

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BAHAMAS

AIRPORT INFRAESTUCTURE PROGRAM

(BH-L1041)

PROJECT PROFILE

The project team consisting of prepared this document: René A. Cortés Forero, Team Leader (INE/TSP); Christopher Persaud, Alternate Team Leader (TSP/CSU); Amado Crotte Alvarado (TSP/CME); Alejandra Caldo and Andrea Patton (INE/TSP); Renaud Tahon (VPS/ESG); Camille Davis Thompson (CCB/CBH); Mario R. Castaneda (FMP/CBH); Gerard Alleng (CSD/CCS); Paulo Martelli (INO/IEN); René Herrera (FMP/CJA); and Betina Henning and Liza M. Lutz (LEG/SGO).

Under the Access to Information Policy, this document is subject to Public Disclosure.

PROJECT PROFILE

THE COMMONWEALTH OF THE BAHAMAS

I. BASIC DATA

Project Name:	Airport Infrastructure Program		
Project Number:	BH-L1041		
Project Team:	René A. Cortés Forero, Team Leader (INE/TSP); Christopher Persaud, Alternate Team Leader (TSP/CSU); Amado Crotte Alvarado (TSP/CME); Alejandra Caldo and Andrea Patton (INE/TSP); Renaud Tahon (VPS/ESG); Camille Davis Thompson (CCB/CBH); Mario R. Castaneda (FMP/CBH); Gerard Alleng (CSD/CCS); Paulo Martelli (INO/IEN); René Herrera (FMP/CJA); Betina Henning and Liza M. Lutz (LEG/SGO)		
Borrower:	The Commonwealth of The Bahamas (GBH)		
Executing Agency:	Ministry of Transport and Aviation (MTA)		
Financial Plan:	IDB (OC):	US\$35,000,000	
	Total:	US\$35,000,000	
Safeguards:	Policies Triggered:	OP-703; B.2; B.3; B.5; B.6; B.7; B.9; B.10; B.11; OP-704; and OP-761	
	Classification:	B	

II. GENERAL JUSTIFICATION AND OBJECTIVE

- 2.1 **Background.** The Commonwealth of the Bahamas (The Bahamas) is located in the northeastern Caribbean and is comprised of 700 islands and cays with a total land area of 5,383 square miles spread over 100,000 square miles. The total population is 367,000¹ people of which 70.4% reside in New Providence, 14.6 % reside in Grand Bahama and the remainder is scattered among the other 28 inhabited islands.² The distances, remoteness and low population densities of the Bahamian islands present significant challenges to the transportation sector within the country. Residents and tourists of the archipelago depend mainly upon the airways for inter-island and international transport, while bulk cargo is largely transported by water.
- 2.2 The internal Bahamian market is small owing to its population size, and the production base primarily comprises tourism and financial services, which account for 70% of output. 90% of tourists are from a single country (the U.S., which also accounts for 90% of imports and 70% of exports). Despite a relatively high income per capita, given the distribution of the small population throughout 28 inhabited islands, there are substantial differences in their population density, economic

¹ The Bahamas in Figures 2013. The Department of Statistics, The Bahamas.

² The population of the Family Islands (Fis), all islands other than New Providence and Grand Bahama, is largely concentrated in four islands: Abaco, Andros, Eleuthera and Exuma. These islands account for 74% of the remaining population.

activity and development. Furthermore, demands are placed on the budget to provide the same level of public services to all citizens throughout The Bahamas.

- 2.3 **The air transport sector.** Air transport is critical to the health of the tourism industry in The Bahamas, representing almost the exclusive mode of transport for tourists with overnight hotel stays. In 2013, air arrivals totaled 1.28 million passengers,⁴ out of which 80% arrived from the U.S. International tourism arrival's in The Bahamas has a growing proportion of passengers arriving by cruise ship as opposed to air⁵ which could affect the indirect and induced employment and income since less hotels, food, beverages and tourism services are been consumed. In addition, air transport also plays a pivotal role in ensuring the population of the Family Islands (FIs) accessibility to goods and services only offered on New Providence or abroad. In many cases, air transport is the only reasonable option available to isolated island communities for the movement of people and goods across significant distances.
- 2.4 Air transport in The Bahamas is provided by 17 international and 5 domestic airlines, including the Bahamian flagship carrier Bahamasair. The international airlines connect The Bahamas directly to Canada, Jamaica, the United Kingdom, Cuba, and the U.S. Nassau is connected with non-stop services to 21 markets in the U.S., the Caribbean, Canada, and the United Kingdom. There are a total of 53 licensed airports in The Bahamas: (i) 18 airports serve as international ports of entry with customs and immigration facilities; (ii) 8 solely serve to the domestic commercial market; and (iii) 27 are secondary airports for general aviation. Lynden Pindling International Airport (LPIA) in Nassau, is the main international gateway and domestic hub of The Bahamas⁶ concentrating over two thirds (68%) of the available domestic and international seats; Grand Bahama International Airport (GBIA) in Freeport is second in importance with 11% of capacity; Marsh Harbour, George Town and North Eleuthera follows, each with around 4%; the remaining airports account for 9%.⁷
- 2.5 Based on the Official Airline Guide (OAG) The Bahamas in 2013 offered 6.5 million seats (national and international), a decrease of 1.6% since 2004⁸. Most of these cuts were on the international routes (-10.9% per annum) compared to a smaller reduction on the domestic market (- 2.4% per annum). However, the 28 FIs airports (all airports except LPIA) have seen their market marginally but steadily increasing, and by 2013, they accounted for 23% of the seating capacity in The Bahamas. Since 2003, this seating capacity has increased annually by 0.4%.⁹
- 2.6 **Gender perspective.** Female labor participation in The Bahamas is one of the highest in the Latin American and the Caribbean (69.1% vs. 52% in 2014);¹⁰ however, women are still under-represented in the infrastructure

⁴ The Bahamas in figures, 2013. The Department of Statistics of The Bahamas.

