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HISTORICAL

ii.1 Place and Date of the Meeting

The Third Meeting of the Haiti Civil Aviation Steering Committee (CASC/3) was held at the Karibe Hotel in Pétion Ville, Port-au-Prince, Haiti, on 12 April 2012.

ii.2 Opening and Officers of the Meeting

Capt. Jean-Marc Maurice Flambert, Director General of the Office National de l'Aviation Civile (OFNAC), and Mr. Pierre André Laguerre, Director General of the Autorité Aéroportuaire Nationale (AAN), arrived late due to required presidential duties. Mr. Jacques Boursiquot of OFNAC was designated to welcome the delegations, provide introductory remarks and serve as Chairman of the meeting with the support of Mr. Ernst Renaud, Director of Operations of AAN. Mrs. Loretta Martin, Regional Director of the North American, Central American and Caribbean (NACC) Regional Office of the International Civil Aviation Organization (ICAO), served as Secretary with the assistance of Mr. Michiel Vreedenburgh, Deputy Regional Director, and Mr. Julio Garriga, Regional Officer Technical Cooperation, also of the ICAO NACC Regional Office. Mr. Peter Noad, Deputy Director of the Technical Cooperation Bureau, and Mr. Juan Lamosa, Regional Coordinator for the Americas of the Implementation Support and Development – Security Section, ICAO Headquarters, were also in attendance.

ii.3 Meeting Agenda

- 1. Haiti civil aviation status and development
- 2. ICAO update
- 3. World Bank/ICAO Project briefing
- 4. State/Organization updates on other assistance projects
- 5. Action Plan update
- 6. Next steps
- 7. Any other business

Information on the CASC is available at:

http://www.mexico.icao.int/RegionalGroups/HaitiCASC.html

Confidential documents access: username: haiticasc; password: caschaiti01

ii.4 Attendance

The meeting was attended by 27 participants representing Haiti (OFNAC, AAN, CNM, MTPTC); United States (FAA, TSA); IATA; IDB; MINUSTAH; OAS; World Bank and ICAO, as detailed in the following List of Participants.

LIST OF PARTICIPANTS

HAITI

Jean Marc Flambert Wesner Excelhomme Arnold Franck Bouchard Théramène Joseph Laurent Dumas Jacques Boursiquot Marc Paulemon Yves André Cesar Jean-Gérald Azor Aïsha Flambert Gardere Ronald Semelfort Pierre André Laguerre Charles-Irénée Altidor Ernst Renaud Guy Exantus Wilson Edouard

UNITED STATES

Kimberly Fowler Elizabeth Neal Larry Mizell

IADB

Michel Vallée

IATA

Jeff Miller

MINUSTAH

Hiran Ferrera Marco Lopez Mazariegos Francisco Rouillon Aza King

OAS

Catherine Pognat

WORLD BANK

Nora Weisskopf

ICAO SECRETARIAT

Loretta Martin Peter Noad Michiel Vreedenburgh Juan Lamosa Julio Garriga

LIST OF PARTICIPANTS

Name / Position	Administration / Organization	Telephone / E-mail				
HAITI						
Jean Marc Flambert Directeur General de l'Aviation Civile	Office National de l'Aviation Civile (OFNAC)	Tel. + 509 3702 7707 E-mail jmflambert@ofnac.aero; jm.flambert1@gmail.com;				
Wesner Excelhomme	Office National de l'Aviation	Tel. + 509 4494 0046				
Director of Air Navigation	Civile (OFNAC)	E-mail				
Arnold Franck Directeur du Transport Aérien	Office National de l'Aviation Civile (OFNAC)	Tel. + 509 3457 2239 / 4494 0041 E-mail franck.arnold123@gmail.com				
Bouchard Théramène	Office National de l'Aviation	Tel. + 509 3425 0505				
Directeur de la Sûreté Aérienne	Civile (OFNAC)	E-mail btheramene@hotmail.com				
Joseph Laurent Dumas Directeur de l'Exploitation Aérienne	Office National de l'Aviation Civile (OFNAC)	Tel. + 509 4494 0045 E-mail ljdumas.hcaa@yahoo.com				
Jacques Boursiquot	Office National de l'Aviation	Tel. + 509 4494 0047				
ICAO Coordinator	Civile (OFNAC)	E-mail jacboursiquot@yahoo.com				
Marc Paulemon	Office National de l'Aviation	Tel. + 509 4494 0043				
Technical Adviser	Civile (OFNAC)	E-mail marcpaulemon@yahoo.com				
Yves André Cesar	Office National de l'Aviation	Tel. + 509 3880 6737				
Technical Advisor	Civile (OFNAC)	E-mail yacesar@hotmail.com				
Jean-Gérald Azor	Office National de l'Aviation	Tel. + 509 4494 0042				
Conseiller Financier	Civile (OFNAC)	E-mail azorjeangerald@gmail				
Aïsha Flambert Gardere	Office National de l'Aviation	Tel. + 509 3478 6767 / 4494 0008				
Legal Advisor	Civile (OFNAC)	E-mail aishaflambert@gmail.com				
Ronald Semelfort	Centre National de Météorologie,	Tel. + 509 3733 2885				
Directeur	Haiti	E-mail ronasem@yahoo.fr				
Pierre André Laguerre	Autorité Aéroportuaire Nationale	Tel. + 509 3448 6865 3360 0646				
Directeur Général	(AAN) Haiti	E-mail laguerrepierreandre@yahoo.com				
Charles-Irénée Altidor	Autorité Aéroportuaire Nationale	Tel. + 509 3453 5257 / 3698 7249				
Directeur Financier	(AAN) Haiti	E-mail chireneealtidor@yahoo.fr				
Ernst Renaud	Autorité Aéroportuaire Nationale	Tel. + 509 3453 5257 / 3698 7249				
Operations Manager	(AAN) Haiti	E-mail ernstrenaud@gmail.com				
Guy Exantus Consultant Technique	UCE-MTPTC	Tel.: + 509 3441 1269 E-mail guyexantus@yahoo.com				

