

**Mongolia
Ministry of Road and Transport
Development(MRTD)**

**The Project for Human Resource
Development and
O&M Capacity Development for
New Ulaanbaatar International Airport
(NUBIA)**

**Project Completion Report
VOLUME 1**

**September 2018
Japan International Cooperation Agency**

**Narita International Airport Corporation
JALUX Inc.
Japan Airport Terminal Co.,Ltd.**

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Project Completion Report

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Separate Volume

Acronyms

Table 1. Acronyms

Acronym	Standard Nomenclature
ATC	Air Traffic Control
CAAM	Civil Aviation Authority of Mongolia
CKIA	Chinggis Khaan International Airport
CS	customer satisfaction
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
JCM	Joint Coordination Meeting
MRTD	Ministry of Road and Transport Development
NSO	National Statistics Office
NUBIA	New Ulaanbaatar International Airport
OECD	Organization for Economic Co-operation and Development
PDM	Project Design Matrix
POA	pre-operation administration
SPC	special purpose company

Interim Review on Technical Cooperation on Airport Operation


Firstly, there are two components in this technical cooperation project 1) Operation of NUBIA and 2) ATC. Although there was only the component 1 (Operation of NUBIA) in this project in the first place, a necessity for technical cooperation for ATC has been recognized after startup of the project. In this way, the project has become composed of two components. One thing that should be emphasized here is that this review is only for the component 1 but the component 2 (ATC). Technical cooperation provided in Mongolia under the component 1 concluded in July 2018 and this review was carried out on the component 1 using the 5 evaluation criteria of the OECD's Committee for Economic Cooperation. When the project is completed, a review which includes both components will be done.

I Basic Information about the Project

1. Mongolia: Basic Data

1-1. Basic Information about Mongolia

Table 2. Mongolia: Basic Information

Flag, Formal Name	 Mongolia
Land Area	Approx. 1.56 million km ²
Population	3,119,935 (2016 National Statistic Office of Mongolia) Of this number, 1,396,288 people live in Ulaanbaatar
Capital	Ulaanbaatar
Ethnic Groups	Mongols (comprising 95% of the total population), Kazakhs and others)
Language	Mongolian (the official language), Kazakh
Religion	Tibetan Buddhism and others
Currency	Tugrik (MNT)
Exchange Rate	\$1US = 1,970.3 Mongolian Tugrik (MNT) (2015 average rate Mongolian Bank)
GDP	\$US 11,741,000,000 (2015 World Bank)

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Per capital GDP	\$US 4,182 (2015 World Bank)
Primary Imports / Exports	Exports: Mineral resources (coal, copper concentrate, fluorite), crude oil, livestock produce (cashmere, leather) Imports: fuel oil, automobiles, machinery and equipment, groceries, pharmaceuticals
Primary Trading Partners	Exports to: China, England, Russia, Germany, Switzerland Imports from: China, Russia, Japan, South Korea, USA (2016 NSO)
No. of Japanese Residents	A total of 468 people (Ministry of Foreign Affairs Annual Report of Statistics on Japanese Nationals Overseas: 2016 abridged edition)

*Source: Ministry of Foreign Affairs website

1-2 Area of Activities



Figure 1. Area of Activities

Source: Ministry of Foreign Affairs website (<http://www.mofa.go.jp/mofaj/files/000076488.pdf>)

1-3 Overview of New Ulaanbaatar International Airport

Table 2 shows an overview of New Ulaanbaatar International Airport

Table 3. Overview of New Ulaanbaatar International Airport

Basic Airport Information	
Airport	New Ulaanbaatar International Airport New Ulaanbaatar International Airport
Administrator	CAAM : Civil Aviation Authority of Mongolia CAAM : Civil Aviation Authority of Mongolia
Location	About 50 km south of the capital Ulaanbaatar
Runway	3,600m×45m
Passenger Terminal	Total floor area: 33,300 m ² (3-story building)

Overview of Construction

Contracted construction period: 43 months (1,290 days)

Contracted delivery date: January 4, 2017

Scale: building construction

- Passenger terminal: 33,300 m² (RC structure + steel frame)
- Control tower: Height of 38 m (4F, RC structure + steel frame)

Civil engineering work

- Runway: Total length 3,600 m x 45 m (width)

Building composition: Passenger terminal building, control tower, substation, boiler for supply of hot water, fire appliance garage, water and sewage treatment facilities, aviation fuel supply facilities, other

Constructors: Consortium comprising Mitsubishi Corporation and Chiyoda Corporation

Designers: Consortium comprising Azusa Sekkei Co., Ltd. and Oriental Consultants Co., Ltd.