⁵ Approximately 80% of all tourist arrivals in The Bahamas are cruise ship passengers.

⁶ Of the Caribbean airports, LPIA is the third busiest airport after San Juan (Puerto Rico) and Punta Cana (Dominican Republic).

⁷ Data provided by the MTA.

⁸ During the period, Grand Bahama has suffered from debilitating climate-related shocks, most notably in the forms of Hurricanes Frances, Jeanne, and Sandy. These shocks have had enduring adverse effects on its tourism performance.

⁹ Comprehensive strategy for optimization of the FIs airports, Stantec.

¹⁰ Source: UN Women. The Bahamas: Overview of the country gender equality status; and International Labor Organization (ILO, 2016). Women at Work: Trends 2016, Geneva.

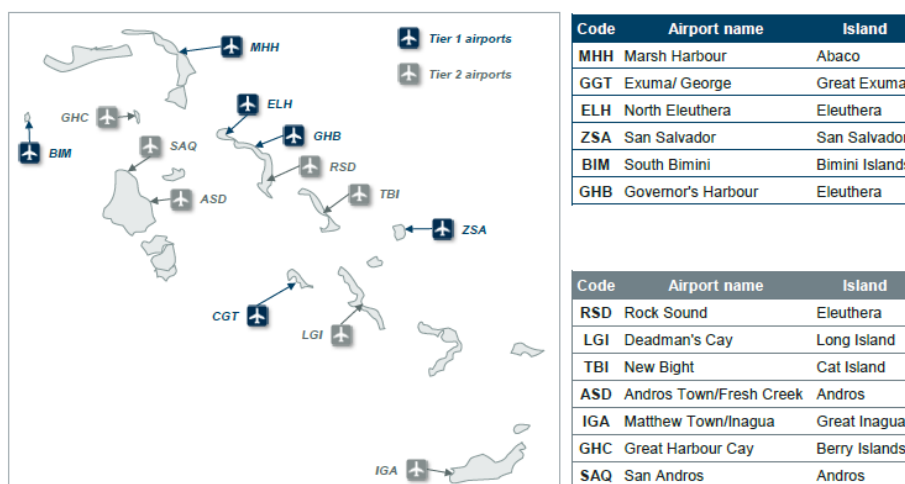
sector.¹¹ Taking this into account, the Technical Cooperation (TC) [RG-T2618](#)¹² will carry out a study, in The Bahamas, on the value chain of the air transport sub-sector with a gender perspective to analyze gender gaps in the sector. Based on this information, this project will incorporate activities aimed at promoting gender equality in the subsector.

- 2.7 **Climate change.** The Bahamas Intended Nationally Determined Contribution (INDC) to the United Nations Framework Convention on Climate Change indicates that the country is environmentally vulnerable to high temperatures, storm surges, sea level rise, flooding, tropical cyclones and non-tropical weather events. While The Bahamas' contribution to the global greenhouse gas emissions is almost negligible (0.01%), the Government of The Bahamas (GoBH) understands the urgent need for adaptation, since mitigation alone will not protect from the negative effects associated with a changing climate. Given the dispersed geographical nature of the Family Islands, climate resilient airports are the first line of defense in connecting citizens to necessary aid and transport in the aftermath of extreme weather events.
- 2.8 **The problem.** The 28 FIs airports in The Bahamas have been in need of investment for some time and require a wide range of aviation and infrastructure upgrades to improve their regional and global integration. The airports require maintenance and improvements in operating conditions and also protection of the airside and its operation protected zones. It has been projected that in the next 20 years, the passenger's demand on the FIs airports would increase by 2.4% annually to reach 1.7 million passengers by 2033.⁷ For the FIs to capitalize on this opportunity and to have a strong market presence in a very competitive Caribbean tourist industry, it is crucial that the island gateway airports offer the highest possible level of safety and quality of aviation services.
- 2.9 As part of the Inter-American Development Bank (IDB) funded Policy Based Loan (PBL) (2682/OC-BH) the GoBH hired a firm to prepare a Comprehensive Strategy for Optimization of the FIs airports amongst other things. In their assessment, the firm designed a three-tier system to classify the airports based on their future operational potential with Tier 1 being the group with the greatest potential. The airside works such as pavements (runway, taxi way and apron) are costly and need to be consistent with their ability to provide a safe operational environment and have the capacity to meet forecast demand in passenger and tourism for each individual airport. Although, landside investments are not a high priority for aviation compliance, the development of attractive terminals in the Tier 1 and Tier 2 airports (Figure 1) would stimulate tourism opportunities for the host islands. According to the firm report, the estimated cost for upgrading all of the 28 FIs airports to comply with international standards and recommended practices is US\$160 million.

¹¹ According to UN women data, women in The Bahamas represented 9% of the construction sector and 39% of the transport, storage and communication sector in 2011.

¹² The Bank is currently hiring a consulting firm to carry out this study, which includes The Bahamas and 10 other countries, and results are expected by October, 2016.