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Name / Position	Administration / Organization	Telephone / E-mail
Wilson Edouard Responsable Technique	UCE-MTPTC	Tel.: +509 3458 9923 E-mail willedouard53@yahoo.fr
	UNITED STATES	<u>.</u>
Kimberly Fowler Foreign Affairs Specialist	Federal Aviation Administration	Tel.+ 202-385-8902E-mailKimberly.Fowler@faa.gov
Elizabeth Neal International Analyst	Transportation Security Administration (TSA), USA	Tel.+ 571-227-3656E-mailElizabeth.neal@dhs.gov
Larry Mizell TSA Attache	Transportation Security Administration (TSA), Nassau, The Bahamas	Tel. + 804 867-7221 (Mobile) +571 227-2186 (Office)
INTE	ERAMERICAN DEVELOPMENT	BANK (IAB)
Michel Vallée Sr. Transport Specialist	Interamerican Development Bank, Haiti	Tel. + 509-2812-5007 E-mail valleem@iadb.org
	IATA	<u>.</u>
Jeff Miller Assistant Director, Safety, Operations & Infrastructure, North America & North Atlantic	IATA, USA	Tel. + 305 7798-9867 E-mail millerj@iata.org
	MINUSTAH	
Hiran Ferrera Chief Aviation Officer	United Nations Organization (MINUSTAH), Haiti	Tel. + 509 3702-9033 / 2229-6700 Ext. 6581 E-mail ferrera@un.org
Marco López Mazariegos Chief Aviation Safety Officer	MINUSTAH, Honduras	Tel. + 50931701117 E-mail lopezmazariegos@un.org
Francisco Rouillon Chief Integrated Support Services	MINUSTAH, Haiti	Tel. + 509-3702-9057 E-mail rouillon@un.org
Aza King Aviation Safety	United Nations Organization (MINUSTAH), Haiti	Tel. + 50937516445 E-mail kinga@un.org
	Organization of American States	(OAS)
Catherine Pognat Senior Program Coordinator	Organization of American States, Haiti	Tel. + 509-3702-2624 E-mail cpognat@oas.org
	World Bank	
Nora Weisskopf Air Transport Specialist	The World Bank Washington D. C. U.S.A.	Tel. +12028348575 E-mail nweisskopf@worldbank.org

Name / Position	Administration / Organization	Telephone / E-mail				
ICAO						
Loretta Martin Regional Director	North American, Central American and Caribbean Office	Tel. + 52 55 5250 3211 E-mail icaonacc@icao.int				
Peter James Noad Deputy Director	ICAO Technical Cooperation Bureau	Tel. + 514 954 8066 E-mail pnoad@icao.int				
Michiel Vreedenburgh Deputy Regional Director	North American, Central American and Caribbean Office	Tel.+ 52 55 5250 3211E-mailmvreedenburgh@icao.int				
Juan Lamosa Regional Coordinator - the Americas Implementation Support and Development Section	ICAO Aviation Security Branch	Tel. + 1-514-954-8219 (6654) E-mail jlamosa@icao.int				
Julio Garriga Regional Officer, Technical Cooperation	North American, Central American and Caribbean Office	Tel. + 52 55 5250 3211 E-mail jgarriga@icao.int				

Report on Agenda Item 1 Haiti Civil Aviation Status and Development

1.1 Haiti provided an update on the status of civil aviation and development (**Appendix A**), which reflected some change since the previous briefing provided at the CASC/2 Meeting in January 2012. However, the CASC once again noted with concern the limited progress since the conclusion of the emergency response and recovery phase during the months following the earthquake disaster.

1.2 Noteworthy Government of Haiti developments were reported as follows:

- Introduction of international air passenger departure tax to fund aviation development
- Recruitment of Air Traffic Controllers for OFNAC
- Ongoing Cap Haïtien Airport Improvement (including DVOR/DME and air-ground communications system) and Secondary Surveillance Radar (SSR) Project
- On-going passenger terminal building rehabilitation
- Planned Air Traffic Control Tower (ATCT) rehabilitation and equipment

Report on Agenda Item 2 ICAO update

2.1 The summary update on the situation in Haiti provided by the Secretary General to the ICAO Council in February 2012 is presented in **Appendix B**.

2.2 ICAO provided a presentation, which guided deliberations and is presented in **Appendix C**.

Report on Agenda Item 3 World Bank/ICAO Project Briefing

3.1 The World Bank "Haiti Civil Aviation Sector Infrastructure and Institution Emergency Recovery Grant" Project, which the MTPTC has contracted ICAO professional services, had commenced with the evaluation mission completed in February 2012 and the preliminary report submitted to the World Bank, MTPTC and OFNAC in March 2012. The evaluation confirmed all existing equipment included in the project scope needed to be replaced. The resulting preliminary recommendations are presented in the following table:

1

Equipment/Facility Description	Estimated Cost (USD)	Priority	
New VHF air-ground radio communication equipment for ACC and APP in "Tete-Etang" remote station	1,050,000	1a	
New Radios for the ATC Tower	140,000	1a	
New Voice Communication Switching System (VCSS) with Consoles for the ACC and the ACT Tower	350,000	1a	
New Instrument Landing System (ILS), Glide Path (GP) / DME and Localizer (LLZ) stations (Runway 10)	1,500,000	1b	
New DVOR and DME/Port-au-Prince Intl. Airport for terminal and enroute services.	1,300,000	1a	
New DVOR and DME/OBLEON Station for enroute service	1,230,000	1b	
New Category I Precision Approach Lighting System (Runway 10)	700,000	1a	
New Precision Approach Path Indicators (PAPI) Runway 28	150,000	1a	
New Precision Approach Path Indicators (PAPI) Runway 10	150,000	1a	
Improvement to Runway End Safety Area (RESA) 28 (west runway end)	350,000	1b	
Improvement to Runway Strip	125,000	1c	
ATM Training	TBD	1a	
TOTAL COST (USD)		7,045,000 + ATM Training	

3.2 The World Bank had discussed the preliminary recommendations with OFNAC and a possible increase of the previous USD 3 million budget with MTPTC. Three funding and associated revised project scope scenarios were developed and presented as follows:

Proposed Air Transport Components Under Different Funding Scenarios

I - US\$3 Million

- New VHF air-ground radio communication equipment for ACC and APP in "Tete-Etang" remote station (\$1,050,000)
- New DVOR and DME/Port-au-Prince Intl. Airport for terminal and en-route services (\$1,300,000)
- New Radios for the ATC Tower (\$ 140,000)
- New Voice Communication Switching System (VCSS) with Consoles for the ACC and the ACT Tower (\$350,000)
- New Precision Approach Path Indicators (PAPI) Runway 28 (\$150,000)
- New Precision Approach Path Indicators (PAPI) Runway 10 (\$150,000)

Total cost: \$3,140,000

II - US\$5 Million

- All of the above items for \$3,140,000 plus:
 - New Instrument Landing System (ILS), Glide Path (GP)/DME and Localizer (LLZ) stations (Runway 10) (\$1,500,000)
 - New Category I Precision Approach Lighting System (Runway 10) (\$700,000)

Total cost: \$ 5,340,000

III - US\$7 Million

- All of the above items for \$5,340,000 plus:
 - New DVOR and DME/OBLEON Station for en-route service (\$1,230,000)
 - Improvement to Runway End Safety Area (RESA) 28 (west runway end) (\$350,000)
 - Improvement to Runway Strip (\$125,000)

Total cost: US\$7,045,000

3.3 The World Bank informed that the USD 5 million budget was considered to be the most likely scenario. Notwithstanding, if there were savings in actual costs from the procurement tenders for any scenario, then additional items could be considered. If this were the case, the new DVOR/DME OBLEON Station for en-route services would be the highest priority of the USD 7 million items. However, the World Bank also informed that due to insufficient budget, the funding of Air Traffic Management (ATM) and other air navigation training was deleted from the project scope.