1-4 Overview of Chinggis Khaan International Airport

Table 3 gives an overview of Chinggis Khaan International Airport. Figure 1 shows the organization of the Civil Aviation Authority of Mongolia ("CAAM") that will run the airport.

Table 4. Overview of Chinggis Khaan International Airport

Basic Airport Information		
Airport (Code)	Chinggis Khaan International Airport (IATA: ULN, ICAO: ZMUB)	
Administrator	CAAM : Civil Aviation Authority of Mongolia	
Location	About 10km southwest of the capital Ulaanbaatar 47°50'33"N 106°46'01"E	
Runway	3,100m×60m (14/32) 2,000m×40m (15/33)	
Passenger Terminal	Total floor area: 16,050 m2 (4-story building)	
Aircraft Movements	11,682	(2016)
Passenger Nos. (International)	789,597	(2016)
Passenger Nos. (Domestic)	228,503	(2016)
Total Passengers	1,018,100	(2016)
Cargo (tonnes)	4,316	(2016)

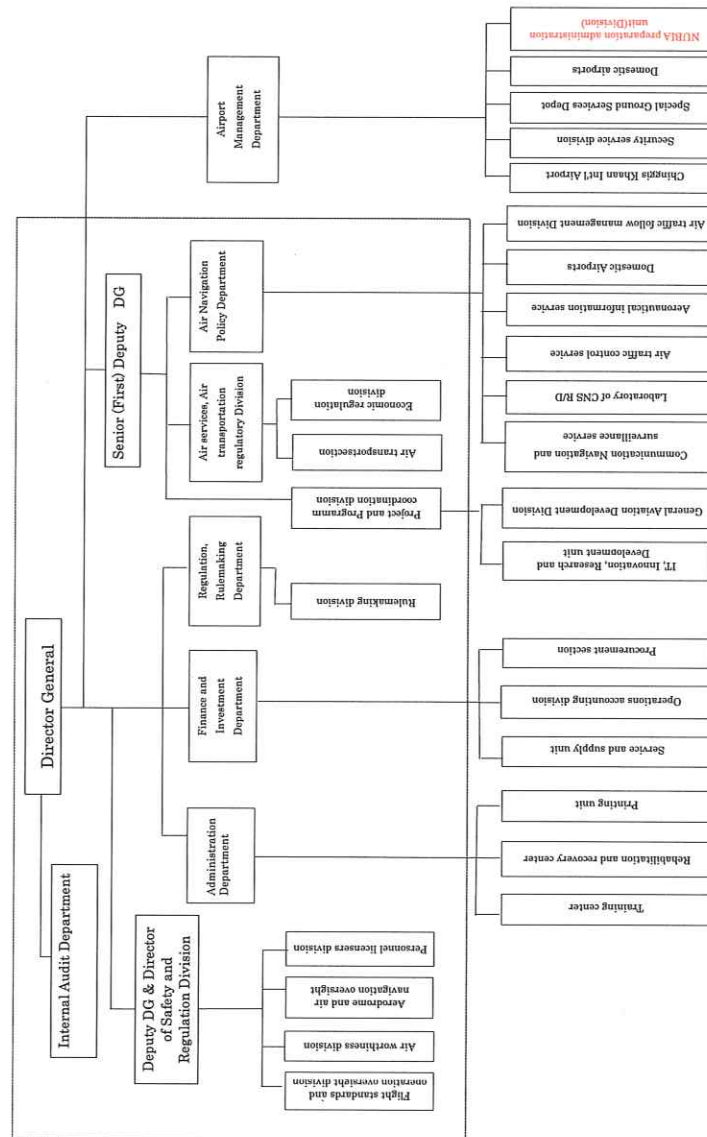


Figure 2. CAAM organizational chart

* Source: Obtained from CAAM

1-5 Overview of Aviation in Mongolia

Table 5. Overview of Aviation in Mongolia

Home Country Airlines	3 companies
	MIAT Mongolian Airlines (OM/MGL), Aero Mongolia (MO/MNG), Hunnu Air (MR/MML)
	  