Figure 1: Tier 1 and Tier 2 airports map



- 2.10 The solution to the FI's air transport issue is to invest in the improvement of the infrastructure required to make these airports compliant international aviation requirements which could be supported by the IDB given the Bank's experience in supporting countries with technical and financial support in air transport infrastructure. In the current economic climate, there is a need for fiscal and economic prudence, and given the significant investment needed to upgrade, operate and maintain all of the airports, this operation will support GoBH to design and implement a Public-Private Partnership (PPP) that would allow for private investment in select airport(s) with the most potential, while maintaining public ownership and oversight. The financing under this operation will provide for the upgrade of selected airports and provide the necessary technical and legal support to tender the concessions of the upgraded airports through a PPP mechanism.
- 2.11 **Studies.** A firm has been contracted to undertake the feasibility study (technical and financial) required for the design of the program. The study will carry out a technical and financial assessment of the Tier 1 and Tier 2 airports to identify potential airports that could attract private investment through a PPP and to develop a financial model of selected airports and concession alternatives. A two phase approach is being used for the study: (i) there would be a preliminary overview of the potential opportunities for PPPs in all Tier 1 and Tier 2 airports; and (ii) a detailed feasibility assessment of those airports selected by government with good potential.
- 2.12 **Bank's strategy.** The IDB's Country Strategy (CS) with The Bahamas 2013-2017 (GN-2731) supports the government's efforts to ensure macroeconomic sustainability; in the social area identified as the subject of efficiency of inter-island mobility across the 28 inhabited islands as one of the transport dialogue topics. In addition, the strategy seeks to enable and encourage the use of PPPs to achieve the developmental goals.
- 2.13 **Strategic alignments.** The program is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (GN-2788-5) and is strategically aligned with the developmental challenges of economic integration as it will contribute to improving infrastructure for regional and international connectivity in a country that is highly

dependent on international tourism. The country will also benefit from an increased foreign direct investment as the project will facilitate the implementation public/private financing scheme. The program is aligned with the UIS cross cutting theme of climate change and environmental sustainability as the proposed intervention will address climate change adaptation, and it is aligned with the corporate result framework through the auxiliary country development result indicator of airport built or upgrading. The program is aligned with the Strategy for Sustainable Infrastructure for Competitiveness and Inclusive Growth (GN-2710-5) as it contributes supporting transportation infrastructure quality's improvement and fostering private sector involvement in the construction and operation of infrastructure, and it is aligned with the Transport Sector Framework (GN-2740-3) contributing to the dimension of quality transportation infrastructure and services. Finally, the project is aligned with the IIC Business Plan 2016-2019 (CII/GN-310) in the core priority of bold infrastructure as the project will support interventions in the transport sector. These kind of interventions present unique opportunities for impact through collaboration across the IDB Group through the public and private sectors on upstream project development.

- 2.14 **Objective.** The main objective of the program is to contribute to environmentally sustainable regional and global integration of The Bahamas through the improvements in air transport infrastructure in the FIs airports. Specifically the program aims to improve air transport connectivity and the distribution and flow of people and goods to the FI through: (i) improvement of infrastructure and its climate change resilience by maintaining, rehabilitating and upgrading selected airports to comply with international aviation standards; and (ii) provide support for the development and procurement of PPPs to support the provision and management of air transport infrastructure. It is expected that the operation will contribute to sustainable growth of the air transport sector and the injection of private investment in The Bahamas.
- 2.15 **The program.** The operation is a specific works operation and is divided in three components:
- 2.16 **Component 1. Civil Works (US\$33 million).** This component will finance investment needed to upgrade the FIs airports to comply with international aviation standards and would also contribute to the attractiveness the facilities for PPP schemes. These include but are not limited to air and landside investments in infrastructure and equipment including those for security and mitigation of climate change risks. Investments would be made in runway, taxiway and parking aprons to cater for projected traffic and climate resilience; runway lights, markings and fencing for safety and security compliances and terminal works to equip the airports with infrastructure capable of handling passenger numbers while providing energy efficiency and being resilient to climate change.
- 2.17 **Component 2. Structuring of PPP (US\$1.0 million).** This component will provide the technical and legal services needed to structure the PPPs including the preparation of request for proposals, service standards and evaluations criteria, drafting of the concession agreement and any other inputs needed for the process.

- 2.18 **Component 3. Implementation support and institutional strengthening (US\$1.0 million).** These activities are directly related to the implementation and supervision of the program, as well as for required technical and environmental audits, program evaluations and performance and completion reports.

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 **Institutional capacity and executing agency.** The execution agency for this program will be the Ministry of Transport and Aviation (MTA). The MTA is currently executing the IDB funded Air Transport Reform Program¹⁴ which is a PBL with a TC component and it is supported by a program coordinator and a procurement officer contracted to assist the ministry. An institutional assessment of the MTA would be carried out as part of the program preparation and this would provide guidance on the implementation mechanism that needs to be in place for the program's successful execution.
- 3.2 **Bank experience in the subsector.** The Bank is involved in programs with The Bahamas to promote the development of safe, secure and efficient air transport in adherence with international standards. This is being done through a comprehensive reform of the existing institutional and regulatory structure. To this effect the Bank has supported the country with 2 non-reimbursable TCs (ATN/MT-9073-BH¹⁵ and ATN/OC-15345-BH¹⁶) and 1 PBL . The loan is a multi-tranche operation with the first already disbursed and the conditions for the last tranche significantly advanced.
- 3.3 **Risk.** A preliminary risk assessment was conducted and the risks, risk classification and proposed mitigation measures are included in Appendix II. The only risk that is unique to this project is the potential for lack of interest from the private sector to invest in the airport sector and this would be mitigated by identifying combination of Tier 1 and Tier 2 airports in packages attractive to both the government and potential investors.

IV. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 **Social and environmental.** In accordance with the guidelines of the Policy Environment and Safeguards Compliance Policy (OP-703), the proposed operation is currently classified as Category B by the project team as it is estimated that the program will not generate significant negative environmental and/or social impacts. In addition, the potential for impacts to cultural heritage/archaeological sites is low. A project classification of B requires an environment and social strategy that should include three components: (i) environmental analysis, which should include the identification of existing critical environmental and social liabilities and corrective/migratory measures; (ii) development and utilization of appropriate social and environmental procedures for implementation and supervision of the works; and (iii) training for contractors and supervisors in social and environmental safeguards that are relevant to air transport planning and construction.

¹⁴ 2682/OC-BH

¹⁵ Strengthening of airport security.

