Field of Service: Aviation / Airport Planning and Design **Client:** Japan International Cooperation Agency (JICA) The Government of Islamic Republic of Afghanistan **Region:** Asia Country: Islamic Republic of Afghanistan



Rehabilitation and Expansion of Aircraft Parking Aprons at Kabul International Airport











The Completion Ceremony

Night View at Apron

Project Overview:

Kabul International Airport (KAIA) is the largest capital airport and the gateway to Afghanistan. Having a 3,500m-length single runway, it is the primary hub for both domestic and international transportation in the country.

As the number of passengers had been increasing rapidly each year, frequent flight delays and small incidents between aircrafts due to lack of adequate parking space were becoming concerning issues at KAIA. Aware of the serious situation, the Government of Afghanistan sought international support for the development and rehabilitation of KAIA and the Government of Japan carried out a survey to identify the possible areas to be improved and developed. Based on the study, shortage of aircraft parking areas as well as the poor conditions of the aprons were identified as issues requiring immediate action.

Under JICA, Gyros carried out this Project that involved rehabilitation and expansion of aircraft parking aprons which were completed in 2014. As the result of the project, flight delays arising from the congestion of aircraft parking aprons has decreased and spacing between aircrafts has improved to meet ICAO standards. In addition, through the installation of apron floodlighting system, the overall safety of boarding/alighting and operating in the nighttime has improved.

Formation: JV (Main)

Type of Work: Study / Detail Design, Assistance in Tendering and **Construction Supervision**

Project Term: April 2012 - December 2013

Outline of Project:

[Objectives]

- To improve the safety in aircraft operation on aircraft parking area and to increase aircraft parking capacity of KAIA through rehabilitation and expansion of aircraft parking area.

- To improve the safety in aircraft operation during low visibility environment by the introduction of apron floodlighting and pavement markings.

[Scope of Work]

1. Rehabilitation and Expansion of Aircraft Parking Area

2. Installation of Apron Floodlighting System to provide sufficient illuminance meeting with ICAO SARPs.

3. Construction of storm water drainages to receive storm drain water from aprons.

Expected Outcome:

- Delays of flight arising from the congestion of aircraft parking aprons will decrease.

- Aircraft parking spaces will be improved so that the arrangements for optimum allocation will meet ICAO recommendations; hence improve safety through sound facilities and services for aircraft traffic.

- Safety of boarding/alighting and operating in the night time will improve.