3.4 In relation to the procurement mechanism, OFNAC recommended that the World Bank consider the ICAO procurement mechanism, Civil Aviation Purchasing Service (CAPS), which had been presented by ICAO at the CASC/2 Meeting. The mechanism provides a transparent process, is not-for-profit, provides lower costs, ensures quality and compliance with ICAO standards and speedier implementation due to its framework with pre-selected suppliers and established process.

Report on Agenda Item 4 State/Organization Updates on Other Assistance Projects

4.1 The progress on the following completed, on-going, and planned projects was reported by the meeting participants:

United States

Federal Aviation Administration (FAA)

- Donation of mobile air traffic control tower only agreement signing pending
- Training at FAA Academy pending formal request by OFNAC
- Civil works by SouthComm (New Horizons) pending clarification of process to request specific assistance

Transportation Security Administration (TSA)

- Aviation Security Sustainability International Standards Team (ASSIST) Agreement - ongoing
- In collaboration with Canada, aviation security training and development of manuals and procedures on-going
- Seeking SouthComm funding for perimeter security upgrading pending
- MTPP Airport assessment and air carrier inspection completed February 2012
- TSA Southcomm meeting defined phased requirements list March 2012
- MTCH Airport assessment planned August 2012

Inter-American Development Bank (IDB)

- Aviation security training and development of manuals and procedures (IATA) ongoing
- Procurement of two AVSEC X-ray equipment (MIF/AAN) on-going
- Runway rehabilitation design and tender documents (Louis Berger) completed
- Airport Master Plan update (Aéroports de Paris Designers and Planners ADPi) cancelled
- Air Traffic Control Tower Study (ADPi) cancelled
- OFNAC and AAN to propose alternative studies in lieu of those cancelled pending formal request

International Air Transport Association (IATA)

- Development of RNAV/RNP procedures pending formal request by OFNAC
- Aviation professional training for courses at the Miami regional office pending formal request by AAN
- Air transport economic study being revised on-going
- Other assistance that can be provided by member airlines to be considered upon request by OFNAC and AAN

United Nations Stabilization Mission in Haiti (MINUSTAH)

- Airport perimeter road and barrier completed
- EOD coverage on-going
- Training on-going
- Will consider requests from GoH for additional assistance (e.g., AWOS, vehicles) pending formal request from OFNAC and AAN

Organization of American States (OAS) / Inter-American Committee against Terrorism (CICTE)

- OAS/CICTE National and Regional AVSEC Courses on-going
- Scholarships for participation in ICAO AVSEC training courses and workshops ongoing

Caribbean Aviation Safety and Security Oversight System (CASSOS)

- Caribbean Airport Certification Process Technical Assistance Study (USTDA project) AOM, AEP and SMS manuals on-going
- Technical assistance for safety oversight, action plan, and plastic licensing system on-going

Report on Agenda Item 5 Action Plan Update

5.1 ICAO presented the Haiti Civil Aviation Development Action Plan, which had been updated following the ICAO/World Bank project evaluation mission undertaken in February 2012. The Meeting reviewed the Action Plan, and the revised version is presented in **Appendix D** to this report.

Report on Agenda Item 6 Next Steps

6.1

The Meeting discussed the next steps and agreed upon the following:

- ICAO/World Bank project on-going expedite procurement
- MTPTC, AAN and Donors to consider ICAO Procurement Mechanism Civil Aviation Purchasing Service (CAPS) transparent process, ensure quality, lower cost, quicker implementation
- GoH acceptance of ICAO Technical Cooperation project documents
- GoH formal requests to MINUSTAH (MOU materials reimbursement waiver, vehicles, AWOS, civil works, RFFS), United States FAA (ATC training), IDB (studies), IATA (procedures)
- ICAO follow-up with WMO (AWOS), GoH/MINUSTAH, GoH/IDB (studies), IATA/WB (economic study)
- ICAO to develop proposed AVSEC assistance coordination mechanism
- Tentative ICAO AVSEC survey mission
- Next CASC meeting July/August 2012

Report on Agenda Item 7 Any Other Business

7.1 Given the provision of AVSEC assistance by multiple donors including Canada, United States, ICAO, IDB, MINUSTAH, and OAS (CICTE), the Meeting established an Ad hoc group to discuss coordination between the States and Organizations to avoid duplication of assistance and to identify any gaps and potential providers to fill those gaps. The Ad hoc group meeting was attended by representatives of United States (TSA), IATA, ICAO, MINUSTAH, OAS, and OFNAC. The participants agreed that the scope of assistance includes site evaluations and the provision of advice, training, documentation and equipment. The participants also recalled the following agreement of the second meeting of the ICAO/LACAC NAM/CAR/SAM AVSEC/FAL/RG:

CONCLUSION 1/6 COORDINATION BETWEEN ORGANIZATIONS PROVIDING AVSEC ASSISTANCE TO STATES

Organizations and development agencies providing AVSEC assistance to States are urged to improve coordination to avoid the duplication of assistance provided and thereby ensure an efficient use of resources to achieve the most effective provision of assistance for the benefit of States to meet their requirements.

7.2 The Ad hoc meeting participants agreed to share information from their respective administrations/organizations on AVSEC assistance requested by and provided to Haiti on items such as evaluation reports, subject to any confidentiality restrictions. ICAO committed to develop and circulate a proposed mechanism for sharing this information to the donors participating in the Ad hoc meeting for comment. ICAO will also contact the other donors who were not present at the meeting, namely Canada and IDB, to invite them to participate in the coordination; OFNAC concurred with the agreed actions.