¹⁶ Support for the development of a national airlift diversification plan.

- 4.2 The institutional capacity assessment mentioned in ¶3.1 will provide the elements necessary for the appropriate fiduciary supervision activities, both procurement and financial management.

V. RESOURCES AND TIMETABLE

- 5.1 The Proposal for Operation Development is expected to be completed on August 10th, 2016 and the Loan Proposal would be considered by the Board of Executive Directors on October 26th, 2016. The administrative budget for the preparation of the project is approximately US\$70,700. The feasibility study is being funded with the TC ATN/OC-15345-BH at a cost of US\$280,650.

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.



Safeguard Policy Filter Report

Operation Information

Operation		
BH-L1041 Airport Infrastructure Program		
Environmental and Social Impact Category	High Risk Rating	
B	{Not Set}	
Country	Executing Agency	
BAHAMAS	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Transport	AIRPORT INFRASTRUCTURE	
Team Leader	ESG Lead Specialist	
RENE ALEJANDRO CORTES FORERO	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$0	0.000 %
Assessment Date	Author	
3 May 2016	renaudt	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	19 May 2016	
QRR (Estimated)	10 Aug 2016	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

Safeguard Policy Items Identified

B.1 Bank Policies (Access to Information Policy– OP-102)

The Bank will make the relevant project documents available to the public.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation is in a geographical area exposed to [natural hazards](#) ([Type 1 Disaster Risk Scenario](#)). Climate change may increase the frequency and/or intensity of some hazards.



Safeguard Policy Filter Report

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The sector of the operation is vulnerable to natural hazards. Climate change may increase the frequency and/or intensity of some hazards.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation includes activities related to climate change adaptation, but these are not the primary objective of the operation.

B.1 Bank Policies (Gender Equality Policy– OP-761)

The operation offers opportunities to promote [gender equality](#) or [women's empowerment](#).

B.10. Hazardous Materials

The operation has the potential to impact the environment and occupational health and safety due to the production, procurement, use, and/or disposal of hazardous material, including organic and inorganic toxic substances, pesticides and persistent organic pollutants (POPs).

B.11. Pollution Prevention and Abatement

The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases).

B.2 Country Laws and Regulations

The operation is in compliance with laws and regulations of the country regarding specific women's rights, the environment, gender and indigenous peoples (including national obligations established under ratified multilateral environmental agreements).

B.3 Screening and Classification

The operation (including associated facilities) is screened and classified according to its potential environmental impacts.

B.5 Environmental Assessment Requirements

An environmental assessment is required.

B.6 Consultations

Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation by women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.

B.7 Supervision and Compliance

The Bank will monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.

Potential Safeguard Policy Items

B.9 Natural Habitats and Cultural Sites

The operation will result in the degradation or conversion of Natural Habitat or Critical Natural Habitat in the project area of influence.



Safeguard Policy Filter Report

Recommended Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.

Additional Comments

[No additional comments]



Safeguard Screening Form

Operation Information

Operation		
BH-L1041 Airport Infrastructure Program		
Environmental and Social Impact Category	High Risk Rating	
B	{Not Set}	
Country	Executing Agency	
BAHAMAS	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Transport	AIRPORT INFRASTRUCTURE	
Team Leader	ESG Lead Specialist	
RENE ALEJANDRO CORTES FORERO	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$0	0.000 %
Assessment Date	Author	
3 May 2016	renaudt	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	19 May 2016	
QRR (Estimated)	10 Aug 2016	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

Operation Classification Summary

Overriden Rating	Overriden Justification
Comments	



Safeguard Screening Form

Conditions / Recommendations

Category "B" operations require an environmental analysis (see Environment Policy Guideline: Directive B.5 for Environmental Analysis requirements)

The Project Team must send to ESR the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports. These operations will normally require an environmental and/or social impact analysis, according to, and focusing on, the specific issues identified in the screening process, and an environmental and social management plan (ESMP). However, these operations should also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.) where necessary.

Summary of Impacts / Risks and Potential Solutions

[Moderate Greenhouse Gas Emissions](#) are predicted.

Greenhouse Gas (GHG) Assessment: The borrower should promote the reduction of project-related greenhouse gas emissions in a manner appropriate to the nature and scale of project operations and impacts. The borrower should quantify direct emissions from the facilities owned or controlled within the physical project boundary and indirect emissions associated with the off-site production of power used by the project. Quantification and monitoring of GHG emissions should be conducted annually in accordance with internationally recognized methodologies (i.e. IPCC - <http://www.ipcc.ch/>). In addition, the borrower should evaluate technically and financially feasible and cost-effective options for the reduction/offset of emissions that may be achieved during the design and operation of the project. The Sustainable Energy and Climate Change Initiative (SECCI) can help with this task (<http://www.iadb.org/secci/>).

Conversion or [degradation](#) of natural habitat causing [minor](#) to [moderate](#) impact on [ecosystem services](#).



Safeguard Screening Form

Mitigation measures presented in the Biodiversity Management Plan must be acceptable:
The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Conversion or [degradation](#) of natural habitat causing [minor](#) to [moderate](#) impact on [species composition](#).

Mitigation measures presented in the Biodiversity Management Plan must be acceptable:
The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Conversion or [degradation](#) of natural habitat causing [minor](#) to [moderate](#) impact on ecological function.

Mitigation measures presented in the Biodiversity Management Plan must be acceptable:
The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Likely to have [minor](#) to [moderate](#) emission or discharges that would negatively affect [ambient environmental conditions](#).



