



**National  
Airports  
Corporation**  
PAPUA NEW GUINEA

# NADZAB AIRPORT REDEVELOPMENT PROJECT



*Aerial view of the entire project sites at Nadzab Airport Redevelopment Project*

to achieve 90% completion of project. I am pleased to report that the project is progressing well and on target despite some challenges experienced at the commencement of construction. We have an experienced and dedicated team on the ground to ensure that we are on track to achieve the targeted completion date of April 2023.

I acknowledge this significant investment by the PNG Government and the Japanese Government through JICA. This investment will yield substantial outcomes. One of which is the improved safety and security compliance of Nadzab Airport to meet International Civil Aviation Organisation (ICAO) standards for a Category 5 International Airport. The developments currently taking place will elevate Nadzab Airport to the standard that is required to serve as PNG's alternate international airport to the Port Moresby International Airport (Jacksos).

You will also note from the report several important milestones reached by the project to date. These include;

- 100% completion of the 7.8 kilometers of palisade fencing around the boundary of Nadzab Airport.
- The completed upgrading of the Runway, Taxiway and Apron which has enabled resumption of jet operations into Nadzab and the

- Completed installation of the Waste Water Treatment Plant just to name a few.

I trust you will enjoy reading and learning about the project and its progress and status to date.

**Mr Rex Kiponge**  
**NAC Managing Director and CEO**



## Statement from the Managing Director and CEO

As the current serving Managing Director and CEO of the National Airports Corporation, it is my pleasure to present you this important update on the Nadzab Airport Redevelopment Project (NARP). This update reports on the milestones reached by the project to date and the current progress and status since construction commenced in 2020.

NARP is a significant project for Papua New Guinea. It symbolizes the future that NAC envisions for our network of airports particularly our major airports as we strive to achieve improved safety and security compliance, sustainability as well as excellence in our operations in order to meet the growing demand for air transportation in PNG and abroad.

NARP is a key driver of NAC's new business direction, 'Point of Transit to Point of Destination' which pursues business development of un-used land and other resources at Nadzab Airport.

Together with key partners, NAC aims to develop Nadzab into a point of destination for business, logistics, tourists, agriculture and general purpose aviation in Morobe Province and PNG.

As you will read from the report, so far, we have exceeded 70% project completion. By the end of this year, we expect-

## Project Background

The Nadzab Airport Redevelopment Project (NARP) is a high impact government project which is funded by the National Government through a soft loan from the Government of Japan through Japanese International Corporation Agency (JICA).

The Japanese ODA Step Loan, PN-P11, was signed on the 14th October 2015 for JPY 26,942 Billion and Counter-funded by GoPNG with PGK114 Million.

Prior to the project and current works being undertaken at Nadzab aerodrome, a detailed feasibility study was undertaken by joint venture Oriental Consultants Global Co. Ltd/ Azusa Sekkei Co. Ltd of Japan.

The study concluded that the airport had already exceeded its capacity and the terminal and the current operations required improved infrastructure. In addition, utility services such as water, sewerage and power infrastructure were either non-existent or out dated and needed urgent upgrade. It was therefore necessary for NAC to seek funding to upgrade the aerodrome to mitigate safety and security issues and also enhance the capacity of Nadzab to serve as an alternate international airport to the Jacksos International Airport.

The detailed design stage started after the loan agreement in 2015 and the tendering and awarding of engineering consultant services commenced in 2017. Front end engineering and design (FEED) was undertaken by the joint venture Oriental Consultants Global Co, Ltd/ Azusa Sekkei Co, Ltd with the assistance of the NAC Project Management Unit (PMU).

In 2019, the contract for construction was awarded to Dai Nippon Construction of Japan with specialist PNG based subcontractors, Hebou Construction and Fletcher Construction to commence construction in February of 2020. Due to COVID-19 related delays, the contractor was awarded an extension of time to complete the project by April 2023.



