principal | CACSA | Tel. +537 8307619 E-mail susana.orta@cacsa.avianet.cu | | | |
| Yamilaine Mercedes Trujillo Fonseca Especialista ATS | IACC | Tel. 58274397 E-mail yamilaine.trujillo@iacc.avianet.c u | | | |
| | El Salvador | | | | |
| Luis Roberto Reyes Inspector CNS | Autoridad de Aviación Civil | Tel. +1 503 2565-4502 E-mail lreyes@aac.gov.sv | | | |
| | Dominican Republic | 1 | | | |
| Fernando A. Cassó Rodríguez Encargado División Sistemas Radar | Instituto Dominicano de Aviación Civil | Tel. +1-809-274-4322 E-mail fernando.casso@idac.gov.do | | | |
| | Haiti | | | | |
| Ernso Edmond AIS Officer | Office National de l'Aviation Civile (OFNAC) | Tel. 50931486822 E-mail ernsoedmond15@gmail.com | | | |
| Emmanuel Jacques CNS Engineer | National Office of Civil Aviation, OFNAC | Tel. 509 4620 6540 E-mail emmanueljacques@gmail.com | | | |

AIDC/NAM/ICD/3 List of Participants – Contact Information

| Name / Position | Administration / Organization | Telepho | ne / E-mail |
|-----------------------------------|----------------------------------|----------|--------------------------------|
| Reginald Guignard | OFNAC | Tel. | 509 344856665 |
| Assistan Director of Air | | E-mail | |
| Navigation Services | | | reginald.guignard@ofnac.gouv.ł |
| | | t | |
| ean-Claude Pierre | OFNAC | Tel. | +50944944334 |
| AIM Unit Chief | | E-mail | |
| | | | jeanclaude.pierre@ofnac.gouv.h |
| | | t | |
| | Honduras | | |
| Samuel Palma | AHAC | Tel. | +50422342510 |
| Supervisor Nacional CNS | | E-mail | spalma@ahac.gob.hn |
| | Jamaica | <u>.</u> | |
| Omar Edwards | Jamaica Civil Aviation Authority | Tel. | 876 837 6280 |
| Air Traffice Controller | | E-mail | omar.edwards@jcaa.gov.jm |
| | | | e, e, , |
| Courtney Malcolm | Jamaica Civil Aviation Authority | Tel. | +876 960 4640 |
| Unit Manager | | E-mail | courtney.malcolm@jcaa.gov.jm |
| | | | |
| | Mexico | | |
| Oscar Vargas Antonio | AFAC | Tel. | 5557239300 EXT 18071 |
| Subdirector de Comunicaciones | | E-mail | ovargasa@sct.gob.mx |
| Navegación y Vigilancia | | | |
| Margarita Rangel | SENEAM | Tel. | +52 55 5786-5514 |
| Oficial de | | E-mail | magosrangel@hotmail.com |
| operaciones/meteorología | 4540 | | |
| Daniel Conrado Castañeda Cruz | AFAC | Tel. | + 52 55 5723 9300 x.18071 |
| nspector Verificador Aeronáutico | | E-mail | dcastane@sct.gob.mx |
| | Nicaragua | | |
| Martha Hernández Reyes | INAC | Tel. | 505-22768580 Ext. 1580 |
| Inspectora ATM y MET | | E-mail | ats@inac.gob.ni |
| | Trinidad and Tobago | <u> </u> | |
| Andrew Ramkissoon | Trinidad and Tobago Civil | Tel. | 1-868-774-4234 |
| Communication Navigation | Aviation Authority | E-mail | aramkissoon@caa.gov.tt |
| Surveillance Engineer | | | |
| Kent Ramnarace-Singh | Trinidad and Tobago Civil | Tel. | +1 868 668 8222 Ext 2532 |
| Unit Chief Planning and Technical | Aviation Authority | E-mail | krsingh@caa.gov.tt |
| Evaluation | | | |
| | United States | | |
| Dan Eaves | Federal Aviation Administration | Tel. | +1 202 385 8492 |
| Air Traffic Control Specialist | | E-mail | dan.eaves@faa.gov |

