



DETAILED ENGINEERING DESIGN

The Revolutionary Government of Zanzibar (SMZ) and UK Export Financing (UKEF) signed USD 428 million agreements to expand Pemba Airport. These agreements also include the construction of several road networks in Unguja and Pemba.



The expansion of Pemba's airport infrastructure came at a time when Zanzibar was experiencing a tourism boom. Official statistics revealed that international tourist arrivals surged by an impressive 16.4 percent in 2023, with the archipelago welcoming a record 638,498 visitors. This upward trend underscores the region's growing appeal as a travel hotspot.

In 2024, Nurizon was subsequently appointed to undertake the detailed engineering design of all the engineering disciplines required to complete this new state of the art facility.

This new airport facility required a significant runway upgrade and extension as well as a new terminal building. The current runway at Pemba Airport, which was built in 1962, was only 1 500 metres long and 15 metres wide, enabling only light aircraft to land at the airfield, limiting its capability to a regional airport servicing internal destinations to Zanzibar City, Tanga, and Dar es Salaam. Most flights being carried out via small code B aircraft.

However, the updated design enables direct international flights to the island. As a result of the upgrade to 2,500m long and 45m wide, including runway end taxiway loops and an expanded apron, much larger aircraft (Code 4C) can be accommodated.

The project will also include the construction of a new terminal building. The existing passenger terminal will be demolished and replaced with a new modern terminal, and there will be a new aircraft rescue and firefighting facility, electrical and airfield lighting substations and air traffic control tower, ancillary buildings (sewage treatment plant and utilities buildings), as well as upgraded parking, access road and landscaping

Pemba Airport served around 45,000 passengers per year in 2023 and upon completion of construction, the new airport will be able to handle up to 750,000 passengers per year.

HIGHLIGHTS OF NURIZON'S ENGINEERING DESIGNS AT PEMBA AIRPORT



Airside Infrastructure

The runway will be extended from its current length of 1,525m to 2,510m to accommodate Code C aircraft, with spatial safeguarding for future Code E operations. Taxiways and aprons will be upgraded, along with associated drainage systems and navigation aids.

Aeronautical Ground Lighting (AGL) will be installed to support nighttime and low-visibility operations. Additional airfield scope items include perimeter security and airside roads.

Buildings

The project includes the construction of a new passenger terminal building (PTB) with modern facilities; an air traffic control tower (ATCT); an airport rescue and firefighting (ARFF) building; an airside gate; and a mosque.

Supporting structures such as substations and a utility building, will also be provided.

Landside Infrastructure

A new landside access road, parking facilities, stormwater management systems, utilities, including bulk electricity and water supply, wastewater treatment, and telecommunications infrastructure will be provided.