THIRD MEETING OF THE HAITI CIVIL AVIATION STEERING COMMITTEE (CASC) APPENDIX A

HAITI CIVIL AVIATION DEVELOPMENT ACTION PLAN

New developmentsProject status

New developments

- Mission of ICAO experts 27- 29 February 2012 to provide
 - An assessment of the air navigation infrastructure
 - Prepare technical specifications for new equipment facilities
- Preliminary mission report submitted to OFNAC and AAN for review and consideration
- New PRODOCs submitted to OFNAC and AAN to establish a framework for the different projects

- ATC Tower Toussaint Louverture airport
 - Priority 1
 - Cost estimate 700 000 USD
 - Improvement of the existing control tower in the wake of the airport terminal rehabilitation. Structure to be rebuilt by the same construction companies working at the airport terminal. OFNAC to provide equipment inside tower.
 - Phased to be completed in 2012

- New VHF Air-Ground radio communication
 - Priority 1
 - Site assessment performed on existing facilities and equipment located in Tete Etang remote station and in OFNAC technical room and decision was made for replacement including the need for a Voice Communication Switching System (VCCS)
 - Technical specifications provided
 - Cost estimate 1050 000 USD + 350 000 USD= 1400 000 USD

- New DVOR/ DME for Toussaint Louverture airport
 - Priority 1
 - Site assessment and technical specifications provided. Decision was made for a replacement by a DVOR/DME to support terminal and en route operations.
 - Cost estimate: 1300 000 USD

- New DVOR/ DME Obleon
 - Priority 2
 - Site assessment and technical specifications provided. Decision was made for a replacement by a DVOR/DME to support en route operations.
 - Cost estimate: 1250 000 USD

- New CAT 1 Precision Approach Lighting System
 - Priority 1
 - Site survey performed and technical specifications available. This system is a required complement to the ILS /DME.
 - Transfer of responsibility to AAN for operation and maintenance is recommended as for other visual aids
 - Cost estimate: 700 000 USD

- New DVOR/DME CAP-Haitien
 International airport
 - Priority 1
 - Project included in the Government loan
 BANDES package. Preliminary negotiations
 with equipment providers
 - Cost estimate: 1000000 USD

- New Instrument landing system ILS/DME rwy 10 Toussaint Louverture airport
 - Priority 1
 - Site assessment performed. Equipment obsolete. New equipment recommended. Technical specifications available.
 - Cost estimate: 1500 000 USD

- ATM training
 - Priority 1
 - Preliminary report of ATM expert regarding human resources planning. Process engaged to recruit air traffic controllers. Further discussions required. IATA to provide assistance for the review and development of terminal procedures
 - Cost estimate; 3000 000 USD

- Backup power supply for existing ACC and navaids
 - Priority 1
 - Site assessment performed and technical specifications elaborated
 - Cost estimate: 500000 USD

- Aeronautical Information Management Office
 - Priority 1
 - Cost estimate: 350 000 USD

- Projects with priority 2
 - Aeronautical charts with NEW WGS 84 survey and publication- Cost estimate: 750 000USD
 - WIFS workstations Cost estimate: 60 000USD
 - Equipped SAR regional Coordination center.
 Cost estimate : 1000 000 USD
 - Updating of AVSEC and FAL legal framwork
 - Cost estimate: 150 000 USD

- Priority 2
 - Surveillance system for the Haitian airspace
 - Cost estimate: 4000 000 USD (Govt loan BANDES package)
 - New ACC collocated with new tower
 - Cost estimate : 6000 000 USD

• Priority 3

Runway visual range Toussaint Louverture airport Cost estimate: 200 000 USD

- Wind shear detection equipment Toussaint
 Louverture airport Cost estimate: 200 000
 USD
- MEVA vsat node at Cap Haitian 150 000 USD

HAITIAVIATION STEERING COMMITTEE (CASC) PLAN

UN GRAND MERCI

CASC/3 Meeeting PAP HAITI 04/12/12

THIRD MEETING OF THE HAITI CIVIL AVIATION STEERING COMMITTEE (CASC) APPENDIX B



INTERNATIONAL CIVIL AVIATION ORGANIZATION NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN REGIONAL OFFICE

UPDATE ON THE SITUATION IN HAITI

February 2012

Following the devastating earthquake that occurred in Haiti on 12 January 2010, a decision was taken by the ICAO Council to develop a technical cooperation project for the reconstruction of the civil aviation sector in Haiti and encourage voluntary contributions from Member States, financial institutions and the aviation industry. In this regard, the Secretary General designated the ICAO North American, Central American and Caribbean (NACC) Regional Office as the focal point for all ICAO assistance and support activities in Haiti.

This briefing provides an update on the situation in Haiti since the last report posted on the ICAO Council website in October 2011 and provides developments and next steps resulting from the multi-disciplinary technical mission conducted from 24 to 28 October 2011, and the Haiti Civil Aviation Steering Committee (CASC/2) Meeting held on 18 January 2012.

Developments since 1 October 2011:

- A multi-disciplinary technical team of air navigation, aerodrome, aviation security and technical cooperation experts from the ICAO NACC Regional Office carried out a mission to Haiti. The visit included meetings with l'Autorité Aéroportuaire Nationale (AAN), Centre National de Météorologie (CNM), Ministère des Travaux Publics, Transports et Communications (MTPTC), United Nations Stabilization Mission in Haiti (MINUSTAH) and World Food Programme (WFP). The team visited Toussaint Louverture International Airport (MTPP) and Cap Haïtien International Airport (MTCH), which included the air navigation, movement area and passenger terminal facilities.
 - Observed improvements included repair of the perimeter barrier and construction of a perimeter road by MINUSTAH, restoration of electrical power to airport facilities and equipment, provision of security equipment and training by the United States Transportation Security Administration (TSA), and provision of temporary passenger processing facilities with the support of American Airlines.
 - Deterioration observed in the areas of critical air navigation aids, communications and movement area surfaces. ATS incidents continue, AIS, MET, and fire-fighting and rescue services are deficient, including emergency response preparedness and coordination.
 - March 2010 ICAO post-earthquake assessment updated
 - o Haiti Civil Aviation Development Action Plan updated
 - o ICAO Technical Cooperation Project Documents updated
- The Second Meeting of the Haiti Civil Aviation Steering Committee (CASC/2) was held in Port-au-Prince, Haiti, on 18 January 2012.
- Noteworthy development observed with the Government of Haiti (GoH) rehabilitation project for the existing Port-au-Prince passenger terminal building since the October 2011 technical mission.

