



Caribbean Regional Air Transport Connectivity Project - Haiti (P170907)

LATIN AMERICA AND CARIBBEAN | Haiti | Transport Global Practice |
IBRD/IDA | Investment Project Financing | FY 2020 | Seq No: 2 | ARCHIVED on 29-Mar-2021 | ISR45900 |

Implementing Agencies: Central Execution Unit of the Ministry of Public Works (UCE), Republic of Haiti

Key Dates

Key Project Dates

Bank Approval Date: 28-May-2020

Effectiveness Date: 27-Aug-2020

Planned Mid Term Review Date: --

Actual Mid-Term Review Date:

Original Closing Date: 30-Jun-2026

Revised Closing Date: 30-Jun-2026

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The objectives of the Project (PDO) are to: (i) improve operational safety and navigation efficiency of air transport in the Recipient's territory; and (ii) increase the climate and disaster resilience of associated infrastructure at the Recipient's international airports.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components Table

Name

Component 1– PAP and CAP operational safety and navigation efficiency investments:(Cost \$58.00 M)

Component 2–PAP and CAP airfield drainage system improvements:(Cost \$14.00 M)

Component 3 – Institutional strengthening & Project Management:(Cost \$12.00 M)

Component 4 – Contingent Emergency Response

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

Implementation Status and Key Decisions

The Project was approved on May 28, 2020. The Financing Agreement was signed on June 29, 2020, and was declared effective on August 27, 2020. The Project Implementation Unit expects to launch the procurement process for the *Assistance à Maîtrise d'Ouvrage* in Q2 2021.



Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	High	High	High
Macroeconomic	Moderate	Moderate	Moderate
Sector Strategies and Policies	Moderate	Moderate	Moderate
Technical Design of Project or Program	Moderate	Moderate	Moderate
Institutional Capacity for Implementation and Sustainability	Substantial	Substantial	Substantial
Fiduciary	Substantial	Substantial	Substantial
Environment and Social	Moderate	Moderate	Moderate
Stakeholders	Moderate	Moderate	Moderate
Other	--	--	--
Overall	Substantial	Substantial	Substantial

Results

PDO Indicators by Objectives / Outcomes

Improve operational safety and navigation efficiency of air transport				
► Targeted upgrade of air navigation systems achieved at CAP and PAP (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Non-precision navigation system: No VSAT or ADS-B	Non-precision navigation system: No VSAT or ADS-B	Non-precision navigation system: No VSAT or ADS-B	Electronic navigation system in place (ADS-B implemented and operational)
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	Haiti currently has a non-precision navigation system (instruments) and is the only CATCOP participating country without an electronic navigation system. The project seeks to upgrade the navigation system by implementing Automatic Dependent Surveillance-Broadcast for Haiti's international airports (PAP and CAP), [including receiver antenna(s), consoles for each ATCT, and equipping Haiti-based aircraft], allowing continuous aircraft position reports and improving situational awareness for air traffic controllers and pilots.			
► PAP and CAP runways in compliance with ICAO SARPs (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jan-2026



Comments: The indicator measures implementation of the Runway End Safety Areas (RESAs) at PAP and rehabilitation of the CAP runway, including (a) milling and repaving the full length of the runway; and (b) installation of Airfield Ground Lighting (AGL) for the runway. Construction of ICAO-required Runway End Safety Areas (RESAs) for both PAP runway ends would improve operational safety and comply with ICAO SARPs. Rehabilitation of the CAP runway will help comply with ICAO SARPs for runway pavement conditions.

► Average Runway Occupancy Time (ROT) of airplanes at PAP (Minutes, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	7.50	7.50	7.50	5.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026

Comments: ROT means the amount of time that each aircraft occupies the runway. The target is to reduce the PAP average Runway Occupancy Time (ROT) per arrival-departure cycle by at least 2.5 minutes. Construction of additional taxiways and aircraft parking apron will reduce ROT thereby increasing runway capacity, reduce delays (and GHG emissions), and improve PAP's ability to handle post-disaster spikes in air traffic volume.