iv – 2

AIDC/NAM/ICD/3 List of Participants – Contact Information

| Name / Position | Administration / Organization | Telepho | one / E-mail |
|--|---------------------------------|-----------------------|---|
| Rudolph Lawrence Air Traffic Control Specialist | Federal Aviation Administration | Tel. E-mail | +202 267 0116 rudolph.lawrence@faa.gov |
| | COCESNA | | |
| Reybin Sanabria Tecnico Mantenimiento ACC | COCESNA | Tel. E-mail | 504 22757090 reybin.sanabria@cocesna.org |
| Jesús Sevilla Gestor de Automatizacion ATS | COCESNA | Tel. E-mail | 50422434057 juan.sevilla@cocesna.org |
| | INDRA | | |
| Rodrigo San Martín Muñoz Gerente ATM Internacional | INDRA | Tel. E-mail | +56 996 433 686 rasan@indracompany.com |
| Guillermo Roselló Massa Director ATM | INDRA | Tel. E-mail | +52 1 5514482474 grosello@indracompany.com |
| | Thales | <u>i</u> | |
| Pedro Velasco ATM Project Manager | Thales | Tel. E-mail m | +5255-2122-2890 pedro.velasco@thalesgroup.co |
| Govind Vekaria Design Authority and Safety Manager | Thales | Tel. E-mail com | +44 0 1293 589 736 Govind.vekaria@uk.thalesgroup |
| | ICAO | | |
| Mayda Ávila Regional Officer Communications, Navigation and Surveillance | ICAO NACC Regional Office | Tel. E-mail | +5255 5250 3211 mavila@icao.int |

iv – 3

1.1 The Secretariat presented WP/01 with the draft agenda and schedule of the Third NAM/CAR Air Traffic Services Inter-facility Data Communication (AIDC) and North American Interface Control Document (NAM/IDC) Implementation Follow-up Meeting (AIDC/NAM/ICD/3) and the Chairperson invited the participants of the Meeting to approve them. The participants of the Meeting approved the agenda as presented in the historical section of this report and the schedule as presented in WP/01.

Agenda Item 2 Joint Meeting with the ANI/WG AIM Task Force

2.1 At the beginning of the Meeting, Mexico mentioned that most of the activities done by the Flight Plan (FPL) Monitoring Group are oriented to solve errors for international flights. Local flights are also taken into account. In addition, consequences for those that generate errors in flight plans should be considered. A final suggestion of presenting some examples for the upcoming ICAO NACC Flight plan error mitigation workshop closed the comments of Mexico's representatives, which were all considered positive.

2.2 Under WP/02, the FPL Monitoring Group rapporteur presented statistics from the most recent data gathering, carried out in October 2019. The methodology of how the collection was carried out was explained, and each of the presented graphics was reviewed. Among the conclusions extracted from the information was the significant percentage of errors originated from airspace users, probably because of the increasing practice of States of receiving electronic FPL messages directly from them; also because there is a great need from States to establish communication channels in order to offer errors feedback to the airspace users.

2.3 Another observation was the great number of cases originated by general aviation. United States commented that there are cases when general aviation pilots use third party systems, mostly web-based, to file flight plans with the sole intention of obtaining information such as weather conditions, but without the intention of actually flying.

2.4 Under WP/03, the Secretariat presented information regarding the human factors aspect of flight plan error occurrence. Different flight plan fields were mentioned, along with references to ICAO documents that regulate the syntax and content of the fields. Training was mentioned as a key activity to correct the generation of flight plan inconsistencies due to human error.

2.5 Under WP/07, the Secretariat mentioned several factors that cause flight plan errors, and pointed out that the lack of updating of Aeronautical Message Handling System (AMHS)/flight plan processing systems with data from the Aeronautical information Publication (AIP) or Air traffic services messaging management centre (AMC) can cause problems, as also the lack of updating the Air Traffic Control (ATC) systems' databases and manual management of flight plans. It was also mentioned that flight plan errors have been approached locally by Flight Information Regions (FIRs), but not regionally.

2.6 Under WP/06, Cuba presented statistics of flight plan errors in its FIR, indicating that its main cause of error is the non-compliance with the 2012 flight plan format. It was also mentioned the agreement to a homogenous regional procedure for flight plan processing, and low training as an obstacle to mitigate this issue.

2.7 Cuba offered several suggestions that apply to the different stakeholders: operators, service providers, industry and civil aviation authorities.