THIRD MEETING OF THE HAITI CIVIL AVIATION STEERING COMMITTEE (CASC) - B2 -

- GoH informed that they were considering modifications to the Cap Haïtien International Airport Improvement and Radar Project, currently financed by a USD30 million loan provided by the BANDES Bank of Venezuela to the Government of Haiti.
- Progress was reported to the CASC on the following completed and on-going State/Organization assistance projects:

United States Projects - Transportation Security Administration (TSA)

- Provision of equipment completed
- In collaboration with Transport Canada, aviation security training and development of manuals and procedures – on-going

Inter-American Development Bank (IDB) Projects

- o Aviation security training and development of manuals and procedures (IATA) on-going
- Some funding for procurement of AVSEC equipment (Multilateral Investment Fund MIF) ongoing
- o Runway rehabilitation design and tender documents (Louis Berger) completed

United Nations Stabilization Mission in Haiti (MINUSTAH)

- Airport perimeter road and barrier completed
- Provision of EOD coverage on-going

Organization of American States (OAS) / Inter-American Committee against Terrorism (CICTE)

- o Scholarships for participation in ICAO AVSEC training courses and workshops on-going
- ICAO presented the Haiti Civil Aviation Development Action Plan, which was reviewed and revised by the Meeting.
- On 5 October 2011, the contract between the MTPTC and ICAO for the World Bank "Haiti Civil Aviation Sector Infrastructure and Institution Emergency Recovery Grant" project was signed. Project start delayed due to internal WB and GoH processes.
- On 8 February 2012, ICAO Secretary General and the Director General of OFNAC signed an ICAO CAPS agreement.
- ICAO deployed consultants to start ICAO/WB Project on 27 February 2012.

Next Steps:

- ICAO/World Bank Project
- ICAO update Technical Cooperation project documents for review and acceptance by Government of Haiti
- GoH invite private sector proposals and ICAO assist in reviewing for strategic and technical due diligence
- GoH/ICAO to jointly lobby potential donors
- Donors to consider ICAO Procurement Mechanism Civil Aviation Purchasing Service (CAPS)
- Next CASC meeting 12 April 2012

Haiti CASC Web Site - http://www.mexico.icao.int/RegionalGroups/HaitiCASC.html - confidential documents access - username: haiticasc; password: caschaiti01.

THIRD MEETING OF THE HAITI CIVIL AVIATION STEERING COMMITTEE (CASC) APPENDIX C

International Civil Aviation Organization



Third Haiti Civil Aviation Steering Committee Meeting (CASC/3) Haiti Civil Aviation Development

International Civil Aviation Organization

Port-au-Prince, Haiti, 12 April 2012

ICAO Update Since CASC/2 Meeting (January 2012)





- OFNAC signed Civil Aviation Purchasing Service (CAPS) agreement with ICAO – 8 February 2012
- ICAO updated Technical Cooperation project documents (PRODOCs) for review by OFNAC and AAN and acceptance by GoH
 - 23 March 2012
 - ★ Results of ICAO Follow-up Mission (October 2011)
 - Updated Haiti Civil Aviation Development Action Plan (January 2012)
 - ★ Revised total cost estimate: OFNAC USD \$33M, AAN USD \$197M
- World Bank "Haiti Civil Aviation Sector Infrastructure and Institution Emergency Recovery Grant" project with ICAO services Evaluation Mission: 27 – 29 February 2012
 - A Preliminary Report: 9 March 2012

World Bank/ICAO Assistance



★ World Bank "Haiti Civil Aviation Sector Infrastructure and Institution Emergency Recovery Grant"

🖈 Project scope:

Runway 10 Instrument Landing System (ILS)

★ 2 DVOR/DMEs (MTPP and Obleon)

VHF air-ground radio communications system

Runway 10 CAT I Approach Lighting System (ALS)

World Bank/ICAO Project





🖈 Project scope

- Precision Approach Path Indicator (PAPI) lights
- **West Runway End Safety Area (RESA) and RWY strip**
- Air Traffic Management (ATM) training plan

🖈 Status

ICAO evaluation mission completed in February 2012
 ICAO preliminary report submitted to Haiti/WB
 Technical specifications in preparation
 ATM Training Plan in preparation

World Bank / ICAO Project Evaluation Mission (Feb 2012)



- Assessment of the following: VHF Air-Ground Radio Communication Equipment for ACC and APP in Tête Étang Remote Station
 - Existing VOR/DMEs: Port-au-Prince International Airport and OBLEON
 - Instrument Landing System/DME CAT I for Port-au-Prince International Airport Runway 10
 - Runway strip, Runway End Safety Areas (RESA), PAPI lights, and Runway 10 approach lighting system

World Bank / ICAO Project Evaluation Mission Determinations



The air navigation/communications equipment was determined to be in poor working condition and should be replaced

The runway strip and west RESA need to be graded, and both PAPI systems should be replaced due to poor working condition

★ Installation of an abbreviated approach lighting system inside the airport property was recommended due to a power line perpendicular to the runway centreline and a cemetery across the road from the airport

Training is needed in the Air Traffic Management field for technical personnel and any other field required for the operation and maintenance of air navigation systems

World Bank / ICAO Project Preliminary Recommendations





Equipment/Facility Description	Estimated Costs (USD)	Priority
New VHF air-ground radio communication equipment for ACC and APP in "Tete-Etang" remote station	1,050,000	1a
New Radios for the ATC Tower	140,000	1a
New Voice Communication Switching System (VCSS) with Consoles for the ACC and the ACT Tower	350,000	1a
New Instrument Landing System (ILS), Glide Path (GP) / DME and Localizer (LLZ) stations (Runway 10)	1,500,000	1b
New DVOR and DME/Port-au-Prince Intl. Airport for terminal and enroute services.	1,300,000	1a
New DVOR and DME/OBLEON Station for enroute service	1,230,000	1b
New Category I Precision Approach Lighting System (Runway 10)	700,000	1a
New Precision Approach Path Indicators (PAPI) Runway 28	150,000	1a
New Precision Approach Path Indicators (PAPI) Runway 10	150,000	1a
Improvement to Runway End Safety Area (RESA) 28 (west runway end)	350,000	1b
Improvement to Runway Strip	125,000	1c
ATM Training	TBD	1a
TOTAL - C7 -	7,045,000 + ATM Training	

World Bank/ICAO Project





🖈 Next Steps

- **WB** increase budget and select items within budget limit
- ICAO submit evaluation and technical specifications report

ATLA

Haiti/WB to provide comments on report and proceed with procurement process

★ GoH/WB to consider ICAO Procurement Mechanism - Civil Aviation Purchasing Service (CAPS) – transparent process, ensure quality, lower cost, quicker implementation

Haiti Government Projects





- Recruitment of Air Traffic Controllers ongoing
 AWOS installation pending
- Cap Haitien Airport upgrade and new Secondary Surveillance Radar (SSR) - (GoH/BANDES loan) – ongoing
 - Cap Haïtien Airport Improvement (including DVOR/DME & air-ground communications system) and Radar Project financed by a USD 30+ million Government loan
- Passenger terminal building rehabilitation (MTPTC) ongoing
- Air Traffic Control Tower (ATCT) rehabilitation and equipment (MTPTC) pending

Donor Assistance Offers





States Organisations Dominican Republic France Vinited States ★ FAA *TIDB* **MINUSTAH AOAS/CICTE World Bank**