	<p><u>MIAT MONGOLIAN AIRLINES</u></p> <p>National Mongolian airline company. Has a fleet of 6 aircraft and flies to Narita, Seoul, Beijing, Hong Kong, Moscow, Frankfurt and other cities.</p>
	<p><u>Aero Mongolia</u></p> <p>National Mongolian airline company. Has a fleet of 3 aircraft. Flies to 10 cities within Mongolia, as well as to Irkutsk (Russia), Hohhot (China) and Urumqi (China).</p>

<p><u>Hunnu Air</u></p> <p>Has 4 aircraft. Flies to 12 cities within and outside of Mongolia as well as making charter flights.</p> <p>Concluded an agreement with the Japan Aviation Academy (April 24, 2012). Runs charter flights between Haneda and Ulaanbaatar. Makes training flights in which Japan Aviation Academy students train as flight attendants.</p>

2. Title of the Project

The Project for Human Resource Development and O&M Capacity Development for New Ulaanbaatar International Airport (NUBIA)

3. Duration of the Project

The duration of the Project will be fifty-four (54) months. (until July 2019)

4. Project Background and Objectives

Mongolia is continuing to post steady economic growth as a result of efforts to promote a market economy since 1990 and recent advancements in its manufacturing and mining sectors. In recent years, the number of overseas travelers visiting the country has increased significantly against a backdrop of expansion in investments into its rich underground resources and livestock

resources. However, topographical constraints imposed by the mountains to the south and east of the airport restrict takeoff and landing operations under certain wind directions and weather conditions, and improving the airport's reliability and safety has become a pressing issue.

Consequently, a yen-loan agreement for the construction of New Ulaanbaatar International Airport was signed in 2008 to improve the airport's safety, reliability and convenience, and construction is currently in progress with completion slated in May 2018.

Smooth operations and maintenance after the commissioning of the new airport is critical to ensuring the project's effectiveness and sustainability. In the belief that it had room for improvement in areas that include employee training, airport operations and maintenance, the Mongolian Ministry of Road and Transport ("MRT"), which is responsible for the operation of NUBIA, requested technical cooperation project in August 2013 from the Japanese government entitled the "Project for Human Resource Development and O&M Capacity Development for New Ulaanbaatar International Airport" (the "Project") with the objectives of improving the operations and maintenance capacity of NUBIA.

5. Overall Goal and Project Purpose

NUBIA, the capital airport of Mongolia, is upgraded in its capacity to be able to function appropriately in case of rapid increase of customers as the gateway of the country.

6. Implementing Agency

Ministry of Road, Transportation and Developing

II Results of the Project

1. Results of the Project

1-1 Input by the Japanese side (Planned and Actual)

(1) Dispatch of Japanese Experts

Twenty six JICA Experts have been assigned to the Projects.

A list of JICA Experts and their total assignment period by the end of 58th dispatch in July 2018 is shown in Annex 1-1.

The total day of dispatched JICA Short-term Expert is 761 and the total time of dispatched JICA Short-term Expert is 99. (Based on the data from Aug. 2015 to Jun. 2018.) Its total field work has counted 943 man-day.

(2) Training in Japan

Training in Japan was conducted to learn practices of airport management, operation, facilities etc. in Japan through visits to Narita Airport, Tokyo Haneda Airport, and other local airports in Japan, etc. from November 2015.

A list of participants to the training in Japan is shown in Annex 1-2.

As of the end of June 2018, the total times of trainings in Japan are 16 and number of participants are 96. (Based on the data from Aug. 2015 to Jun. 2018.)

1-2 Input by the Mongolian side

(1) Assignment of Counterpart Personnel

POA added significant number of officers after the Fourth JCM.

Other than ordinal sections and divisions, POA has organized various action plan teams to implement plans and prepare operation manuals. Teams have been making concentrated effort to achieve good progress in achieving action plans and manuals. JICA expert team intensively supported action plan teams in this regard. Because a consensus is achievement of action plan is achievement of project goal.

Assignment of Counterpart Personnel is shown in Annex 1-3.

(2) Office Space and Equipment

PIU provided for JICA Experts necessary work space and equipment in its office.

1-3 Activities

Initial action plans and achievements are shown in Annex 1-4.