Safeguard Screening Form

Management of Ambient Environmental Conditions: The borrower should be required to prepare an action plan (and include it in the ESMP) that indicates how risks and impacts to ambient environmental conditions can be managed and mitigated consistent with relevant national and/or international standards. The borrower should (a) consider a number of factors, including the finite assimilative capacity of the environment, existing and future land use, existing ambient conditions, the project's proximity to ecologically sensitive or protected areas, and the potential for cumulative impacts with uncertain and irreversible consequences; and (b) promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants, including strategies that contribute to the improvement of ambient conditions when the project has the potential to constitute a significant source of emissions in an already degraded area. The plan should be subject to review by qualified independent experts. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.).

Project activities will moderately impact [water quality](#), [water quantity](#) and/or [water availability](#).

Water Resources: A targeted Water Resources Assessment should be undertaken, which in addition to undertaking the relevant analyses, must include justification for assigning a moderate risk classification. Project activities (and any associated facilities) will be required to be constructed and operated so as to avoid impacts to water quality, water quantity and/or water availability. Evidence of appropriate stakeholder consultation should also be provided. Monitoring requirements should be included in relevant legal documentation.

Project construction activities are likely to lead to localized and temporary impacts (such as dust, noise, traffic etc) that will affect local communities and [workers](#) but these are [minor](#) to [moderate](#) in nature.

Construction: The borrower should demonstrate how the construction impacts will be mitigated. Appropriate management plans and procedures should be incorporated into the ESMP. Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).

Safety issues associated with structural elements of the project (e.g. dams, public buildings etc), or road transport activities (heavy vehicle movement, transport of [hazardous materials](#), etc.) exist which could result in [moderate](#) health and safety [risks](#) to local communities.

Address Community Health Risks: The borrower should be required to provide a plan for managing risks which could be part of the ESMP; (including details of grievances and any independent audits undertaken during the year). Compliance with the plan should be monitored and reported. Requirements for independent audits should be considered if there are questions over borrower commitment or potential outstanding community concerns.

The negative impacts from production, procurement and disposal of [hazardous materials](#) (excluding POPs unacceptable under the Stockholm Convention or toxic pesticides) are [minor](#) and will comply with relevant national legislation, [IDB requirements on hazardous material](#) and all applicable International Standards.

Monitor hazardous materials use: The borrower should document risks relating to use of hazardous materials and prepare a hazardous material management plan that indicates how hazardous materials will be managed (and community risks mitigated). This plan could be part of the ESMP.



Safeguard Screening Form

The project is located in an area prone to [coastal flooding](#) from [storm surge](#), high wave activity, or erosion and the likely severity of the impacts to the project is [moderate](#).

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards, coastal retreat and other land use regulations and civil defense recommendations in coastal areas.

The project is located in an area prone to [hurricanes](#) or other [tropical storms](#) and the likely severity of the impacts to the project is [moderate](#).

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations.

The project is located in an area prone to [inland flooding](#) and the likely severity of the impacts to the project is [moderate](#).

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. This must take into consideration changes in the frequency and intensity of intensive rainfall and in the patterns of snowmelt that could occur with climate change. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the area's disaster alert and prevention system, general design standards, land use regulations and civil defense recommendations in flood prone areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives.

The project is located in an area prone to [sea level rise](#) and the likely severity of the impacts to the project is [moderate](#).



Safeguard Screening Form

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations.

Transport of [hazardous materials](#) (e.g. fuel) with [minor](#) to [moderate](#) potential to cause impacts on community health and safety.

Hazardous Materials Management: The borrower should be required develop a hazardous materials management plan; details of grievances and any independent health and safety audits undertaken during the year should also be provided. Compliance with the plan should be monitored and reported. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement etc). Consider requirements for independent audits if there are concerns about commitment of borrower or potential outstanding community concerns.

Disaster Risk Summary

Disaster Risk Level

Moderate

Disaster / Recommendations



Safeguard Screening Form

The reports of the Safeguard Screening Form (i.e., of the Safeguards Policy Filter and the Safeguard Classification) constitute the Disaster Risk Profile to be included in the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.

The Borrower prepares a Disaster Risk Management Summary, based on pertinent information, focusing on the specific moderate disaster and climate risks associated with the project and the proposed risk management measures. Operations classified to involve moderate disaster risk do not require a full Disaster Risk Assessment (see Directive A-2 of the DRM Policy OP-704).

The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency.

Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options. Please consult the INE/CCS adaptation group for guidance.

Disaster Summary

Details

The project is classified as moderate disaster risk because of the likely impact of at least one of the natural hazards is average.

Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.

ENVIRONMENTAL AND SOCIAL STRATEGY

I. BASIC DATA

Project Name:	Airport Infrastructure Program
Project Number:	BH-L1041
Country:	The Bahamas
Sector:	Transport Division
Borrower:	The Commonwealth of The Bahamas (GBH)
Executing Agency:	Ministry of Transport and Aviation (MTA)
Total Cost of the project	US\$ 35,000,000
IDB Funds:	US\$ 35,000,000
Responsible Division:	INE/TSP
Safeguard Classification:	B

- 1.1 Air transport is critical to the health of the tourism industry in the Bahamas, representing almost the exclusive mode of transport for tourists with overnight hotel stays. In many cases, air transport is also the only option available to isolated island communities for the movement of people and goods across significant distances.
- 1.2 The 28 Family Island Airports (FIA) in the Bahamas (all country's licensed airports except the Nassau International Airport) have been lacking investments for some time; maintenance and improvements in operating conditions, as well as protection of the airside and its operation protected zones, are required. For the FIA to have a strong market presence in a very competitive Caribbean tourist industry, it is crucial that the island gateway airports offer the highest possible level of safety and quality of aviation services.
- 1.3 In that context, and within IDB funded Policy Based Loan (PBL) (2682/OC-BH), the Government of the Bahamas hired the firm Stantec to prepare a Comprehensive Strategy for Optimization of the FIA, which came to an estimated cost of US\$160 million for the developments plans defined to upgrade all of the 28 FIA to comply with all international standards and recommended practices (in particular ICAO Annex 14).
- 1.4 To that end, and given the economic situation in the Bahamas and the significant investment needed to upgrade all of these airports, it is planned to implement a Public-Private Partnership (PPP) scheme that would see the airports with the most potential for private investment concessioned to the private sector. Through this operation the Bank will support the government for the necessary technical and legal support to tender the concessions, and will provide the financing needed for the public contribution to the PPP scheme.