United States Projects





Federal Aviation Administration (FAA)

Donation of mobile air traffic control tower – only agreement signing pending

***** Training at FAA Academy - pending

Civil works by SouthComm (New Horizons) – pending

United States Projects





Transportation Security Administration (TSA)

- Aviation Security Sustainability International Standards Team (ASSIST) Agreement
- In collaboration with Canada, aviation security training and development of manuals and procedures ongoing
- Seeking SouthComm funding for perimeter security upgrading - pending
- MTPP Airport assessment and air carrier inspection completed February 2012
- TSA Southcomm meeting phased requirements list March 2012
- **MTCH Airport assessment planned August 2012**

Inter-American Development Bank (IDB) Projects



- Aviation security training and development of manuals and procedures (IATA) – ongoing
- Procurement of two AVSEC X-ray equipment (MIF/AAN) ongoing
- Runway rehabilitation design and tender documents (Louis Berger) - completed
- Airport Master Plan update (Aéroports de Paris Designers and Planners - ADPi) - cancelled
 Air Traffic Control Tower Study (ADPi) – cancelled
- *****OFNAC and AAN to propose alternative studies pending

International Air Transport Association (IATA) Projects



Aviation professional training for courses at the Miami regional office - pending

Air transport economic study - ongoing

Other assistance that can be provided by member airlines to be considered upon request

Other Projects

#United Nations Stabilization Mission in Haiti (MINUSTAH)

- **Airport perimeter road and barrier completed**
- ★ EOD coverage ongoing
- ★ Training ongoing
- ★ Will consider requests from GoH for additional assistance (e.g. AWOS, vehicles)

 Organization of American States (OAS) / Inter-American Committee against Terrorism (CICTE)
 OAS/CICTE National and Regional AVSEC Courses - ongoing
 Scholarships for participation in ICAO AVSEC training courses and workshops - ongoing



Other Projects





Dominican Republic - pending Air Traffic Control Officer (ATCO) training Facilities for other organization training France - pending Available funding for projects through IDB Assistance from DGAC France upon request Airports Council International (ACI) - cancelled Airport professional training Airport equipment

Updated Action Plan (April 2012)



Priority 1

Air Navigation Services (FIR and aerodromes)

VHF air-ground communications systems including VCSS and ATCT radios (2) – MTPP - WB (1), MTCH - Haiti (1)

DVOR/DME (3) – MTPP & OBLEON – MTPP - WB (1), MTCH -Haiti (1), OBLEON - ?

Automatic Weather Observation Systems (AWOS) – WMO
 Aeronautical Information Management (AIM) Office
 Personnel recruitment and training – Haiti, US, Dom. Rep., etc.

Updated Action Plan (April 2012)



Priority 1

Port-au-Prince International Airport
 Refurbishment of Passenger terminal facilities - MTPTC
 Refurbishment of Air traffic control tower - MTPTC
 Back-up power for ACC
 Instrument Landing System (ILS) - WB
 Approach Lighting System (ALS) – WB
 Precision Approach Path Indicator (PAPI) lights - WB
 West Runway End Safety Area (RESA) and runway strip

Updated Action Plan (April 2012)



Priority 1 Port-au-Prince International Airport (continued)

- ***** Runway, taxiway, apron pavement, lights, signs
- Rescue and fire fighting services (RFFS) personal protection equipment (PPE), water replenishment and emergency communications system/equipment
- AVSEC equipment IDB, Haiti AIS Office

Priority 2
 OFNAC and AAN operations equipment and vehicles
 New Air Traffic Control Tower and Area Control Centre (ACC)
 New passenger terminal complex

Tentative ICAO AVSEC Survey Mission



- Evaluation of State implementation of Annex 17 provisions for the purpose of determining assistance needs - no USAP audit yet
- Consider existing assistance projects to determine if any gaps remain
- **★**Expected results:
 - Development of State Improvement Plan (SIP)
 Close gaps in the existing security programmes
 Strengthen the overall AVSEC regime
 Establish specific assistance activities
 - ***** Remove duplication of assistance activities







- ICAO/World Bank project ongoing expedite procurement
- MTPTC, AAN and Donors to consider ICAO Procurement Mechanism -Civil Aviation Purchasing Service (CAPS) – transparent process, ensure quality, lower cost, quicker implementation
- **GoH** acceptance of ICAO Technical Cooperation project documents
- GoH formal requests to MINUSTAH (MOU waiver, vehicles, AWOS, civil works, RFFS), United States FAA (ATC training), IDB (studies), IATA (procedures)
- ICAO follow-up with WMO (AWOS), GoH/MINUSTAH, GoH/IDB (studies), IATA/WB (economic study)
- ICAO to develop proposed AVSEC assistance coordination mechanism
- Tentative ICAO AVSEC survey mission
 Next CASC meeting July/August 2012

Haiti CASC web site





http://www.mexico.icao.int/RegionalGroups/HaitiCASC.html Confidential documents access susername: haiticasc password: caschaiti01





Haiti Civil Aviation Steering Committee (CASC)





INTERNATIONAL CIVIL AVIATION ORGANIZATION HAITIAN CIVIL AVIATION DEVELOPMENT ACTION PLAN

(Rev. 12 April 2012)

No.	Item Description	tem Description Haiti	Donor State /	Donor State / Organization	Cost	Phasing for Completion		
INO.	item Description	Organization	(Status)	(1, 2, 3)	Estimate (USD)	2012	2013	2014 - 2015
1	New temporary Air Traffic Control Tower (TWR) or improvement of existing mobile TWR ¹	OFNAC	MTPTC / AAN / OFNAC (planned)	1	700,000	Х		
2	New VHF air-ground radio communication equipment for ACC and APP in "Tete Etang" remote station ² , radios for ATC tower and VCSS	OFNAC	World Bank (planned)	1	1,540,000	х		
3	AMHS/ AFTN system including new FPL infrastructure, software and training ³	OFNAC	MTPTC / OFNAC (planned)	1	500,000	Х		
4	Back-up power Supply for existing ACC (and Navaids) until new facilities and systems become operational ⁴	OFNAC		1	500,000	Х		
5	New DVOR and DME/Port-au-Prince Intl. Airport for terminal and enroute services ⁵	OFNAC	World Bank (planned)	1	1,300,000	х		
6	Improve Aeronautical Information Management (AIM) Office, including a NOTAM Office, with the necessary facilities, equipment, training, communications, procedures, sufficient personnel, etc. and airport AIS office	OFNAC		1	350,000	Х		
7	New Runway 10 Category 1 Approach Lighting System	OFNAC / AAN	World Bank (planned)	1	700,000	Х		

¹ Improvements should include relocation for better visibility, communications, direct connection to commercial power supply, site preparation and measurements for severe weather conditions. ² This item includes redundant radio link, hot-standby radio transceivers for four frequencies to implement services (PAP APP, emergency, 2 PAP ACC)

with remote control/monitoring system, antennae, antennae tower, redundant power supply, grounding and lightning protection and shelter.