2.8 One of the suggestions, the establishment of a specific unit watching or monitoring the service provider dedicated to flight plan validation, spurred an interesting discussion on the requirement of having such a unit. Several documents were mentioned that indicated this responsibility belonging to the Air traffic service Reporting Office (ARO). The fact that the practice of submitting the electronic flight plan message by the airspace users corresponds to the action of submitting a flight plan form, which must be received by the ARO as detailed in Chapter 4 of Doc 4444 was also mentioned.

2.9 United States in P/04 showed how the personnel in Miami Control Centre analysed and solved a significant number of AIDC flight plan related disparities. The project was successful due to, among other things, the commitment of the facility. The issues that were occurring between Miami and Cuba had brought the problem to attention.

2.10 Ineffective practices, such as informing flight crew of errors, were mentioned. Throughout the aforementioned presentation the effective practices were pointed out, summarized as follows:

- 1. To have the right contacts for each airspace user.
- 2. Build good professional relationships with the airspace users.
- 3. Willingness to be persistent and escalate issues in the airspace users' hierarchy.
- 4. Involvement of upper management of the ATS unit.
- 5. Continuous and close, short-term monitoring quality control.

2.11 The FPL rapporteur proposed to use the group to begin implementing the practices, creating this momentum in the group and involving the necessary personnel, through teleconferences with the users and national Air Navigation Services Provider (ANSP) and Civil Aviation Authorities as required. The following decision was made to that end:

| DRAFT DECISION | | | | |
|--|--|--|--|--|
| AIDC/NAM/ICD/3/1 COORDINATE TELECONFERENCES BETWEEN AIRSPACE USERS AND STATE PERSONNEL FOR DISCUSSING AND CORRECTING FLIGHT PLAN ERRORS. | | | | |
| What: | Expected impact: | | | |
| That the FPL Monitoring Group coordinate te the airspace users, with the presence of a considered pertinent (AIM manager, ATM m in order to establish a communication channe the purpose of correcting flight plan errors. | ny local personnel 🖂 Inter-regional nanager, CAA, etc.), 🔲 Economic | | | |
| Why: | | | | |
| Because feedback with the user has proven ef | ffective in the reduction of flight plan errors. | | | |
| When:Determinedfromteleconferencewith group. | Status: 🛛 Valid / 🗆 Superseded / 🗆 Completed | | | |
| Who:States <a>ICAO Other:FPL Monitoring Group and States | | | | |

2-2

Agenda Item 3 NAM/CAR Pending AIDC Implementation Process

3.1 The regional plan was updated by the representatives of the States that attended the Meeting.

3.2 Several States presented their implementation status. During the presentations, ICAO brought to the attention of the Meeting the problem of not having updated and synchronized databases in the region, pointing out that in spite of having had a workshop last year, this problem is still present, and therefore actions should be taken in this respect.

3.3 Under WP/10, the Secretariat presented several factors that States have to take into account for AIDC implementation, with a strong focus on training. The suggested actions of the working paper were agreed upon and one of them was captured in the following decision.

| DRAFT CONCLUSION | | | |
|--|---|-------------------|--|
| AIDC/NAM/ICD/3/2 | | | THE ICAO WEB PAGE DEDICATED O AIDC IMPLEMENTATION. |
| What: | | | Expected impact: |
| information such as less benefits obta training oppo mission information | rtunities; | entation of AIDC, | Political / Global Inter-regional Economic Environmental Operational/Technical |
| | serve as a reference for th ion, and thus ease the pro | | begin or are beginning the process |
| • | 0 to send the design of Comments received till | Status: 🛛 Valid | / □ Superseded / □ Completed |
| Who: 🗆 States 🖂 I | ICAO 🗆 Other: | ICAO | |

3.4 Under P/05, United States presented details of the NAM ICD version E, and mentioned that version F was under development.

3.5 ICAO suggested that ASIA PAC ICD messages be included into the NAM ICD to allow States to implement just that one hybrid protocol which represents a cost reduction to them. United States considers changing protocols as they are prohibitive in terms of cost and capability to their current AIDC project investments already operational and in development.

3.6 ICAO will provide information on AIDC handoff messages and how they work to United States for their consideration and analysis regarding the previous paragraph.

3.7 The issue of vendors updating their systems to include version F was also commented. Thales suggested that States should only request compliance to newer versions of ICD to the suppliers when the ICD are completed and stable. The rapporteur commented that versions should be made backwards compatible as possible, so as not to force States to upgrade new versions as released.