II. PROJECT

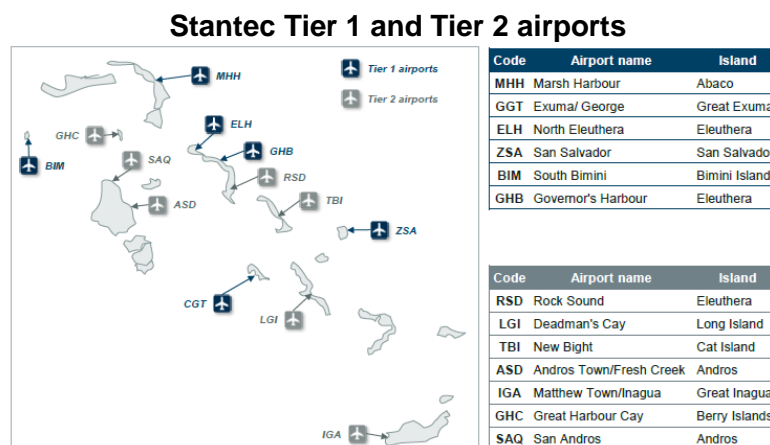
- 2.1 The operation is a specific works operation and is divided into the following three components:
 - i. **Component 1. Structuring of PPP (US\$1.0 million).** This component will provide the technical and legal services needed to structure the PPP including the preparation of Request for Proposals complete with specifications, service standards and evaluations criteria, diligence on the project financing and

risk, drafting of the contract or concession agreement and any other inputs needed to support the process.

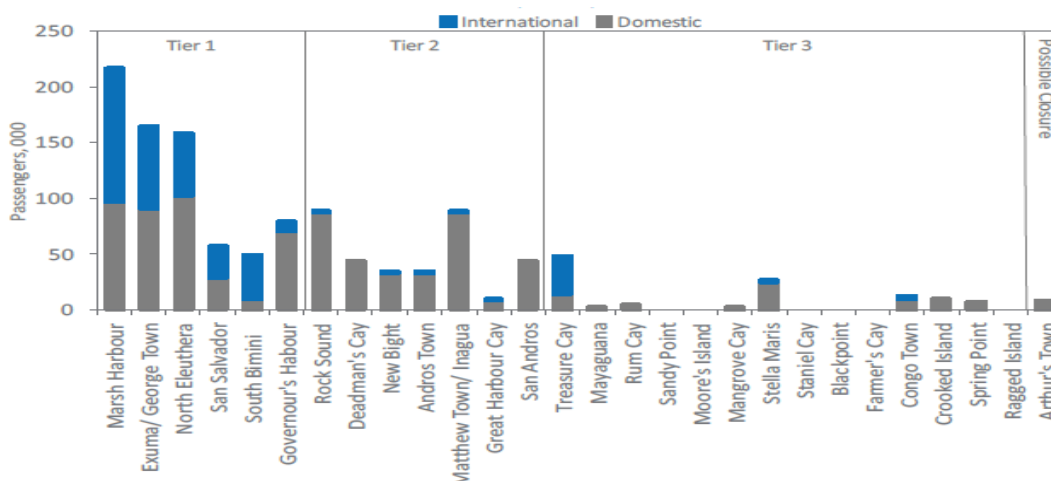
- ii. **Component 2. Civil Works (US\$33 million).** This component will finance the public part of the PPP investment needed to upgrade the FIA to comply with international aviation standards.
- iii. **Component 3. Implementation support (US\$1.0 million).** These activities are directly related to the implementation and supervision of the program, as well as for required technical and environmental audits, program evaluations and performance and completion reports.

- 2.2 A firm has just been contracted (April 2016) to undertake the **feasibility study** (technical and financial) required for the design of the PPP. To identify potential airports that could attract private investment through a PPP scheme and develop a financial model of selected airports and concession alternatives. The study will carry out a technical and financial assessment of the thirteen Tier 1 and Tier 2 airports. Stantec identified as having the greatest potential (Stantec designed a three tier system to classify the airports based on their future operational potential, with Tier 1 being the group with the greatest potential). A two phase approach is being used for the study; firstly, there would be a preliminary overview of the potential opportunities for PPPs in all Tier 1 and Tier 2 airports, followed by a detailed feasibility assessment on those airports with good potential that are selected by the government.
- 2.3 For the purpose of the environmental and social review and compliance process of the Bank, the project will be defined as the upgrades and works of the airport(s) object of the PPP on Component 2 mentioned above. To date it is unknown which airport(s) will be concerned, or how many; this decision will be made during Bank's due diligence process, as an outcome of the feasibility study.

Figure 1: The thirteen airports potentially object of the PPP



**Figure 2: Range of yearly scheduled passengers per airport
(Source Stantec report)**



- 2.4 Figure 2 presents the range of activity level of the various airports - showing the most important airport has a current activity of 215,000 commercial passengers per year.
- 2.5 The type of upgrades and works contemplated are:
- Airside:** obstacle clearance, visual aids¹, security and wildlife control, pavements and other physical infrastructures.
 - Landside:** terminal repairs/upgrades (baggage, immigration area), parking, improvement of health and safety.
 - Equipment:** vehicles, lighting equipment, Aircraft Crash, Rescue and Firefighting (ARFF) equipment.
 - Improvement of maintenance management.**
- 2.6 It is noteworthy that interventions outside of the airports' areas should therefore be extremely limited, typically to minor obstacle clearances.