Passenger Forecasts - Nadzab

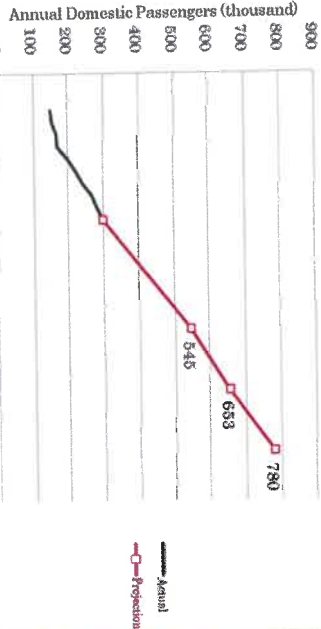


Chart 1: Air Passenger Forecast in Nadzab Airport (only ANG and APNG), (Source: JICA preparatory study, 2015)

Forecast passenger figures indicate that, the number of air passengers to Nadzab Airport has almost doubled over the last 10 years with the construction and production of various mines and LNG projects, passenger numbers are expected to further double.

The passenger movements during the years of construction shows proof of increased movements beyond the year of the pandemic. After the decline in movements during the restrictions and lockdown periods, the passenger movements to Nadzab recovered well and even increased steadily and as expected gone beyond previous years.

The capacity of each airport facilities are set as follows:

- a) Initial capacity of the new passenger terminal building; year 2026.
- b) Initial capacity of the terminal equipment such as check-in counters, security check equipment, etc.; year 2026.
- c) Initial floor space of the new passenger terminal building; equivalent to year 2031.

The passenger traffic demands planned for the opening year after redevelopment, and 10 years after that are shown:

Passenger traffic demand for project years

Project Year	Passenger Traffic
2021	600,000
2026	718,000
2031	858,000

Technology

Under STEP loan terms, Japanese technologies such as the following will be applied for energy saving and environmental protection. These were considered during D/D stage in accordance with the capacity development plan.

- Use of Natural Light
- Low Emissivity Glass
- LED Lighting Fixture
- Lighting Switch Control
- Inverter Controlled Air Conditioner

Under the project, JICA have sponsored training for four engineers and have accepted one of the NAC engineers to undertake master's program in Japan. There are further training being offered this year and following years.

The support and attention from the Project Steering Committee (PSC) comprising Department of Transport, Department of National Planning and Monitoring Department of Treasury and Department of Finance was instrumental in ensuring that the project was funded through the Public Investment Programme. To date the annual budgets appropriation has been received in full despite the issues faced in cash flow.

The PSC has been providing significant support toward the project and lessons learnt will be applied to further improve on future projects funded by JICA such as the proposed Tokua Airport Redevelopment.

Aeronautical Ground Lighting Installations

Temporary runway edge Lights are being used on the runway utilizing solar technology for the project. This is ensuring that flight operations continue whilst managing installation of new permanent lights for

JICA LOAN DATA:

**Borrower:** The Independent State of Papua New Guinea  
**Mr. Andrew Oaake, Acting Secretary Department of Treasury**

**Executing Agency:** National Airport Corporation Limited (NAC)  
**Employer:** Mr. Rex Kiponge  
**Managing Director and CEO**

**Implementing unit:** Project Management Unit (PMU)  
**Mr. Tom Nou**  
**Project Director PMU**

**Monitoring:** Project Steering Committee: DNP&M, JICA, Treasury, Finance NAC and Stakeholders

**Outline of Loan Agreement:**  
**Source of Finance:** JICA: Not exceeding 26,942mil. JPY (approx. 227.8 mil. USD)  
**GoPNG:** 5,303 mil. JPY (approx. 44.8 thousand. USD) (\$1USD=1118.24)

**Terms and Conditions**  
-Interest Rate: 0.1% p.a.  
(other than consulting services) 0.01% p.a  
-Repayment Period: 40 years, including 10 years of grace period

the Nadzab Airport Runway. There is in excess of 25 kilometres of cables being laid with over 380 Lights for the AGL. The lights will be specifically installed at runway thresholds/ end lights, runway edge, taxiway, Apron, PAPI and Simple Approach Lighting System. The lights comply with ICAO and help identify the runway for take-offs and landings.