3.8 Under P/06, Thales presented information regarding its experience on AIDC implementation, pointing out issues that it has encountered in the region. In that sense, referring to the upgrading of its software to include NAM, Thales informed that in the process there were doubts on the interpretation of the NAM ICD, but it did not know who to consult on the matter, as it had no points of contact defined for this. This issue is represented in the following decision:

| DRAFT DECIS AIDC/NAM/I | | OF THE RESPONSIBLE ENTITIES FOR |
|---|---|--|
| What: | | Expected impact: |
| entity resp NAM) used a) th dit b) IC | w that is important to obtain a list of contacts for the ponsible of developing the AIDC protocols (ASIA PAC, d in the region, e AIDC Task Force to obtain the point of contact of the ferent NAM/CAR States by 30 May, 2020; and. AO to update and put this information available by 30 ne 2020. | ☑ Inter-regional □ Economic □ Environmental ☑ Operational/Technical |
| | ndustry and States to consult any doubts in the interpolates or changes in these protocols. | retation of the ICDs, and be notified |

| When: | June 30, 2020 | Status: 🗌 Valid / 🗆 Superseded / 🗆 Completed |
|-------|---|--|
| Who: | \Box States $oxtimes$ ICAO $oxtimes$ Other: | AIDC Task Force and ICAO NACC |

3.9 Thales commented that inclusions of optional messages in an ICD are interpreted differently by suppliers and the States. ICAO considered ATC Service Provider (Industry) could have available the onsite software configuration to give the opportunity to States to personalize messages according with their needs. There should be an agreement between vendors and States on this matter.

3-2

4.0 United States commented that PIARCO has reached out to knowledgeable people in their State to do desktop practices before the implementation to see the interoperability issues beforehand. It is imperative to know about the interactions between systems that will take place during the implementation. It would be valuable for each State that has successfully implemented AIDC to be available their lessons learned to those States that are in the process of setting up an interface, could use those information. For this purpose the following decision was agreed:

| DRAFT CONCLUSION | | | | | | |
|---|------------|----------|-----------------|-----------------|-------------|---------|
| AIDC/NAM/ICD/3/4 | STATES' A | ND INDU | STRY | AIDC SUBJECT | MATTER | EXPERTS |
| | CONTACT LI | ST | | | | |
| What: | | | | Expected imp | oact: | |
| Who? to obtain a list of subject matter experts' contacts from | | | Political / 0 | Global | | |
| States that have successfully implemented AIDC, as well as | | | 5 🗌 Inter-regio | onal | | |
| industry, and have this published in the AIDC Task Force website. | | | · 🗆 Economic | 🗆 Economic | | |
| | | | | 🗆 Environme | ental | |
| | | | | Operation | al/Technica | al |
| Why: | | | | | | |
| This will allow States that are implementing AIDC to discuss the necessary topics to take into account for developing the specifications for their systems, as well as to assist with the implementation process. | | | | | | |
| When: June 30, 2020 | | Status: | 🗆 Vali | d / 🗆 Supersede | d / 🗆 Com | pleted |
| Who: 🗌 States 🛛 ICAO 🖂 Ot | her: | AIDC Tas | sk Force | and ICAO NACC | | |

4.1 The interface update implementation status is under **Appendix A** to this report.

4.2 In addition, and in support of the other suggestions in WP/10, the AIDC Task Force Rapporteur considered that these experts could also provide information for the training profile mentioned in that working paper. Hence, the following decision was made:

| DRAFT DECISION AIDC/NAM/ICD/3/5 | DEVELOPMENT OF AN AIDC T REGION | RAINING PROFILE FOR THE NACC |
|---|---|--|
| What: | | Expected impact: |
| implemented AIDC submit sugge AIDC training profile to the AID on their experience of impleme | erts from the States that have estions on a non-system specific C Task Force Rapporteur, based ntation; this proposed profile to ing Group meeting in September | Political / Global Inter-regional Economic Environmental Operational/Technical |
| Why: | | |
| Because AIDC training, apart froe training is an important factor af | | arce in the region, and the lack of |

AIDC/NAM/ICD/3 Report on Agenda Item 3

| When: | August 7, 2020 | Status: 🗆 Valid / 🗆 Superseded / 🗆 Completed |
|-------|--|--|
| Who: | \Box States \Box ICAO $oxtimes$ Other: | AIDC Task Force |

Agenda Item 4 NACC Strategic Objectives

4.1 Under WP/09, the Secretariat provided a quick overview of the 6th edition of the Global Air Navigation Plan (GANP), approved during the last ICAO Assembly held in Montreal, Canada, from 24 September to 4 October 2019. The layered structure was explained, and the GANP portal was displayed to the Meeting for acquaintance.

