Ex-Ante Evaluation(for Japanese ODA Loan)
East Asia Division, East and Central Asia and the Caucasus Department
Japan International Cooperation Agency

１．Name of the Project

(1) Country: Mongolia
(2) Project: Chinggis Khaan International Airport Expansion Project
(3) Project Site: Sergelen Soum, Tuv Province
(4) Loan Agreement: September 29, 2026

２．Background and Necessity of the Project

(1) Current State and Issues of the Transport Sector in Mongolia

In Mongolia, the former Chinggis Khaan International Airport (currently Buyant-Ukhaa Airport; hereinafter referred to as “the old airport”), constructed in 1957, has experienced progressive deterioration over the years. In addition, due to its geographical constraints—surrounded by mountains on two sides (south and east) and thus limiting aircraft approach and departure directions—flight delays and cancellations occurred frequently. In response, the Government of Mongolia constructed a new Chinggis Khaan International Airport (referred to as “New Ulaanbaatar International Airport” at the time of construction; hereinafter referred to as “the new airport”) at a location less susceptible to such constraints, utilizing Japanese ODA loans.

The new airport is operated by a joint venture company comprising four Japanese firms and the Government of Mongolia under a concession agreement, and has become a symbol of Japan–Mongolia cooperation.

Although the new airport commenced operations in July 2021, passenger traffic and cargo volumes have since been expanding from 2022 onward, surpassing pre-COVID-19 (2019) levels. According to a survey conducted by the then JBIC in 2007, passenger traffic was projected to reach 1.65 million five years after opening (planned for 2019); however, in reality, this level was exceeded in the second year of its operation (2023), without waiting for the fifth year, and reached approximately 2.45 million in 2025. Furthermore, the Government of Mongolia has designated the period from 2023 to 2028 as the “Years to Visit Mongolia” and is implementing proactive tourism promotion measures such as expanding visa-exempt countries and increasing international route network. As a result, further growth in tourism demand and the travel industry is expected, with passenger traffic projected to reach 5.2 million by 2039 (JICA, 2026).

Regarding air cargo, the Government of Mongolia is promoting liberalization of

air transport. With cargo volume projected to reach 20,225 tons in 2039, expansion of cargo handling capacity is also required. Passenger volumes have already exceeded the initial design capacity of 1.65 million, and there are also reports that existing facilities are becoming insufficient. Against this backdrop, during the Japan–Mongolia Summit Meeting in September 2024, a request was made for support toward expansion of the new airport.

(2) Japan's and JICA's Policy Cooperation Policy and Operations in the Transport Sector

Under the Country Development Cooperation Policy for Mongolia (December 2017), "Creating eco-friendly and balanced economic growth" is identified as a priority area. The JICA Country Analysis Paper for Mongolia (January 2023) also highlights "Developing the urban infrastructure considering the environment and disaster preparedness" as a key issue. The Project is consistent with these policies.

Furthermore, the Project falls under the "Building a global network" cluster of JICA's Global Agenda on Transportation and is aligned with the relevant policies, analyses, and strategies. In addition, the New Plan for a "Free and Open Indo-Pacific (FOIP)" announced by then-Prime Minister Kishida in March 2023 emphasizes "Multi-layered Connectivity." For Mongolia, a landlocked country situated between China and Russia, the Project will contribute to improving connectivity with countries beyond its two neighboring countries through air transport.

JICA's past cooperation in the transport sector in Mongolia includes the ODA Loan project "New Ulaanbaatar International Airport Construction Project" (Phase I: L/A signed in 2008; Phase II: L/A signed in 2015).

The Project also contributes to the achievement of SDG Goal 9 (Industry, Innovation and Infrastructure) and Goal 11 (Sustainable Cities and Communities).

(3) Other Donors' Activities

None.

３．Project Description

(1) Project Description

① Project Objective

The objective of the Project is to ease congestion and enhance further convenience through accommodation of future growth in air passenger and cargo transportation demand, by expanding Chinggis Khaan International Airport, thereby contributing to further economic development of Mongolia.