Increase the climate/disaster resilience of associated infrastructure at Haiti's int'l airports

► Average number of days per year the discharge exceeds the capacity of the airport drainage system at PAP and CAP (Days, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	20.00	20.00	20.00	0.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026

Comments: The capacity of a drainage system is defined by the cross section of the drainage channels, the slope, the alignment, possible structures, and the revetment. If the actual discharge exceeds the capacity, inundation follows. The function of a drainage system is to discharge water in a controlled manner. The availability of the discharge system is defined by the rate (or the number of days per year for both PAP and CAP) the capacity is sufficient to discharge water in controlled manner.

□ Average number of days per year the discharge exceeds the capacity of the airport drainage system at PAP (Days, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	10.00	10.00	10.00	0.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026

□ Average number of days per year the discharge exceeds the capacity of the airport drainage system at CAP (Days, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	10.00	10.00	10.00	0.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026

Intermediate Results Indicators by Components



Component 1: PAP and CAP operational safety and navigation efficiency investments				
► Length of PAP taxiway system built (Meter(m), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	1,460.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	31-Dec-2024
Comments:	The indicator measures the construction of a partial parallel taxiway and two additional exit taxiways. They would significantly improve aircraft flow and enhance reduce aircraft (Runway Occupancy Time)			
► Additional aircraft parking apron built at PAP (Square Meter(m2), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	26,100.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	31-Dec-2025
Comments:	The indicator measures construction of additional aircraft parking apron that together with the additional taxiways would eliminate significant bottlenecks and inefficiencies in aircraft movements, reduce aircraft CO2 emissions, improve aircraft operating safety, and would allow to accommodate spikes in relief flights (passenger and cargo) in post-disaster periods.			
► Length of CAP runway rehabilitated (Meter(m), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2,450.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator tracks the progress of milling and repaving the full length of the runway and helps comply with ICAO standards for runway pavement conditions. The runway pavement at CAP is deteriorated and is becoming increasingly unsafe.			
► Airfield Ground Lighting (AGL) for the CAP runway is installed and operational (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator measures the installation and operational status of the AGL for the CAP runway that will be implemented with the runway rehabilitation. The AGL is a system of runway lighting that provides an enhanced visibility for the aircrafts in their approach for landing and allows the airport to operate at night. The installation of AGL will highly improve the safety of operations at CAP.			
► PAP RESAs implemented and consistent with ICAO SARPs (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes



Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator measures the construction of RESAs at PAP. The ICAO SARPs require a 150-m RESA including a 60-m paved strip starting from the end of the runway, and a 90-m surface surrounding the runway, suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.			
► Constructed CAP Air Traffic Control Tower (ATCT) in compliance with ICAO SARPs (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	28-Feb-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator measures the Construction of a new CAP ATCT in a location and height to provide unobstructed visibility for the full length of the CAP runway. The ATCT can accommodate instruments for air control but must also provide good visibility conditions to the controller.			
► ADS-B for CAP and PAP installed and operational (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	28-Feb-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator measures the installation of ADS-B at CAP and PAP. The Automatic dependent surveillance—broadcast (ADS-B) is a surveillance technology in which an aircraft determines its position via satellite navigation and periodically broadcasts it, enabling it to be tracked. Such a system brings many benefits for operation and safety. It will notably enhance navigation efficiency and improve pilots and controllers' visibility. It will also increase operational capacity at the airport by providing many operational features that will help maximize the use of the runway infrastructure. Moreover by allowing a more efficient operation, it allows to reduce flight times and thus contributes in reducing fuel consumption and pollution.			
► Share of infrastructure activities identified as climate resilient (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Mar-2026
Comments:	The indicator will track that all the project activities that will improve the airport infrastructure will integrate climate-resilient measures and that these measures will be completed during the work phase. The following activities will be tracked with this indicator: (a) PAP taxiway, (b) PAP apron, (c) PAP RESAs, (d) PAP paved stopways, (e) CAP ATCT, (f) CAP drainage system, (g) PAP drainage system, (h) CAP runway.			