4.2 The important concept of the Basic Building Blocks (BBB) was explained and presented to the Meeting through the GANP portal, representing the baseline for States subsequent improvement.

4.3 The ASBU framework was explained afterwards, including the main concepts (block, thread, module, element and enabler), the new thread structure, and the relationship between them. The GANP portal was further examined, showing examples of the information regarding some ASBU elements.

4.4 The AIDC Task Force Rapporteur added some explanations regarding the six-step method, and showed participants the AN-SPA tool.

Agenda Item 5 AIDC Implementation Objectives with Respect to the New Version of the Global Air Navigation Plan (GANP)

5.1 Under P/10, the Secretariat offered details of the CNS and technology services thread of the ASBU framework. The modules and elements of each thread were presented in a general view. The correspondence of these modules to the current and projected Task Forces was also reviewed.

5.2 The fact that Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration (FICE), the module that is projected to be developed by the AIDC Task Force, does not have any elements for Block 1, but only AIDC implementation for Block 0 was reviewed. Therefore there are no additional tasks in the short term for the Task Force.

Agenda Item 6 ANI/WG AIDC Task Force Regional Work Plan Update

6.1 Under WP/05, the AIDC Task Force Rapporteur displayed the current work programme, notifying the Meeting that despite the changes in regional objectives expected after analysis and consideration by the upcoming NACC Working Group meeting, for the time being there was no necessary change in the work programme.

6.2 Each item in the work programme was considered, and the decisions and conclusions of other meetings pertaining to the AIDC Task Force were also evaluated. The task of updating the ATC systems' databases was an item referred earlier by the Secretariat. Therefore, in order to go forward with the requirement a decision was reached for States to identify the factors that affect updating ATC systems databases and report them to the Rapporteur in order to address them.

| DRAFT CO | ONCLUSION | | | | | | | |
|--|--|------------------|-------|--|-------------|-----------|------------|----------|
| AIDC/NA | M/ICD/3/6 | IDENTIFICATION | ••• | | | FLIGHT | PLAN | SYSTEMS' |
| | | DIFFICULTIES FOR | DAT | ABASE | UPDAT | ES | | |
| What: | | | | | Expe | ected imp | act: | |
| That States identify and submit to the AIDC Task Force Rapporteur any difficulties encountered with updating the databases of their ATC and flight plan processing systems, in order to evaluate the possible solutions to these difficulties. 1. Each State to provide this information with the actual problems by 30 June 2020. 2. Every time that States find information about it, it will be addressed to the AIDC Task Force. | | | e | olitical / G nter-region conomic nvironmen perationa | nal ntal | cal | | |
| Why: | | | | | | | | |
| | Because differences in ATC and flight plan processing systems are a source of errors that impact AIDC operation. | | | | | | mpact AIDC | |
| When: | June 30, 2020 | Stat | us: | 🗆 Vali | d / □ Si | upersedeo | d / 🗆 Coi | mpleted |
| Who: | $oxtimes$ States \Box ICAO $oxtimes$ Oth | er: State | es an | d AIDC | Task Fo | orce | | |

6.3 The AIDC Task Force Work Programme is under **Appendix B** to this Report.

Agenda Item 7 Other Businesses

7.1 Under P/01, Indra presented its product portfolio, including details of its flight data processor, with respect to flight plan error mitigation, explaining the development of automation, the status of ASBU development, as well as the example of ITEC, a very interesting project of collaboration between entities for the development of automations solutions.

7.2 The different protocols as offered by Indra were presented, as well as challenges and issues encountered by the company, especially the case of optional messages. It was also mentioned that States contract systems without the critical supporting systems, such as connectivity with the adjacent FIR. In this aspect the Task Force rapporteur reminded the Meeting of the ASBU element enablers for the FICE-BO/1 module, and suggested assigning an order of priority to these to avoid these situations.

7.3 COCESNA referred to several situations that occurred during the implementation of its systems and explained lesson learned. The AIDC Task Force Rapporteur suggested that, in line with the decision of having subject matter experts in different FIRs, the test protocols of these FIRs that include representative examples of the flight plans to be expected from them be available for Factory Acceptance Test (FAT) and On site Acceptance Test (SAT) of the systems under implementation, so that these situations may be detected early on in the implementation process.