② Project Components

1. Civil works, building construction, and equipment installation (financed by ODA loans) (Construction of a new passenger terminal building; development of taxiways, aprons, parking facilities, and access roads; enhancement of utility infrastructure, etc.)
2. Consulting services (financed by ODA loans)(Detailed design, construction supervision, procurement assistance, etc.)
3. Cargo Terminal Building (CTB) development (financed by the Mongolian side) (Design and construction of a new CTB; demolition of the existing CTB; relocation and associated works)

③ Project Beneficiaries（Target Group）

- Direct beneficiaries: Users of the new airport (approximately 14,000 persons/day; projected for 2039)
- Ultimate beneficiaries: Entire population of Mongolia (approximately 4.27 million; projected for 2039, National Statistics Office of Mongolia)

(2) Estimated Project Cost

196,716 million Yen (Japanese ODA loans: 158,284 million Yen)

(3) Schedule

September 2026 – June 2035 (106 months)

The Project will be deemed completed upon commencement of operation of the new facilities. (December 2033).

(4) Project Implementation Structure

１）Borrower: The Government of Mongolia

２）Guarantor: None

３）Executing Agency: Ministry of Road and Transport, “KHUSHIGIIN KHUNDII AIRPORT” STATE OWNED LLC

４）Operation and Maintenance System：The Government of Mongolia

(Outsourced to New Ulaanbaatar International Airport LLC (NUBIA))

(5) Collaboration and Sharing of Roles with Other Donors

１）Japan’s Activity

Through the country-focused training “Capacity Enhancement of Aviation Safety Management Systems” (2024–2025), the aviation safety policies of the Civil Aviation Authority are strengthened, thereby enhancing the safety of the aviation sector, including the new airport.

２）Other Donors’Activity

None.

(6) Environmental and Social Consideration

① Category: Category B

② Reason for Categorization: The project is not considered to be a large-scale Aviation project, is not located in a sensitive area, and has none of the sensitive characteristics under the JICA guidelines for environmental and social considerations (January 2022), it is not likely to have a significant adverse impact on the environment.

③ Environmental Permit: The Environmental Impact Assessment (EIA) report for the Project is scheduled to be approved by the Ministry of Environment and Climate Change in December 2027.

④ Anti-Pollution Measures: During the construction phase, measures such as water sprinkling, leachate treatment, and restrictions on working hours will be implemented to ensure compliance with national emission and environmental standards for air quality, water quality, and noise. During the operation phase, noise mitigation measures, including the installation of sound barriers, are planned.

⑤ Natural Environment: The Project site is not located within or around environmentally sensitive areas such as national parks, and adverse impacts on the natural environment are expected to be minimal.

⑥ Social Environment: As the Project will be implemented within the existing site, no land acquisition or involuntary resettlement will occur. Facilities of cargo operators currently located within the site are expected to be vacated through negotiations based on land-use contracts.

⑦ Other/Monitoring: Ministry of Road and Transport will monitor air quality, water quality, waste, soil contamination, noise and vibration, land subsidence, odor, biodiversity, topography and geology, socially vulnerable groups, labor conditions, community health, safety and security, existing social infrastructure and services, accidents, transboundary impacts, climate change, and grievances.

⑧ The greenhouse gas (GHG) emissions attributable to the Project are estimated at 82,073 tCO_2 equivalent per year during operation.

(7) Cross-Sectoral Issues

The Project will contribute to climate change adaptation by developing infrastructure that is resilient to the impacts of climate change. The estimated number of beneficiaries of this adaptation measure is approximately 4.27 million people (projected for 2039; National Statistics Office of Mongolia). Furthermore, the Project is consistent with the objectives set forth in Mongolia's Nationally Determined Contribution (NDC) under the Paris Agreement, particularly the objective of strengthening resilience to the impacts of climate change through the development of climate-resilient infrastructure.

New Ulaanbaatar International Airport LLC (NUBIA), which operates the airport, is promoting barrier-free access within buildings and surrounding facilities to support users with disabilities who require assistance or special consideration. Services provided include communication boards with frequently used phrases and illustrations that enable communication by pointing, tablets to facilitate written or translation-based communication, and dedicated applications that allow access to online sign language interpretation services.

In the Project, due consideration will be given to ensure that persons with disabilities are not adversely affected in relation to employment generated by the Project, labor conditions, public consultation and information dissemination during construction, and airport operations. Reasonable accommodations, including access to information (such as the use of the above-mentioned tools and services), will be provided while reflecting the views of persons with disabilities through their participation.