Initially, this project was to continue until 29 September 2017 but the opening of the airports was delayed due to major delays in the construction of facilities under the jurisdiction of the government of Mongolia in 2017 and in the appointment of an organization to operate NUBIA.

Consequently, the government of Mongolia requested an extension of the technical cooperation period and it was continued until 28 September 2018.

Because of frequent personnel transfers by our local counterparts during the project period, training of personnel had to be repeated in some fields and some of our local counterparts had less experience and expertise in their fields than was initially envisaged in the project. Therefore, more visits by experts to Mongolia were added and, consequently, the number of visits that took place was different to the number originally planned.

2. Achievements of the Project

2-1. Outputs and indicators

Achievement rate of indicators is shown in annex1-4.

(1) Output 1

The expectations for Output1 are " O&M organization is established based on O&M plan including staff allocation".

The action plan implementation team responsible for personnel matters drafted an organization plan but recruiting has still not taken place and recruiting will now be done by the SPC which is to be established at some point in the future. Consequently, Result 1 has not been achieved but almost all of the action plans required before the establishment of an SPC have been implemented.

(2) Output 2, 3, 4 and 5

The expectations for Output 2 through 5 are "Implementation capacity for revised maintenance plan of runways etc. at NUBIA is improved" "Implementation capacity for newly developed O&M plan of fuel supply at NUBIA is improved" "Implementation capacity for newly established charge setting system and tenant management plan at NUBIA is improved" and "Implementation capacity for newly developed customer satisfaction (CS) plan for upgrading CS at NUBIA is improved". We can say that the level of achievement for Results 2 through 5 is "Generally Completed".

The personnel training under this project will be taken over by the SPC and the actual airport operations will be under the jurisdiction of the SPC. Most of the action plans and airport operations manuals cannot be implemented or drafted without administrative input from the SPC so, with those exceptions, everything else is generally completed.

(3) Output 6

Output 6 is "Implementation capacity for newly developed relocation master plan is improved".

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We were able to transfer the fundamental knowledge required for airport relocation by inviting executives to visit Centrair International Airport and New Ishigaki Airport and be briefed by JICA experts on the essential requirements for airport relocation.

However, the responsibility for detailed relocation planning, etc for NUBIA will be shared between the SPC, the government of Mongolia and the airlines and it is still not possible to define the scopes of activities and responsibilities at this stage without an SPC. Therefore, the results for this area are yet to be forthcoming.

2-2. Project Purpose and indicators

PDM defined Project Purpose as “Mechanism as well as capacity for O&M is strengthened in NUBIA for its smooth inauguration.”

Indicators of the project purpose are as follows:

- 1) O&M organization of NUBIA is appropriately functioning by implementing the O&M organization plan.
- 2) Most of preparatory work is completed in the field of maintenance of runways, etc. along with the revised maintenance plan for NUBIA.
- 3) Most of preparatory work is completed in the field of fuel supply system along with O&M plan for NUBIA.
- 4) Most of preparatory work is completed in the field of tenant management along with the O&M plan for NUBIA with charge which is appropriately set for NUBIA.
- 5) Most of preparatory work is completed in the field of customer satisfaction (CS) improvement along with the plan for NUBIA.
- 6) Most of preparatory work is completed for relocation to NUBIA.

The project purpose is to complete organization and human resource preparations at NUBIA in readiness for the opening of the airport. However, it is not possible for training to be provided for personnel throughout the organization because the SPC, which will actually be the organization, has not been established and, therefore, the project purpose has still not been achieved. Capacity development related to airport operations and maintenance up to what could be done prior to establishment of the NUBIA operator and the CAAM and SPC will need to continue maximizing their efforts for the startup and commissioning of the airport.

After SPC is established, the counterparts who were trained under the project can be expected to play a central role in pushing ahead with the startup and commissioning of the airport.

3. History of PDM Modification

3-1 Amendment Effective from 26 September 2014 (22 April 2016)

Decision on technical cooperation for ATC and items related to those fields added

3-2 Amendment effective from 22 April 2016 (7 April 2017)

ATC training courses in Japan added.

3-3 Amendment effective from 7 April 2017 (5 June 2018)

Items added in relation to ATC training overseas and the establishment of a NUBIA airport operator and fueling operator.

