

## Environmental and Social Data Sheet

### Overview

Project Name:	ST MAARTEN AIRPORT POST-HURRICANE RECONSTRUCTION
Project Number:	20180640
Country:	Sint Maarten (Dutch OCT)
Project Description:	The Project consists of the reconstruction of the Princess Juliana International Airport in Sint Maarten, which was damaged by hurricanes Irma and Maria in September 2017. Works include the internal reconstruction of the Airport's passenger terminal, keeping the existing foundation and steel building structure.
EIA required:	no
Project included in Carbon Footprint Exercise <sup>1</sup> :	no

### Environmental and Social Assessment

#### Context

On September 6 and 7, 2017, the island of Sint Maarten was hit by Category 5 Hurricane Irma with winds of more than 185 mph (296km/h). During the landfall, the storm's eye passed directly through Sint Maarten exposing it to the highest wind velocities in the storm causing widespread damage across the island and to Princess Juliana International Airport (PJIA). Twelve days later, the already compromised infrastructure was further damaged by Hurricane Maria.

The project consists of reconstructing the Airport terminal to pre-hurricane conditions. Works include the internal reconstruction of the passenger terminal building, keeping the existing foundation and steel building structure.

The project's Promoter is Princess Juliana International Airport Operating Company N.V. (PJIAE). PJIAE is fully owned by the Princess Juliana International Airport Holding Company N.V. (PJIAH), which in turn is owned 100% by the Government of Sint Maarten.

#### Environmental Assessment

Sint Maarten is a Dutch OCT Country not belonging to the European Union. If it were located within the EU, no environmental impact assessment would have been required for the project, as the project does not fall under either Annex I or Annex II of the EU Environmental Impact assessment (EIA) Directive.

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<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 20,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

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The Competent Authority in Sint Maarten is the Minister of Housing, Physical Planning, and Environment. A building permit (*Bouwvergunning*) was granted by the Competent Authority prior to the start of the construction of the new terminal on May 27<sup>th</sup> 2004. For the current project, the reconstruction of the terminal, there is no requirement for a building permit as the execution of the works are taking place within the building. In this context, no Environmental Assessment was carried out. Nonetheless, an adequate Environmental and Social Management Plan (ESMP) or equivalent instrument is implemented and monitored during reconstruction works.

The initial works consisted of the demolition, removal and disposal of non-structural components of the terminal building that were damaged in the September 2017 hurricanes, as well as the infrastructure and equipment later affected by mould. The disposal of materials took place at certified landfill.

The remainder of the surfaces that have been affected by mould have been treated by a specialised company. Material and mould samples were taken to attest that mould had been properly removed and that no further growth is possible. The treatment was carried out following local and US environmental regulations.

The impact of the reconstruction works will be localised (within the terminal building), temporary and of small magnitude. Nonetheless, during the project's execution Environmental Management Plans will be implemented to monitor potential impact during reconstruction works. During the terminal operation, no additional environmental impacts are expected when compared to pre-hurricane situation.

## **Climate adaptation**

Given its geographic position, Sint Maarten is highly vulnerable to natural disasters and adverse climatic events. For the past decades, the country has been exposed to high winds and numerous hurricanes, including notably intense storms: Donna in 1960 (Category 3), Luis in 1995 (Category 4), and Irma 2017 (Category 5 on Saffir-Simpson scale). Due to the size of the country, a single storm has the potential to directly impact the entire population. High winds, rainfall and flooding are the principal risk factors while the country is also vulnerable to earthquakes. Coastal areas are exposed to flood risk from storm surge and tsunamis. Increased urbanization along with climate change and limited country capacity to build with resilience adds to its vulnerability to natural hazards.

In order to be able to face increasing hurricane intensity, PJIAE is introducing a number of climate adaptation measures and upgrade to the reconstructed terminal building, to improve its ability to withstand category 5 hurricanes and its general resilience to climate action:

- **Roof strengthening and waterproofing:** the new roof design includes changes to strengthen the top layer of the roof structure so that it can withstand Category 5 winds. About 76% of the top roof layer was lost during Hurricane Irma. Additionally, a 2-layer waterproof membrane is being installed across the entire terminal roof, which should prevent water from entering the building through the roof again in the event of damage to the top section of the roof.
- **Main terminal and jet bridge door strengthening:** the revolving doors on the front of the terminal were heavily damaged during Hurricane Irma allowing wind to enter the terminal building, which likely exacerbated the roof damage. They are to be replaced with sliding glass doors. Further, the interface between the jet bridges and the terminal building are to be strengthened to prevent them from being displaced by high winds as occurred during Irma.

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The reconstruction project will provide improved sustainability and energy efficiency than the original construction, including, but not limited to: high performance exterior insulated glazing, LED lighting to reduce energy consumption and longer lifespan, lighting control and occupancy sensors to turn off lights in rooms that are not occupied, higher efficiency HVAC equipment, LED monitors, higher efficiency BHS system and roof mounted solar panels.

### **Other Environmental and Social Aspects**

PJIAE will receive external support and assistance from the World Bank through grants to create a permanent environmental and social management team within the Airport's management structure. The support from the World Bank will mitigate the risk arising from the fact that PJIAE currently does not have dedicated environmental and social experts.

## **Conclusions and Recommendations**

Given the above, the following environmental conditions are to be applied.

### **CONDITIONS**

First disbursement is subject to receipt by the Bank of the following:

- Prior to first disbursement, the Promoter will have to provide evidence that the dedicated Project Implementation Unit (PIU) or similar structure already in place is fit for purpose with staff, resources and competences to the satisfaction of the Bank, is maintained until project completion, both in headquarters and on site, to coordinate and manage the Project. The PIU shall be staffed with experienced professionals in the areas of procurement and environmental and social management with terms of reference satisfactory to the Bank.

### **UNDERTAKINGS**

- The Promoter shall ensure that an adequate Environmental and Social Management Plan(s) (ESMP) or equivalent instrument is implemented and monitored by an independent and certified body acceptable by the Bank during the construction of the project, and will notify the Bank of any unexpected environmental impacts or incidents during the works.

Subject to the above conditions and undertakings being met, the environmental and social impacts of the Project are expected to be minor and the Project is considered to be acceptable for EIB financing.

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