Item includes central system, user terminals, Web server, New flight Plan format compliance and network interfaces. It also includes training and documentation

⁴ This item includes remote control and monitoring features available from the Equipment Room.

⁵ This item includes shelter, power supply system, air conditioning, grounding and lightning protection, and devices for remote operational status information (for PAP TWR and PAP ACC) as well as remote control unit for the Technical Equipment Room. It should also include flight commissioning, on-site training, documentation and installation activities.

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No.	o. Item Description	Haifi		1 1 2 3 1	Cost Estimate	Phasing for Completion		
110.					(USD)	2012	2013	2014 - 2015
8	Upgrade primary and provide secondary power supply systems with required switch-over times for critical airport systems and lights	AAN	AAN (completed)	1	400,000	x		
9	New PAPI lights for both runways and systems calibration	AAN	World Bank (planned)	1	300,000	X		
10	RFFS personnel protection equipment (75), fire proximity suits (12), self contained breathing apparatus (SCBA - 12) and air compressor for SCBA	AAN	MINUSTAH (possible)	1	750,000	x		
11	Improve west Runway End Safety Area (RESAs) and improve runway strip	AAN	MINUSTAH (possible) US SouthComm (possible)	1	475,000	x		
12	Temporary passenger processing facility including equipment and furniture	AAN	MTPTC / AAN (ongoing)	1	12,000,000	X		
13	Communication system linking the fire station with the TWR and rescue and fire fighting vehicles, to be integrated into the ACC Voice Switching System	AAN	MINUSTAH (possible)	1	250,000	x		
14	New Apron flood lighting	AAN		1	220,000	X		
15	Two perpendicular link taxiways between apron sides to runway	AAN		1	5,000,000	X		
16	Repair runway and taxiway surface, rehabilitation of apron pavement, and replace taxiway and apron edge lights and electrical connections.	AAN		1	5,000,000	x		
17	Replace and repair existing AVSEC equipment and provide maintenance. Provide EOD capability including equipment and training	AAN	U.S. TSA, MINUSTAH, IDB/AAN (part)	1	1,000,000	x		
18	New DVOR and DME/OBLEON Station for enroute service ⁶	OFNAC	World Bank (possible)	1	1,230,000	x		

⁶ Item includes shelter, redundant power supply system, air conditioning, grounding and lightning protection, and devices for remote information of operational status for PAP ACC as well as remote control unit for Technical Equipment Room. It should also include flight commissioning, on-site training, documentation and installation activities.

- D3 -

NI.	Ham Description	Haiti	Donor State / Prio	Priority	Cost Estimate (USD)	Phasing for Completion		
No.	Item Description	Organization	Organization (Status)	(1, 2, 3)		2012	2013	2014 - 2015
19	New Instrument Landing System (ILS), Glide Path (GP) / DME and Localizer (LLZ) stations (Runway 10) ⁷	OFNAC	World Bank (planned)	1	1,500,000	x		
20	Automatic Weather Observation System (AWOS) at Port-au- Prince Airport	CNM	WMO (pending installation), MINUSTAH (planned)	1	200,000	Х		
21	Illuminated signs for the movement area	AAN		1	500,000	Х		
22	New DVOR and DME/Cap Haïtien Intl. Airport for terminal and enroute services ⁸	OFNAC	Government Loan BANDES (planned)	1	1,000,000	x		
23	New VHF air-ground radio communication equipment at "Vegie" remote station for PAP ACC and APP, and for Cap Haïtien TWR ⁹	OFNAC	Government Loan BANDES (planned)	1	500,000	x		
24	Training of professionals (air traffic controllers, technicians and operators) and the development of procedures and manuals for air navigation services	OFNAC	Dominican Republic, U.S. FAA (possible)	1	3,000,000	X	х	
25	Training of airport professionals; development of procedures and manuals for airport operations and maintenance	AAN	U.S. TSA, Canada, IDB, OAS, ICAO, MINUSTAH, IATA, CASSOS / USTDA	1	3,000,000	x	Х	
26	New Air Traffic Control Tower (TWR) ¹⁰ (collocated with new ACC)	OFNAC		1	5,000,000			Х
27	New passenger terminal building including apron expansion, link taxiways, public access roads and vehicle parking areas	AAN		1	200 million			X

⁷ Item includes shelter, redundant power supply system, grounding and lightning protection and devices for remote operational status information for PAP TWR as well as remote control unit for Technical Equipment Room. It should also include flight commissioning, on-site training, documentation and installation activities.

⁸ This item includes shelter, power supply system, air conditioning, grounding and lightning protection and devices for remote operational status information (for Cap Haïtien TWR and PAP ACC), as well as remote control unit for Technical Equipment Room. It should also include flight commissioning, on-site training, documentation and installation activities.

⁹ This item includes redundant radio link, hot-standby radio transceivers for five frequencies to implement services (emergency, 2 PAP ACC, PAP APP and Cap Haïtien TWR) with remote control/monitoring system, antennae, antennae tower, redundant power supply, grounding and lightning protections, and shelter.

¹⁰ This item includes structural cabling infrastructure, redundant power supply, grounding and lightning protection, TWR accessories, and equipment related to provision of air traffic control (ATC) services detailed in section "Proposed Equipment and Systems for TWR, ACC and Associated Facilities" (Attachment).