7.4 Under P/02, Thales presented details of its Flight Data Processor (FDP), providing an overview of the different functions available relevant to AIDC and flight plan processing. Several new functions have been introduced into its software, which were identified. A sample of the different checks done in terms of flight plan validation was viewed.

7.5 Under its presentation, items to take into account for correct operation of the system were offered, in terms of avoiding errors and keeping data up to date.

7.6 Venue and dates for the next meeting will be discussed and agreed by 1 August 2020.

APPENDIX A

Interface Update Implementation

| State/Organization | System | Point of contact | Network Bandwidth | Comments | Milestones/Obstacles |
|--------------------|---|---|---|---|---|
| Bahamas | INDRA AIRCON 2100* | - | - | - | |
| Belize | INDRA AIRCON 2100 | Gilberto Torres | AMHS: 64 Kbps | Has class 2 and 3 | December – meeting in COCESNA January – Training |
| Canada | CAATS GAATS+ (Gander Oceanic) | Troy Wilton Manager, ATM and ACC Automation (613) 248 6915 wiltont@navcanada.ca | - | - | |
| COCESNA | INDRA Aircon 2100 Renovado | Reybin Sanabria (reybin.sanabria@cocesna.org) Jesus Sevilla (juan.sevilla@cocesna.org) | N/A (the current AFTN circuit speed is 1.2 kbps internally and 9.6 kbps the internationals). COCESNA planned to change her AFTN network for a new AMHS network in September 2016 | - | Class 2 next year waiting for Cuba Update of system – waiting for Cuba |
| Costa Rica | No - FDP Server must upgrade – Q1 2017 | Warren Quirós navegacionaerea.cns@dgac.go.cr +50622314924 | AMHS: 64 Kbps | Has class 2 and 3 | December – meeting in COCESNA January – Training |
| Cuba | yes - Oracle Version 9 modified by LITA-CUBA | Joao Vázquez Estrada,email: joao.vazquez@aeronav.avianet.cu | AMHS: 64 Kbps* | 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 | Class 2. Work in progress |

| State/Organization | System | Point of contact | Network Bandwidth | Comments | Milestones/Obstacles |
|---------------------|---|--|-------------------|---|--|
| Curacao | - | Jacques Lasten, ATS Manager, DC-ANSP, j.lasten@dc-ansp.org | AMHS: 64 Kbps | - | |
| Dominican Republic | Yes TopSky-ATC, Thales ATM | Julio Cesar Mejia A. Enc. ATM, jmejia@idac.gov.do, 809 274-4322. Ext. 2103 + Fernando Casso, fernando.casso@idac.gov.do | AMHS: 64 Kbps | - | Signing of phase change agreement - october 2017 Installation of test bed and update operation - September 2018 |
| El Salvador | INDRA Aircon 2100 Renovado | Danilo Ramírez danilo.ramirez@cepa.gob.sv | AMHS: 64 Kbps | - | |
| Guatemala | INDRA Aircon 2100 Renovado | Sergio Raul Enrique senriquez@gmail.com David Ascoli davidascoli@gmail.com | AMHS: 64 Kbps | - | |
| Haiti | - | Nadia Leopold nleopold@hotmail.com | - | - | |
| Jamaica | Thales Topsky In installation | Carl Gaynair – Carl.gaynair@jcaa.gov.jm | 64k | 85% implementation | Training. Verify if NAM is implemented and how. If classes are as should be. Thales Australia |
| Mexico | Yes- FDP=Topsky, Producer= THALES ATM, INFO= Four Control Centres, all Mexico covered | Oscar Vargas Antonio ovargasa@sct.gob.mx | 19200 bps | Mexico already counts with the implementation of CPL/LAM information exchange between: MZT $\leq \geq$ LAX, MZT $\leq \geq$ ABQ, MTY $\leq \geq$ ABQ, MTY $\leq \geq$ \geq HOU, MID $\leq \geq$ HOU, MID $\leq \geq$ HAB | Class 2 not planned in near future |
| Nicaragua | INDRA Aircon 2100 Renovado | Jorge Saballos jsaballos@eaai.com.ni | AMHS: 64 Kbps | Has class 2 and 3 | December – meeting in COCESNA January – Training |
| Trinidad and Tobago | SELEX ATM System | Veronica Ramdath vramdath@caa.gov.tt | 64k | | Approval phase for upgrade Upgrade will be next year. Continue testing phase afterwards. |