4. Others

4-1. Results of Environmental and Social Considerations

The site for NUBIA is an extensive basin with a grassy expanse so the relocation of residents has not been a problem. However, the government of Mongolia intends to build a new city in this basin with a population of 100,000 residents and NUBIA is the forerunner for this development program. The expressway now under construction and the planned cargo rail link will serve future residents well.

Controls will also prevent waste, etc. from the activities at NUBIA from having a significant impact on the natural environment.

4-2. Results of Considerations on Gender/Peace Building/Poverty Reduction

The majority of our counterparts in this project have been women. The creating of a large number of female professionals through this project can be seen as a helpful contribution to gender issues in this country.

NUBIA is expected to handle more than twice as many passengers as CKIA at present, so the creation of more employment opportunities can be described as a contribution to eradicating poverty.

The objective of the project is to provide the capacity to transport international passengers smoothly with an airport of larger dimensions. Increases in international passengers will encourage mutual understanding, investment and cooperation with other cultures around the world. These are important elements in peace building.

III Results of Joint Review

1. Results of Review Based on DAC Evaluation Criteria

Joint evaluation was carried out as a combined exercise by the JICA team of experts and their counterparts from the government of Mongolia. The following are the results and have been approved by the 6th JCM.

1-1. Results of Joint Evaluation of Technical Assistance on Airport Operation

(1) Review of July 2018

There are two components in this technical cooperation project. 1) Operation of NUBIA and 2) ATC. Technical cooperation provided in Mongolia under component 1 (Operation of NUBIA) concluded in July 2018 and a review was carried out on the component 1 using the 5 evaluation criteria of the OECD's Committee for Economic Cooperation.

(2) Results of interim review of technical cooperation on airport operation

① Relevance

The relevance of this technical assistance is extremely high.

- The importance of staff training in civil aviation fields is mentioned in the government policy on civil aviation with 2020 as the target year.
- This cooperation is also compatible with "balanced socio-economic development" and "quality infrastructure that can support economic growth".
- The facilities at NUBIA were provided with a yen loan and cooperation training airport operations staff will demonstrate a synergistic effect in terms of facilities and services.

② Effectiveness (Project Goal Achievements)

The effectiveness of the project is moderate but can be expected to improve in the future.

- The capabilities of NUBIA staff have improved to some extent through this technical assistance.
- The knowledge levels of our counterparts have been markedly different from the beginning and not all have attained an adequate level because some with absolutely no airport working experience were placed in the startup and commissioning team by CAAM.
- If an organization to operate NUBIA (SPC) is established at the appropriate time during the startup and commissioning period, the effect would mean a smoother commissioning of the airport.
- The 55 counterparts, including those on the fueling team, as well as the several hundred to be transferred from CKIA, etc. will transfer their expertise in the operation of NUBIA to new employees. The real effectiveness of technical cooperation will become evident when

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the secondary technical transfer concludes properly.

- Almost all of the envisaged project activities have concluded. However, this does not include preparations for airport relocation. This is because there is no clear demarcation between the technical assistance activities for the operation of NUBIA and the activities of the SPC.
- The POA counterparts are very satisfied with the technical assistance provided at NUBIA and training in Japan by the JIC team of experts.

It is worth noting that the development of further capabilities will be done by the SPC as the operating entity for NUBIA but in terms of personnel training prior to that, the project has attained the highest possible levels. In that sense, the effectiveness of the project is very high but the interim evaluation will be "moderate" in terms of the overall project goals.

③ Efficiency

The efficiency of this project is moderate.

- Project input and activities have almost concluded. This includes carrying out action plans and drafting manuals in English and Mongol.
- The term of the project was extended from the initial 31 months to 43 months because the opening of the airport was delayed due to major delays in the construction of facilities under the jurisdiction of the government of Mongolia in 2017 and in the appointment of an organization to operate NUBIA. This extension enabled the counterparts to obtain more time for training and improvement.
- The handover of facilities and equipment at NUBIA and the relevant handling instructions was greatly delayed by the extended construction period. This was the reason for the delay in carrying out the action plans and drafting the manuals.
- Because the assignment of counterparts was significantly delayed, some did not have enough time for training.
- Of the 12 counterpart teams, some comprised only inexperienced personnel while in other teams, the counterparts continued to alternate and this was an obstacle to efficient staff training.
- Of those who were selected for training in Japan, some, for political reasons, came from fields that were not compatible with training themes, and others resigned soon after returning to Mongolia, etc. Not just a few participants were selected who had little value to the project.