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No.	Itom Decemination	Haiti	Donor State /	Priority	Cost	Phasing for Completion		
INO.	Item Description	Organization	Organization (Status)	(1, 2, 3)	Estimate (USD)	2012	2013	2014 - 2015
28	8 vehicles for OFNAC to access its facilities and perform maintenance and inspections	OFNAC	MINUSTAH (possible)	2	325,000	х		
29	Develop Aeronautical charts including a new WGS-84 Survey and publication considering the geoid undulation (EGM96) for THRs coordinates in the AIP and implementation of e- TOD	OFNAC		2	750,000	X		
30	10 airport operations, maintenance and security vehicles, vehicle and equipment spare parts, and security communications equipment	AAN	MINUSTAH (possible)	2	425,000	X		
31	Pavement sweeper for runway, taxiways and apron to maintain surfaces free of debris	AAN		2	200,000	x		
32	Provision of wire on top of perimeter wall and secure perimeter drainage system	AAN	U.S. Southcomm (wire only)	2	100,000	х		
33	Upgrading of movement area drainage system	AAN	MINUSTAH (possible)	2	800,000	Х		
34	Upgrade perimeter security road and provision of partial length internal perimeter security fencing	AAN	MINUSTAH (completed)	2	11,000,000	x		
35	WIFS workstation and new NOAAnet workstation ¹¹	OFNAC/CNM		2	60,000	X		
36	Rubber removal and runway friction measurement equipment	AAN		2	200,000	Х		
37	Airport perimeter security lighting including power supply in guard posts	AAN	MINUSTAH (possible)	2	800,000	х		
38	Upgrade water supply and fire hydrant system	AAN		2	500,000	Х		
39	Wind shear detection equipment at Port-au- Prince runway end	OFNAC/CNM		2	200,000	X		
40	Cap Haïtien Intl. Airport upgrading and expansion	AAN	Government Loan BANDES (ongoing)	2	30,000,000	X	Х	

¹¹ This communications system will change on 30 June 2012, to the WAFS Internet File Server (WIFS), which will use the Internet to transmit all WAFS products to all States in the CAR/SAM Regions. Therefore, for this item only a good workstation and a fast Internet connection are required, which will lower the cost.

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N.		Haiti	Donor State /	Priority	Priority Cost	Phasing for Completion		
No.	Item Description	Organization	Organization (Status)	(1, 2, 3)	Estimate (USD)	2012	2013	2014 - 2015
41	Equipped Search and Rescue (SAR) Regional Coordination Centre (RCC)	OFNAC	MINUSTAH (possible)	2	1,000,000		Х	
42	Updating of National Civil Aviation Security Programme, quality control, training, contingency, airport security and facilitation programmes	OFNAC	IDB (part)	2	150,000		х	
43	Rehabilitate Runway 10/28 and taxiway pavement and upgrade airfield ground lighting (AGL)	AAN		2	18,000,000		Х	
44	New RFFS Station to provide direct access to runway and comply with required response times	AAN	MINUSTAH (possible)	2	1,500,000		х	
45	Surveillance system that may be, according to study, a Wide Area Multilateration System (WAM) with ADS-B capability receivers or a 2-channel Monopulse Secondary Surveillance Radar (MSSR) station with double motor and double encoder configuration ¹²	OFNAC	Government Loan BANDES (ongoing)	2	4,000,000		Х	
46	New Area Control Centre (ACC) building (collocated with new TWR) ¹³	OFNAC		2	6,000,000			Х
47	Runway visual range (RVR) at Port-au-Prince Intl. Airport	OFNAC/CNM		3	200,000	Х		
48	Security CCTV System for perimeter, aprons and boundary facilities with a CCTV Control Centre	AAN		3	3,000,000	х		
49	MEVA VSAT node at Cap Haïtien ¹⁴	OFNAC		3	150,000		X	
50	Parallel taxiway (could be phased with initial partial length to west runway end) and rapid exit taxiway	AAN		3	20,000,000			х

 ¹² MSSR item includes site preparation, radome, radar tower, radio link to communicate signal, parrot to be located at PAP, redundant power supply and lightning and electric protection, grounding, flight commissioning, installation, documentation and training.
 ¹³ Item includes structural cabling infrastructure, redundant power, grounding and lightning protection and equipment for provision of air navigation services (ANS) as detailed in section "Proposed Equipment and Systems for TWR, ACC and Associated Facilities" (Attachment). This item also includes hardware/software MEVA node expansion, transferring the existing MEVA VSAT station to new ACC, and integration of the circuits into the VCSS.
 ¹⁴ Item includes redundant power supply and electric/ lightning protection.

ATTACHMENT

PROPOSED EQUIPMENT AND SYSTEMS FOR NEW PAP ATC TWR, ACC AND ASSOCIATED FACILITIES

1. New PAP TWR Control Room

- ATC consoles for four positions (Aerodrome, Ground, Clearance Delivery and Supervisor)
- VHF air-ground radio communication system, including primary and back-up equipment for TWR and back-up APP (hot-standby radio transceivers for four frequencies to implement: PAP TWR, emergency, PAP APP, surface movement/general purpose)
- Back-up ground-ground communication system
- Voice Communication Switching System (VCSS) (this may be part of the ACC VCSS)
- Other radio communication systems
- Display of Automated Weather Observation System (AWOS)
- Navaid status display
- ATC devices, including light gun, binoculars, etc.
- Crash alarm system
- Time information displays
- Flight plan processing system position (strip printer and computer)
- Air traffic display
- AMHS terminal equipment
- Other auxiliary communication equipment and devices

2. New PAP ACC Control Room

- ATC consoles for ACC and APP functions (Cap Haïtien will be an APP Sector) including air traffic displays, VCSS touch screens, flight plan displays, flight plan strip printers, MET/AIS positions, etc.
- The ATC system will have Cap Haïtien as a remote sector as well as remote radar displays in PAP and CAP TWRs for which the necessary communications means are to be included
- VHF air-ground radio communication system, including primary and back-up for APP and ACC (hot-standby radio transceivers for four frequencies to implement PAP APP, emergency, 2 PAP ACC)
- Back-up ground-ground communication system
- Navaid status panel for APP control position
- Time information displays
- AMHS terminal equipment
- ATC operational supervisor position
- Other auxiliary communication equipment and devices

3. Technical Room of the ACC and TWR

- Voice Communication Switching System (VCSS) and voice recorder for TWR/APP/ACC
- Automated System: flight data processors (FDP), surveillance data processors (SDP) with enough capacity to include radar feeds from adjacent FIRs (Dominican Republic, Cuba, etc.) and ADS-B and multilateration feeds, data recording
- VHF air-ground radios for TWR, APP and ACC functions, including interface system linked to the remote VHF stations
- Radio link system with "Tete Etang" and other VHF remote stations and surveillance remote stations
- Central automated ATC flight plan processing equipment
- Ground-ground central system, including interface linked with national airports
- Common clock for time distribution system
- ILS and VOR/DME remote control / status system
- AMHS central system, including Web server and network interfaces
- MEVA VSAT station for international and Cap Haïtien aeronautical telecommunication
- Cable interconnection and patch panel modules
- Other communication and ATC auxiliary systems
- Electric, grounding and lightning protection system

4. **Power Supply Rooms**

- UPS True On-line units for power supply of the central equipment of Technical Room with capacity for autonomous service
- Acid-seal battery set
- Electric generators
- Other auxiliary equipment

5. Monitoring and Control System

- Surveillance, radio, navaid, UPS and other electronic monitoring displays
- ATC technical supervisor position
- Personal computers
- Interconnection and distribution system
- Other auxiliary equipment and devices