(8) Gender Category: GI (S) (Gender Integrated Project)

<Details of Activities/Reason for Categorization>

In response to gender-related issues identified during the preparatory survey, such as inadequate working environments at construction sites, the Project will improve working conditions for female workers (e.g., installation of separate toilets and rest areas for men and women, provision of nursing spaces). Progress and outcomes will be monitored through indicators such as satisfaction levels with working conditions, disaggregated by gender.

In addition, the Project will incorporate gender-responsive facility design (e.g., installation of lighting to enhance safety), promote the recruitment of female staff, and include provisions in contracts with contractors for the implementation of

gender awareness training in collaboration with NGOs and other organizations.

(9) Other Important Issues

The Project is expected to introduce and utilize Japanese construction and civil engineering technologies, including highly weldable steel frames and curtain wall systems integrating building-integrated photovoltaic (BIPV) technologies, as well as specialized airport equipment such as smart security lanes and baggage handling systems. Furthermore, the use of eco-airport technologies in the aviation sector (e.g., insulation coatings and metal insulated sandwich panels to enhance thermal insulation and cold resistance of buildings) is envisaged.

4. Targeted Outcomes

(1) Quantitative Effects

Outcomes (Operation and Effect Indicators)

Indicator	Baseline (Actual value in 2024)	Target (2035) [2 years after project completion]
Annual number of passengers (10,000 persons) (of which international)	216 (174)	436 (384)
Annual number of foreign passengers (10,000 persons)	83	173
Annual number of aircraft movements (number) (of which international)	16,279 (11,803)	29,885 (24,799)
Cargo volumes (tons)	10,172	18,358

(2) Qualitative Effects

Reduction of congestion at airport facilities, enhancement of convenience, comfort and safety for airport users, and promotion of Mongolia's economic development.

(3) Internal Rate of Return

Based on the assumptions listed below, the economic internal rate of return (EIRR) for the Project is 21.0%, and the financial internal rate of return (FIRR) is 6.4%.

【EIRR】

Cost：Construction costs and operation and maintenance costs (excluding taxes)

Benefit：Increased tourism revenue and increased aviation-related revenue from foreign airlines

Project Life：38 years

【FIRR】

Cost：Construction costs and operation and maintenance costs

Benefit：Aviation revenue and non-aviation revenue

Project Life：38 years

５. External Factors and Risk Control

(1) Preconditions

None.

(2) External Factors:

No sudden decline in passenger and cargo demand due to the outbreak of pandemics such as that experienced during the COVID-19 period.

６. Lessons Learned from Past Projects

Ex-post evaluations of the ODA Loan projects for Mongolia, namely “New Ulaanbaatar International Airport Construction Project” and “New Ulaanbaatar International Airport Construction Project (II)” (evaluation year: 2023), indicate that following the outsourcing of airport operations to the private sector, the payment of fixed asset tax became the responsibility of the Civil Aviation Authority. Since the old airport had been operated by a public entity, it had been exempt from such taxation; however, under private operation, tax payments have imposed a certain financial burden on the Authority.

Based on this experience, it was identified that when the operation and maintenance entity of new facilities differs from that of existing facilities, it is necessary to examine in detail the respective roles of each entity and the financial burdens arising after the transition, and to ensure that such matters are communicated in advance and well understood by all stakeholders.

In this Project, given that the current concession agreement is set for a period of 15 years, the status of considerations regarding the operational structure after the expiration of the concession will be regularly monitored.

７. Evaluation Results

The Project is consistent with Mongolia's development challenges and policies, as well as with Japan's and JICA's cooperation policies and analytical framework. By expanding Chinggis Khaan International Airport to accommodate future increases in demand for air passenger and cargo transportation, the Project will contribute to the growth and development of Mongolia's aviation and airport sector, and ultimately to the country's overall economic growth.

Furthermore, the Project is expected to contribute to the achievement of SDG Goal 9: "Industry, Innovation and Infrastructure" (building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation) and Goal 11: "Sustainable Cities and Communities" (making cities and human settlements inclusive, safe, resilient, and sustainable). Therefore, the need to support implementation of the Project is high.

8. Plan for Future Evaluation

(1) Indicators to be Used

As indicated in Sections 4.