Component 2: PAP and CAP airfield drainage system improvements

► Length of PAP drainage system (Meter(m), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	3,850.00	3,850.00	3,850.00	2,450.00



Date	28-Feb-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The current PAP drainage system does not have an optimal configuration. The Project would improve the water evacuation route by constructing a direct connection to the evacuation point. This optimization will, therefore, result in a reduction in total length of the current drainage system.			
► New culverts built at CAP (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	4.00
Date	28-Feb-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator will track the realization of new culverts at CAP in order to improve the existing drainage system: 3 existing culverts (1 east, 1 west, 1 north) will be replaced by 4 larger culverts (2 east, 1 west, 1 north).			

Component 3: Institutional strengthening & Project Management				
► Aviation sector strategy prepared (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	An Aviation Sector Strategy guiding sector priorities and investments for the next 20 years. This strategy will form an essential framework for institutional strengthening activities.			
► Wildlife management plan prepared and implemented for PAP and CAP airports (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator measures the preparation and implementation of the Wildlife Management Plan, which will leverage established practices and lessons learned at existing CATCOP airports, as well as international best practices. Wildlife Management Plan will be elaborated with a focus on reducing runway incursions by wildlife and reducing bird strikes by aircraft on landing and takeoff, which was raised as a critical operational safety concern. The indicator will follow the preparation and implementation of the Plan, which will leverage established practices and lessons learned at existing CATCOP airports, as well as international best practices. At the completion of the indicator, the following actions will have been implemented: - Wildlife management risk analysis - Identification and design of mitigation measures - Implementation of the Plan - Training of AAN and OFNAC staff on Wildlife Management Plan Implementation			
► OFNAC safety inspectors trained by a certified agency (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	50.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026



Comments:	OFNAC safety inspectors require periodic certified training from Boeing and Airbus. The indicator measures the number of OFNAC inspectors trained.			
► Rescue Coordination Center staff trained by a certified agency (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	50.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator measures number of staff trained for the operation of the Rescue Coordination Center.			
► Regional training programs attended by AAN and OFNAC (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	5.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator measures the participation of ANN and OFNAC in regional capacity building trainings. Indicator target based on an hypothesis of at least one training per year during the implementation.			
► Grievances adequately responded to and/or resolved within the stipulated service standards (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The indicator will track the correct operation of the Grievance Redress Mechanism.			
► Share of women hired in medium-skill jobs by UCE-MTPC, OFNAC and AAN (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	15.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	The project will analyze recruitment, retention and promotion barriers for women to participate in the aviation sector. Women will be part of a training program to get skills as traffic controllers, supervisors, and public safety and security screening staff and to improve their potential for being hired at UCE-MTPC, OFNAC and ANN. 100% of the women trained and accredited as traffic controllers will be employed to perform within OFNAC.			
► Share of women included in the medium-skills training (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	30.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026



Comments:	The project will finance training by a certified agency for ANN and OFNAC capacity building for development of medium skills, including those related to air traffic controllers, supervisors, and public safety and security screening staff. The indicator will measure how many women will participate in this training.			
► People with Enhanced Access to Transportation Services (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	1,900,000.00
Date	30-Jun-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	Number of passengers per year that experience improved access to aviation infrastructure and services that have been built or rehabilitated through the project.			
► Semi-annual meetings held with stakeholders to discuss their suggestions and related actions taken by the Project (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	12.00
Date	29-May-2020	08-Sep-2020	12-Mar-2021	30-Jun-2026
Comments:	Number of meeting minutes documenting the discussion on decisions and/or actions taken based on stakeholders' focus group's feedback.			