| State/Organization | System | Point of contact | Network Bandwidth | Comments | Milestones/Obstacles |
|--------------------|---|---|--|---|---------------------------------|
| United States | Yes - Host Automation / En Route Automation Modernization(ERAM) systems. Lockheed- Martin (LMCO) is the prime contractor for the Host/ERAM system. Ocean21 provides its own FDP processing in the oceanic environment. LMCO is also the contractor for Ocean21. | Dan Eaves, Federal Aviation Administration Air Traffic Control Specialist, Dan.Eaves@FAA.gov, 202-385-8492 | US- Mexico: NADIN/AFTN 64 kbps X.25 US- Cuba : MEVA III 19.2 kbps connection to NADIN | The domestic FDP is integrated into The Host Automation / En Route Automation Modernization (ERAM) systems 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. | Working Class 3 2020 estimated. |

APPENDIX B

AIDC Task Force Work Program Updated 07/03/2020

| - | Task Description | Due Date | Status |
|-------------------------|---|---------------------|--|
| | Update Database Informatio | 'n | I |
| | 1.1 Update ATC systems | To be updated | Valid |
| | 1.2 Update messaging systems | To be updated | Valid |
| | 2 FPL errors | | |
| 2.1 Implement homogene | eous procedure | | |
| | 2.1.1 Develop procedure | | Complete |
| | 2.1.2 send a survey to airlines to determine flight plan processing systems capabilities | | Complete |
| | 2.1.3 send a survey to ANSPs to determine flight plan processing systems capabilities | | Complete |
| | 2.1.4 discuss and agree on the use of ATS messages, in the light of the capabilities of the systems | | Complete |
| | 2.1.5 carry out trials as proof of concept of the regional procedure, by means of bilateral agreements | By State | Valid |
| | 2.1.6 review and publish the addresses to which airspace users should send flight plans, taking into account the capabilities of their systems and in accordance with the regional procedure | By State | Valid |
| | 2.1.7 propose the resulting procedure for flight plan processing, based on the discussed procedure and considering the results of items c) and d) of this decision, to be the regional procedure, and request its publication in Doc 7030 - Regional Supplementary Procedures | To be determined | Valid |
| 2.2 Improve feedback be | tween airlines and ATS units | | |
| | 2.2.1 update the contact list for the 3, in which to include Aeronautical Fixed Telecommunication Network (AFTN)/Aeronautical Message Handling System (AMHS) addresses, e-mail addresses and/or phone numbers for the entity responsible for handling flight plan errors, for uploading to the ANI/WG AIDC Task Force web page (https://www.icao.int/NACC/Pages/reg ional-group-AIDC.aspx) | | On-going – to be considered integrated into future task force web page |

| | sk Description | Due Date | Status | | | | | |
|-----------------------------|--|--------------------------------|--|--|--|--|--|--|
| | 2.2.2 create an ANSPs contact list for, in which to include AFTN/AMHS addresses, email addresses and/or phone numbers for the entity responsible for handling flight plan errors, for uploading to the AIDC Task Force web page, and also update the Aeronautical Information Publication (AIPs) of each State accordingly | | Valid– to be considered integrated into future task force web page | | | | | |
| | 2.2.3 review and recommend the use of the reference of the Rejection Message (REJ/ACK) guidance from Cuba, United States and COCESNA, and for future updates and implementation of flight plan processing systems | To be updated | Valid | | | | | |
| | 2.2.4 create a guidance document for determining which circumstances require a rejection of flight plans and which does not | To be updated | Valid | | | | | |
| | 2.2.5 consider and carry out user teleconferences with the participation of air navigation personnel as deemed necessary | | Superseded by AIDC/NAM/ICD/3 decision | | | | | |
| | 2.2.6 promote and carry out regional user teleconferences to follow up on pertinent issues | | Superseded by AIDC/NAM/ICD/3 decision | | | | | |
| 2.3 Maintenance of aircraft | type database | | | | | | | |
| | 2.3.1 update aircraft type data | To be updated | Valid | | | | | |
| | 2.3.2 develop a procedure to allow timely update of this data | To be updated | Valid | | | | | |
| 3 Implement ATS au | | | 3 Implement ATS automated message exchanges as required (FPL, CPL, CNL, DLA, etc.) | | | | | |
| | 3.1 AIDC implementation class 1-2 | On-going | | | | | | |
| | | | Valid | | | | | |
| 4 li | mplement automated radar handoffs w | | Valid | | | | | |
| 4 lı | , · · | | Valid Valid | | | | | |
| 4 li | mplement automated radar handoffs w | where possible Beginning in | | | | | | |
| 4 li | nplement automated radar handoffs w 4.1 AIDC implementation class 3 | where possible Beginning in | | | | | | |
| 4 | nplement automated radar handoffs w 4.1 AIDC implementation class 3 5 Improve training 5.1 Identify and inform of training needs for the application and implementation of ATS system | where possible Beginning in | Valid Superseded by AIDC/NAM/ICD/3 | | | | | |