The Simple Approach Lighting System (SALS)

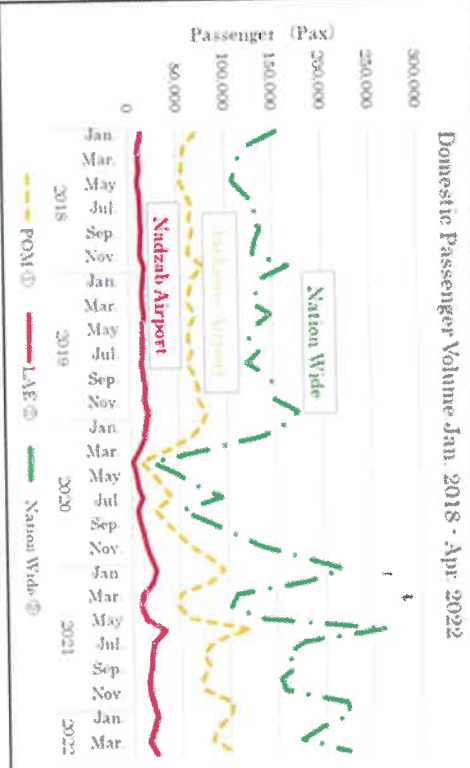
The SALS is an additional lighting set up in the new AGL system that will improve runway visual approach for safe aircraft operations. The AGL system will have its designated power supply with back up UPS and genset at the new AGL substation.

Waste Water Treatment Plant (WWTP)

The WWTP will utilize Japanese Technology by installing a treatment plant that uses the combined anaerobic and aerobic processes to break down waste. In the aerobic stage, the complex "Activated Sludge" method is used. This method provides extensive control to break down waste with a treatment capacity of 225 cubic meters per day for the new plant. The treatment performance in terms of Biochemical Oxygen Dissolved (BOD) is < 10mg/Ltr effluent.

Scope of Works

1. Widening and strengthening of the existing runway
2. Widening and/or strengthening of the existing taxiways
3. Construction of new taxiways
4. Construction of high strength rigid pavement apron
5. Strengthening of the existing apron
6. Storm water drainage
7. Car Park
8. Other civil works Road, perimeter road, perimeter fence and gates.
9. Improvement of aeronautical visual nav aids and lighting for Non-Instrument Code 4C
10. Construction of new passenger terminal building Total floor space of approx. 9,900m2 (two story structure) including two boarding bridges, baggage handling equipment, flight information system and security screening equipment.
11. Construction of a new administration building
12. Construction of a new fire-fighting station Cat 8 capacity
13. Refurbishment of the existing passenger terminal building for future cargo terminal
14. Construction of utilities and backup power substation



Passenger Movements







Artist impression of the completed passenger terminal building

Overall Construction Contract Summary				
Reporting Date	1st August 2022			
Contract Start Date	4th Feb 2020			
Contract End Date	9th April 2024	Actual % of Progress (Estimated)	73%	
Practical Completion Date	9th April 2023	Days Passed (Calendar Days)	909	
Contract Duration	30 Months (913 days)	Remaining Days (Calendar Days)	253	
Extension of Time	248 Days			
% of Time Lapsed	78%			

Safety Information for Start to Date:	
Lost Time due to Injury:	0
First aid medical treatment:	3
Covid19: 30 tested positive (All recovered)	
Total Manhours:	3,152,032
Environment compliance:	Compliant



Ministerial visit to Nadzab Airport, 2021

PROGRESS 73% complete	
Status % Completion of each work	
Runway Taxiway and Apron	100%
Grooving runway	90%
PAPI and lighting installation	75%
Roads and car parks	95%
Terminal building	64%
RFF Fire station	80%
NAC Amin office	50%
Power station	60%
Waste Water Treatment Plant	100%
New Fire Fighting truck	95%
Palisade security Fencing	100%



7.8km palisade fencing constructed around Nadzab Airport.