III. INSTITUTIONAL AND REGULATORY CONTEXT

- 3.1 The executing agency of the operation is the Ministry of Transport and Aviation (MTA). The MTA is currently executing the IDB funded Air Transport Reform Program (BH- L1027) which is a policy based loan with a TC component and is supported by a program coordinator and a procurement officer contracted to assist the ministry. An institutional assessment of the MTA would be carried out as part of the program preparation and this would provide guidance on the implementation mechanism that needs to be in place for the program's successful execution.
- 3.2 The Bahamas Civil Aviation, whose Ministry is MTA, is in the process of updating its safety regulations, with in particular its schedule 21, Aerodrome certification and operation, in its public's consultation period. This schedule aims in particular at

¹ Precision Approach Path Indicators (PAPIs); Wind Direction Indicators (WDIs); Runway Pavement Markings; Apron Safety Lines.

reflecting in Bahamas regulation the ICAO Annex 14 Volume I, which deals with Aerodrome Design and Operations. Current version (2013) of schedule 21 requires the issuance of an aerodrome certificate, or an amendment thereto, prescribed by the authority. The certificate must be accompanied by an environment impact assessment report.

- 3.3 The Bahamas Environment, Science & Technology (BEST) commission was established in 1994 to manage the implementation of multilateral environmental agreements and review environmental impact assessment and management plans for development projects within the country. The Bahamas does have legislation pertaining to the environment, but it lacks an overall regulated environmental framework.

IV. ENVIRONMENTAL AND SOCIAL SETTING AND CONTEXT

- 4.1 At this stage, without knowing the airport(s) retained to be object of the PPP, only very general information is available on the environmental and social settings of the 13 candidate airports. It appears preliminarily that population density directly around these airports is generally low.
- 4.2 Most airports are located in close proximity to water bodies including wetlands, lakes, and the coastal shore, which attract wildlife namely avian species. The Bahamas and conservation organizations have identified important areas to avian species with varying degrees of legal protection. Some of these areas of importance are located within the boundary of or in close proximity to airports, which can be preliminarily summarized as presented in table 1.

Table 1: Significant Ecological Consideration at FIA.

Airport Name	Significant Ecological Consideration ¹
Andros: San Andros Airport	IBA within Airport Security Boundary <ul style="list-style-type: none"> • San Andros Pond (BS008), Important Bird Area (IBA)/Unprotected (not a National Park) • 2 threatened birds • 3 restricted-range birds
Congo Town Airport – Driggs Hill to Mars Bay	<ul style="list-style-type: none"> • Important Bird Area (IBA) • 2 threatened birds • 4 restricted-range birds • Congregatory Birds
San Salvador – Cockburn Town Airport, Southern Great Lake (BS029)	<ul style="list-style-type: none"> • Important Bird Area (IBA) • 4 restricted-range birds • Congregatory Birds

- 4.3 More detailed information will be gathered during Bank's due diligence, in particular through respective phases of the feasibility study.

V. IMPACTS RISKS AND CONTROL MEASURES

- 5.1 Key potential impacts of the upgrades and works contemplated are limited in space and time, and are expected to be managed with standard management practices focusing on the topics of: air quality, water quality, noise, wastes managements, health and security (including for their interaction with airports' operation), hydrology and drainage. In some instances, specific plans might have to be developed to protect nearby or adjacent ecosystems.
- 5.2 On the other hand, regular operations of airports have certain key potential socio environmental impacts and risks, in particular: (i) noise from aircrafts; (ii) air pollution, water pollution (from among others, petroleum/chemicals facilities); Oil spills, health and safety; (iii) wildlife (risk to and from wildlife); and (vi) wastes to be properly managed. Without proper management practices and mitigation measures, certain of these impacts might be exacerbated by the project (such as typically aircraft noise in case of traffic increase or introduction of night operations).
- 5.3 In parallel to its study comprehensive strategy for optimization of the FIA", Stantec was also commissioned to prepare generic Safety Management System (SMS) manuals for the FIA, as well as develop a suite of environmental guidelines and OHS (Occupational Health & Safety) standards that would apply to all of the airports in The Bahamas.
- 5.4 The main reference standards used were: (i) ICAO Aviation Safety Standards consolidated under Annex 19; (ii) ICAO Airport Planning Manual (Part I and II); (iii) Health and Safety at Work Act, Chapter 321C; FAA 150/5200-3IC Airport Emergency Plan; (iv) Best international practice and the requirements of the Disaster Preparedness and Response Act of The Bahamas for Airport Emergency Plan; (v) World Bank Group, Environmental, Health, and Safety (EHS) Guidelines (April 2007) and (vi) International best practices recognized for Management Systems such as OHSAS 18001 (OHS Management Systems) and ISO 14001 (Environmental Management Systems).
- 5.5 In that context, the following environmental guidelines were developed to achieve due diligence and environmental sustainability commensurate with national, ICAO, and International environmental priorities: (i) waste water and storm water management guideline; (ii) natural environment protection guideline; (iii) air emissions and noise management guideline; and (iv) waste management guideline.
- 5.6 A suite of site-specific Airport Emergency Plans (AEPs) for the Bahamas FIA was also prepared.
- 5.7 All the above plans and framework are intended to manage the potential socio environmental impacts and risks both of contemplated upgrades and works, as well as regular operations of the airports.

VI. ENVIRONMENTAL STRATEGY FOR DUE DILIGENCE

- 6.1 The project is classified as a Category B, based on its limited potential environmental and social impacts and risks.
- 6.2 The Bank's Environmental and Social Due Diligence (ESDD) will be done following next steps: (i) initial review of available documentation; (ii) review of phase I feasibility study and analysis mission; and (iii) review of phase II feasibility study and development of the ESMR.