④ Impact

The impact of the project is moderate but will improve shortly.

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- Because NUBIA will be able to handle more than twice as many passengers as CKIA, it will make a contribution in a variety of socio-economic areas.
- 55 counterparts were trained under the project.
- Under the project, many counterparts recognized the differences in airport operation by a private sector corporation as opposed to a public sector organization. This could be described as a small step in the direction of innovation in the public sector.
- Including CKIA and NUBIA, there are airports and airfields in 22 locations in Mongolia. The CAAM will someday conduct a study into applying the private sector operation format to other airports.

⑤ Sustainability (Ongoing Efforts to Achieve Project Goals)

The project's sustainability will improve later.

- Satisfactory operation of NUBIA is a high-priority item in the national policy for the government.
- Japanese corporations will also participate in the NUBIA SPC and that will add strength to its human resources.
- If the government of Mongolia assigns appropriate personnel to NUBIA, we will be able to anticipate the SPC to operate the airport satisfactorily.
- If the SPC operates the airport properly, the service levels at NUBIA can be expected to continue to improve in the competition in international comparison evaluations of airports.
- The fuel division will be a separate organization to the SPC at NUBIA and if the process for selecting a fuel operator organization is done properly, we can expect the fuel facilities to also be operated correctly.

2. Key Factors Affecting Implementation and Outcomes

2-1. Desirable Effects

(1) Personnel with practical experience mobilized as short-term experts

The experts in this project had practical experience in their individual technical fields. During interviews, many of the counterparts recognized the depth of practical knowledge of the experts and felt that they could answer just about any question at all.

(2) All Japan assistance framework

There were three essential elements in the commissioning of NUBIA: facility construction, personnel training and establishment of an operating company. Japanese corporations are involved in all of these. There have been various issues such as inadequate works and the delay in the establishment of an operating company, but adjustments were made under the leadership of JICA. The result is the prospect of Mongolia's first private-sector operated airport.

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2-2. Undesirable Effects

(1) Timing of POA staff (counterpart) assignment

This project began in January 2015 and 13 of the first counterparts were finally assigned to the project in October of the same year. That number has steadily grown to 55 at present but the results of the technical transfer would be much different if there were 55 to start with.

(2) Level of POA staff assigned

There were significant differences in the levels of counterparts assigned to the project. For every person with 10 years experience at a senior level at CKIA, there was one who was an absolute novice. The situation for JICA experts was like teaching post-graduates with elementary school students and, naturally, many of the novices who arrived were not of a level where they could undertake practical duties at NUBIA.

3. Evaluation on the results of the Project Risk Management

The risks in the project are covered by the envisioned prerequisites and external conditions, etc. in the planning table. The state of management of these risks is shown in the table below.

Table 6. External Prerequisites and Level of Achievement

External Prerequisites	Achievement
<p>1. The following organizations were established in advance</p> <p>a) JCM (Joint Committee Management)</p> <p>b) Operations & Maintenance Teams</p>	<p>1. .</p> <p>a) Although the committee was established, its first meeting was 9 months after establishment in October 2015.</p> <p>b) The manning of the counterpart teams was substantially delayed and there was not enough basic knowledge in the respective fields.</p>
<p>2. Budget obtained by the Mongolian side before the project was undertaken</p>	<p>2. The Mongolian side did not have an adequate budget, particularly in relation to the employment of counterparts and this was an obstacle in the technical transfer. The delay in establishing an SPC is also a major hurdle in the transfer of trained counterparts and the startup and commissioning.</p>
<p>3. Preparation of facilities and equipment required for undertaking the project</p>	<p>3. There were no problems with facilities and equipment for JICA experts but assigning</p>