*Engineering consultant OCG team Nadzab*

## Project Management Unit - JICA Projects

The Project Management Unit was established by NAC and the National Government to execute JICA-funded projects in line with the government's development strategy to deliver high impact airport projects that will contribute to PNG Vision 2050 and the Connect PNG Initiative.



The team comprises engineers, technical officers, safety personnel and admin staff who represent the employer and the funding source and are involved in all aspects of the project from inception, feasibility, design & documentation, tendering & award and construction management.

The past few months have been extremely busy for PMU and our contractors and sub-contractor partners working diligently as one team on the various development stages of NARP.

PMU works closely with the consultant's engineer, JV Oriental Consultants Global/ Azusa Sekkei and the main contractor, Dai Nippon Construction of Japan as well as specialist subcontractors Hebu Construction and Fletcher Construction for building works.

In 2020, after the contract had just been awarded and while going through mobilisation, the COVID 19 restrictions and lockdowns made it difficult to proceed. An 8 month extension of time was approved, with the new completion date agreed for April, 2023.

PMU has always maintained a goal of efficient project delivery for cost, time, quality and above all, safe delivery of the project. The underlying foundation of the project is the same as the NAC leadership led by MD/CEO Mr Kiponge and that is transparency, and zero tolerance for corruption and practice of Godly principles.

PMU thrives on equal opportunity for all people especially encouraging female participation, local SME businesses and third level airline operations. PMU have put extra efforts in encouraging and motivating land owner participation and training on the job in technical and business management.

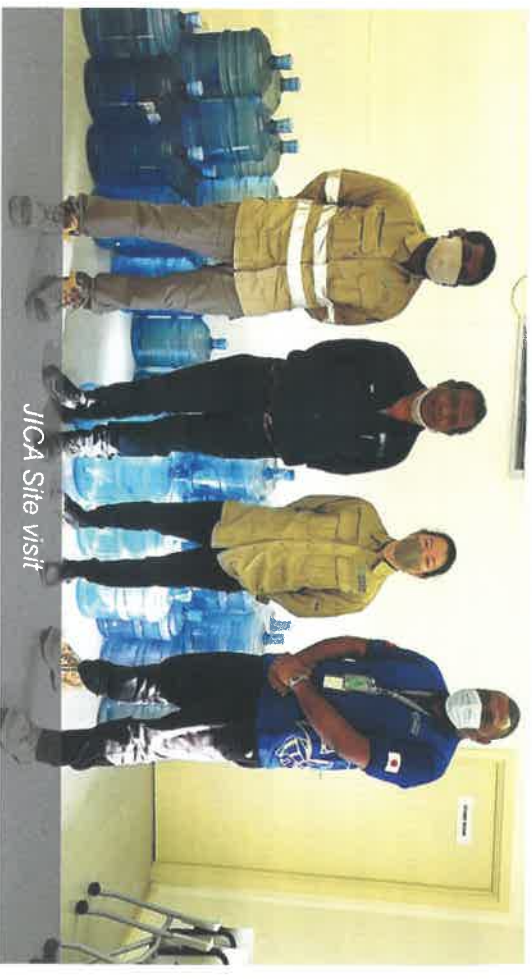
We are confident in crossing the finish line on time, within budget and without any lost time due to injury or fatality.

As we push on towards project delivery date, we have also commenced planning and preparations for the official handover and takeover of the Nadzab Airport Project to NAC. This will be signified by an opening ceremony where the public will be able to witness the opening of the new iconic terminal building for Nadzab Airport which will become a major landmark for Morobe Province and Papua New Guinea.

**TOM NOU**  
**PROJECT DIRECTOR – PMU**



*NAC Managing Director Rex Kiponge and team on site visit*



*JICA Site visit*



*PMU Port Moresby Team*



*DNP&M and Department of Treasury site visit*



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