- 6.3 **Initial review of available documentation.** In particular the following Stantec reports: (i) comprehensive strategy for optimization of the FIA; (ii) institutional & organizational analysis/development of guidelines & standards²; (iii) hazardous cargo management procedures and; and (iv) energy & water use conservation standards.
- 6.4 During this first step will be performed in particular: (i) detailed review of adequacy (underlying standards / level of details) of socio environmental related management plans and frameworks develop by Stantec; and (ii) proposals for selection indicators / criteria for the airports to be included in the operation (such as in relation to the wildlife issues mentioned above, or noise patterns) to be considered in the feasibility study.
- 6.5 **Review of phase I feasibility study and analysis mission.** Through the feasibility study, the environmental and socio economic characteristics of the area surrounding all 13 airports will be assessed as well as potential impacts and risks of their development plans. This will allow to factor relevant Bank's safeguard policies compliance criteria in the choice of airport(s) for the PPP.
- 6.6 The principal aspects to be reviewed will be: (i) potential impacts and risks of the upgrades or works contemplated, in particular to health, safety and to neighboring environment through any impacts to water; (ii) environmental and social baseline liabilities such as: current and expected noise levels, soil pollution air pollution, sensitive or protected areas around the site, and (iii) the potential (including foreseen) impacts of airport operation to natural habitat and wildlife.
- 6.7 An outcome of phase one on the feasibility study will be a shortlist of airports to be considered for detailed analysis for inclusion in a PPP.
- 6.8 **Review of phase II feasibility study and development of the ESMR.** That phase will allow for the shortlisted airports: (i) deepening the analysis made during the previous step (see ¶6.5 to ¶6.7); (ii) defining detailed management and mitigation measures and; (iii) their costs for each shortlisted airport and its development plan.
- 6.9 Finally for the airport(s) object of the operation, environmental and social analysis and managements plans³ (covering both contemplated upgrades/works and certain aspects of regular operation) will be finalized. This will include among others and as applicable: health and safety, emergency preparedness and response, noise management, drainage management and waste management plan, also cultural artefacts chance find procedure, public information disclosure and consultation procedures, grievance mechanisms and wildlife management.
- 6.10 Following completion of the ESDD, the project team will prepare an Environmental and Social Management Report (ESMR) which will summarize the key impacts and risks and will provide a final assessment of the project's compliance with the Bank's safeguard requirements. The ESMR will indicate how the environmental and social management measures are expected to be covered by borrower commitments in the loan agreement and other contractual documents, and how the Bank will supervise their implementation.

² This includes: Wastewater and Storm water Management Guideline, Natural Environment Protection Guideline, Air Emissions and Noise Management Guideline, Waste Management Guideline, and site-specific Airport Emergency Plans (AEPs).

³ Particular attention will be put to any ancillary facilities (e.g. sourcing of construction materials or dumping sites).

COMPLETED AND PROPOSED SECTOR WORK

Study	Description	Responsible	Date	Reference & Links
Comprehensive strategy for optimization of the FIA	Comprehensive Strategy for Optimization of the Bahamas Family Islands Airports has two substantial components: • Aerodrome Technical Assessment • Economic Analysis	The Ministry of Transport and Aviation and Department of Civil Aviation Bahamas	July 21, 2014	IDBDocs#40241738
Institutional & organizational analysis / Develop of guidelines & standards for the FIA	Generic Safety Management System (SMS) manuals for the FIA, as well as develop a suite of Environmental Guidelines and OHS standards	The Ministry of Transport and Aviation and Department of Civil Aviation Bahamas	July 17, 2014	IDBDocs#40262317
Hazardous cargo management procedures	The Hazardous cargo management procedures is a guide and lay out of general procedures for the safe transport of dangerous goods carried by air to and from aerodromes in the FIs of the GoB	The Ministry of Transport and Aviation and Department of Civil Aviation Bahamas	July 15, 2014	IDBDocs#40262328
Energy & water use conservation standards	This report summarizes the existing state of energy and water use and conservation at the FIA, provides a baseline of current efforts and recommends an institutional framework for the management of energy and water	The Ministry of Transport and Aviation and Department of Civil Aviation Bahamas	July 15, 2014	IDBDocs#40262816
North Eleuthera airport master plan	The report narrates the rational for a capital infrastructure investment plan	The Ministry of Transport and Aviation and Department of Civil Aviation Bahamas	December 11, 2015	IDBDocs#40262871
San Salvador international airport master plan	The report narrates the rational for a capital infrastructure investment plan	The Ministry of Transport and Aviation and Department of Civil Aviation Bahamas	December 11, 2015	IDBDocs#40262874
Governor's Harbour master Plan	The report narrates the rational for a capital infrastructure investment plan	The Ministry of Transport and Aviation and Department of Civil Aviation Bahamas	December 11, 2015	IDBDocs#40262885
Exuma master plan	The report narrates the rational for a capital infrastructure investment plan	The Ministry of Transport and Aviation and Department of Civil Aviation Bahamas	December 11, 2015	IDBDocs#40262889
Institutional reform of the airport authority, the civil aviation authority and the air navigation services in The Bahamas	This report defines an implementation plan for the organizational and institutional reforms for better governance of the aviation sector in The Bahamas	The Ministry of Transport and Aviation	3 rd quarter 2016	To be finalized

Consultancy services for the feasibility studies for the rehabilitation of a selection of Bahamian airports through a PPP scheme	The objective is to identify the infrastructure needs for Tier 1 and Tier 2 airports and conduct a financial analysis for a potential investment through a PPP scheme,	IDB	3 rd quarter 2016	To be finalized
Institutional assessment of the MTA	Provide guidance on the implementation mechanism that needs to be in place for the program's successful execution	IDB	3 rd quarter 2016	To be finalized

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.