| Tas | sk Description | Due Date | Status |
|--|---|---|--|
| CONCLUSION PROJECTAIDC/NAM/ICD/ C/02 | a) the States report to the AIDC Task Force Rapporteur which functionalities have their flight plan treatment systems, which functions they have, how is the parameter processing operator with the new plan format in order to identify operational incompatibilities and weaknesses in the standardization of coordination by 30 November 2019; and, b)the Group Rapporteur prepare an analysis of the provided information by 10 January 2019. | To be updated | Valid |
| DECISIONAIDC/NAM/ICD/ D/02 | That the AIDC Task Force will prepare a proposal on a regional agreement for NAM/CAR States to apply 6 characters for SID and STAR designators, in coordination with the AIM Task Force for opinions and comments, for its presentation in the ANI/WG meeting. | NACC WG Meeting September 2020 | Valid |
| DRAFT CONCLUSIONAIDC/NAM/ ICD/C/01 | That States ensure, in the short- term, the review of their ATC databases and the updating of the information of the different elements with the objective of having the latest information in force and to ensure the homogeneity of the information in the different control centres. | | Superseded – identification of problems in databases |
| DRAFT CONCLUSIONAIDC/NAM/ ICD/C/03 | That the States consult the AIM Task Force cases where the interpretation of ICAO documents related to flight plans that are not sufficiently explicit and clear in order to solve flight plan processing problems, by 30 November 2019 | To coordinate with AIM Task Force | Valid |
| DECISION ANI/WG/5/10 | UPDATING OF THE ANI/WG TASK FORCES REGIONAL PLANS | | Superseded – will be determined by the results of the regional objectives analysis to be presented in NACC WG meeting in September 2020 |
| DECISIONANI/WG/5/11 | ASSESSMENT OF THE REQUIREMENTS FOR THE FREE ROUTE AIRSPACE (FRA) IMPLEMENTATION | | Superseded – will be determined by the results of the regional objectives analysis to be presented in NACC WG meeting in September 2020 |

| Та | sk Description | Due Date | Status |
|----------------|--|--|--------|
| AIDC/NAM/ICD/3 | COORDINATE TELECONFERENCES BETWEEN AIRSPACE USERS AND STATE PERSONNEL FOR DISCUSSING AND CORRECTING FLIGHT PLAN ERRORSDetermined from teleconference with group. | Determined from teleconference with group. | Valid |
| AIDC/NAM/ICD/3 | DEVELOP A WEB PAGE UNDER THE ICAO WEB PAGE DEDICATED TO INFORMATION RELATIVE TO AIDC IMPLEMENTATION | March 13 to send the design of web page. Comments received till March 18. | Valid |
| AIDC/NAM/ICD/3 | OBTAIN A LIST OF CONTACTS OF THE RESPONSIBLE ENTITIES FOR AIDC PROTOCOL DEVELOPMENT | | Valid |
| AIDC/NAM/ICD/3 | STATES' AND INDUSTRY AIDC SUBJECT MATTER EXPERTS CONTACT LIST | May 30, 2020 | Valid |
| AIDC/NAM/ICD/3 | DEVELOPMENT OF AN AIDC TRAINING PROFILE FOR THE NACC REGION | August 7, 2020 | Valid |
| AIDC/NAM/ICD/3 | IDENTIFICATION OF ATC AND FLIGHT PLAN SYSTEMS' DIFFICULTIES FOR DATABASE UPDATES | May 30, 2020 | Valid |
| AIDC/NAM/ICD/3 | Discuss and agree on next meeting date and venue | August 1, 2020 | Valid |

— END —