(2) Future Evaluation Schedule

Ex-post evaluation: 2 years after the project completion

END

Annex: Map of Chinggis Khaan Internatinoal Airport Expansion Project

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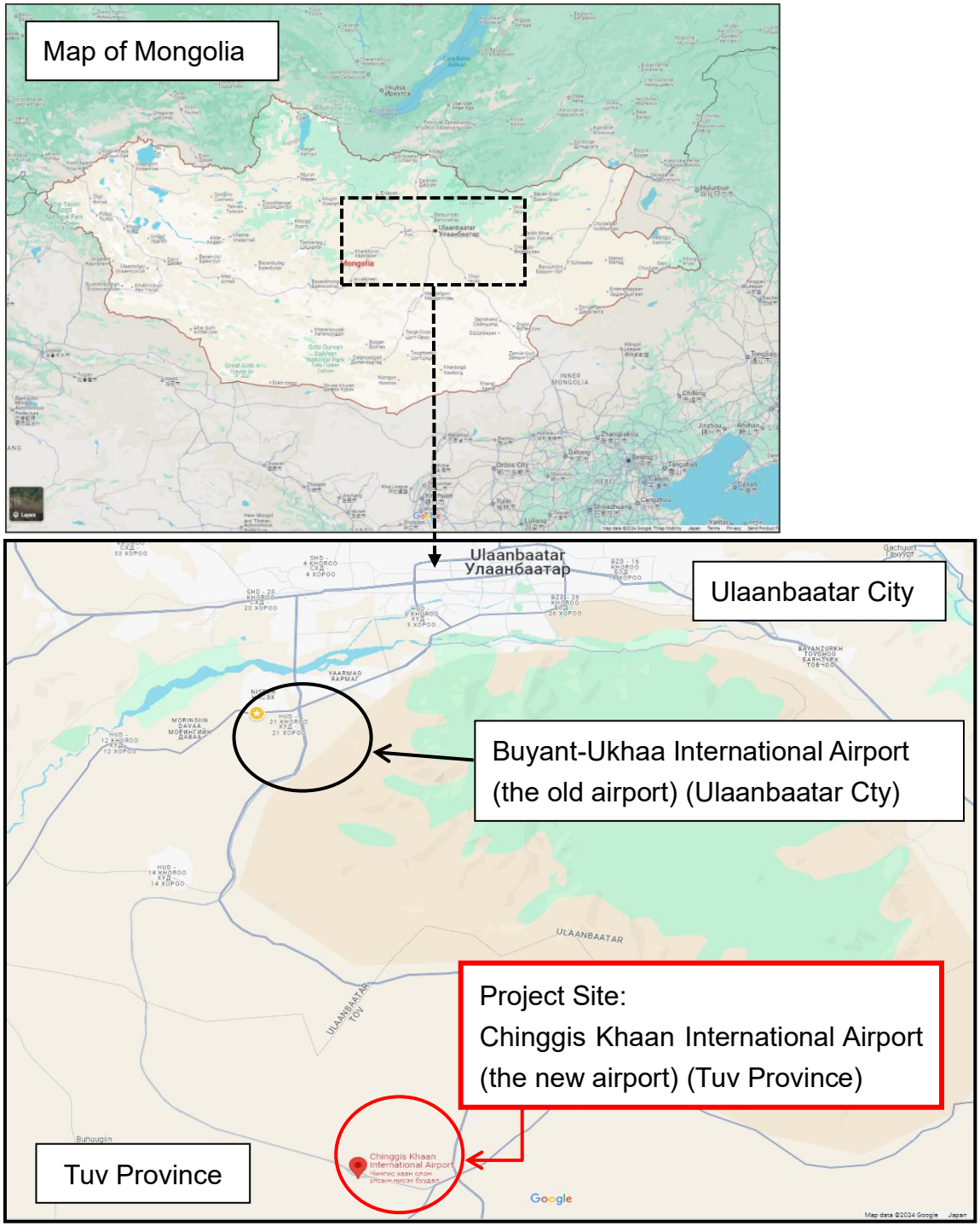
Map of Chinggis Khaan Internatinoal Airport Expansion Project



Source：Google Maps（Map data ©2024 Google、TMAP Mobility）Prepared by JICA.