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	counterparts took time.
External Requirements for Producing Results	Achievement
<ol style="list-style-type: none"> 1. Statutory preparation for establishment of SPC 2. Adequate number of staff assigned to take over NUBIA operation and maintenance 	<ol style="list-style-type: none"> 1. Under the present legal system, a private sector company (SPC) cannot operate a government airport so, as an alternative measure, a public sector company was established as a parent company funding the SPC instead of CKIA. 2. There have been three problems facing the assignment of staff and this has prevented the project from achieving results. <ol style="list-style-type: none"> a) Assignment of staff was extremely delayed b) There were some personnel who did not meet expected levels of expertise c) Trained staff were reassigned elsewhere
External Conditions for Achieving Project Goals	Achievement
<ol style="list-style-type: none"> 1. Facilities under the jurisdiction of the Mongolian side and not a yen loan recipient project to be constructed on time 2. Staff training to be taken over by the Mongolian side 3. Ministry of Road and Transport Development will undertake the procedures for establishing an SPC 	<ol style="list-style-type: none"> 1. The construction of expressways, cargo terminal, administration building and hangars was significantly behind schedule. 2. It is expected that the 55 counterparts trained under the project will train NUBIA staff. 3. The establishment of an SPC has been greatly delayed and this is a key issue for opening NUBIA.

4. Lessons Learnt

4-1. Personnel Policies for Counterpart Organizations in Cooperation Recipient Countries

Public organizations in Mongolia have no framework for seconding personnel and this has been an obstacle to obtaining POA staff. Some trained counterparts have been transferred elsewhere outside the project and this has also been a negative impact on project results. It would have been better for JICA to confirm the existence of a government framework during implementation discussions and obtain some sort of affirmation from the CAAM in regard to counterpart personnel.

4-2. Assistance with SPC Establishment

Aware of the importance of establishing an SPC, JICA provided technical assistance through Nomura Research Institute but this failed to produce results because the Mongolian side had very little awareness. Given the expectation of more PPP projects like NUBIA, some consideration should be given to successful methods of undertaking assessments of SPC establishment and infrastructure operation and providing assistance.

IV For the Achievement of Overall Goals after the Project Completion

1. Prospects to achieve Overall Goal

Since the goal of setting up operators for the airport and fuel facilities, etc. at NUBIA was not reached during this technical support period, except for those areas where executive decisions from these airport and fuel facility operators are required, all assistance considered possible by the completion of technical support was provided, including the drafting of the O&M manuals and regulation proposals necessary for the operation of NUBIA.

Although an operator for NUBIA has not yet been appointed, the POA, an airport management organization within the CAAM, has been formed and is now exercising substantial management and maintenance of airport facilities based on the manuals drafted with technical support. Therefore, if an operator for NUBIA is appointed, there is ample scope for the possibility of the primary goals of this project (enhancing the gateway functions for the nation's capital, Ulaanbaatar, and enabling the airports to handle more passenger traffic) being reached.

However, it goes without saying that operators for NUBIA and the fuel facilities must be appointed as quickly as possible for that purpose and during the period leading up to the point where these operators take over, allocations must be maintained for budgetary and labor requirements to ensure that the airport facilities continue to be operated and managed correctly.

2. Plan of Operation and Implementation Structure of the Mongolian side to achieve Overall Goal

Along with the major concern that an operator for NUBIA has not been appointed, the program for relocating Mongolia's national airline and government agencies to NUBIA is still on the drawing board. Therefore, it is indisputable that the government of Mongolia should coordinate negotiations as early as possible for an agreement on the rights required to establish an organization to operate NUBIA and that strong government leadership should be demonstrated on policy decisions affecting the relocation of the national carrier and government agencies with realistic operations and implementation programs being drafted and moved into the execution stage as quickly as possible.

3. Recommendations for the Mongolian side

In order to achieve the primary goals, the most desirable course would be for the government of Mongolia to conclude a concession agreement for the operation of NUBIA with conditions that would be sustainable for a private sector entity.

Further to that, it is crucially important for reaching those primary goals that the policies that shut out overseas carriers to protect the government-operate MIAT Mongolian Airlines be revised, and that the management fundamentals of the airline be shored up so that it can withstand competition from foreign carriers while as many of those foreign carriers as possible be subsequently encouraged to operate at NUBIA.

4. Monitoring Plan from the end of the Project to Ex-post Evaluation

This project is made up of two components.

- ① Preparation for airport operation and management (JICA technical assistance concluded in July 2018 but a schedule for the conclusion of preparations by an SPC has not been decided)
- ② Airport management preparations (prior to opening of airport)

An ex-post evaluation will probably take 3 years after the opening of NUBIA. At that time, the information in the completion reports for the above components will be used.