Performance-Based Conditions

Data on Financial Performance

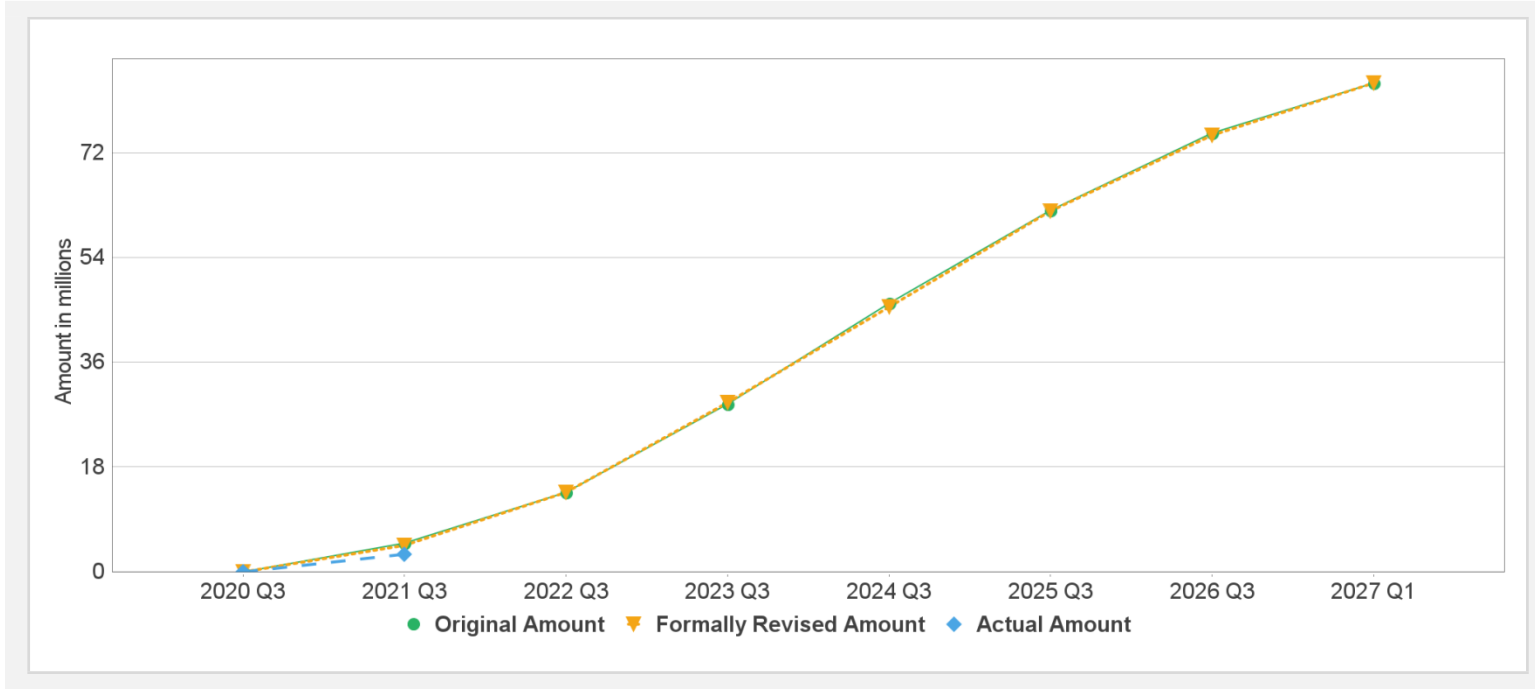
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P170907	IDA-D6290	Effective	USD	84.00	84.00	0.00	3.00	85.38	3.4%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P170907	IDA-D6290	Effective	28-May-2020	29-Jun-2020	27-Aug-2020	30-Jun-2026	30-Jun-2026

Cumulative Disbursements



PBC Disbursement

PBC ID	PBC Type	Description	Coc	PBC Amount	Achievement Status	Disbursed amount in Coc	Disbursement % for PBC

Restructuring History

There has been no restructuring to date.

Related Project(s)

There are no related projects.