# APPENDIX TO CHAPTER 5

# GUIDELINES FOR DECIDING THE OWNERSHIP AND CORPORATE STRUCTURE OF THE MAJOR AIRPORTS OF KAZAKHSTAN

### 1. BACKGROUND AND PURPOSE

The National Associated Airlines of Kazakhstan (Kaz Air) was created in October 1993 from Kazakhstan's component of Aeroflot which was inherited after the dissolution of the USSR in late 1991. At inception it was structured on the Aeroflot model, whereby the air carrier, air navigation service and airport components were functionally integrated but geographically decentralized to 21 separate airport locations. Most of the remaining 7 separate constituent units were located at Almaty, including the main airport of Kazakhstan and the main air carrier component.

On 1 June, 1995, the air navigation services' components of the Kaz Air units were separated and consolidated into a new joint stock company, wholly owned by the Government and called Kazaeronavigation.

Prime Ministerial decree number 533 promulgated on 30 April, 1996 stated, among other things, the Government's intention to separate the air carrier and airport components of Kaz Air. This would affect all locations except for Almaty airport which already existed as a separate Kaz Air unit.

Another Prime Ministerial decree number 1030, promulgated on 20 August, 1996, indicated that 10 airports which were economically and strategically important to Kazakhstan would each become separate and open joint stock companies. These were identified as: Akmola, Atyrau, Aktau, Uralsk, Aktyubinsk, Karaganda, Kostanay, Pavlodar, Petropavlovsk and Shimkent. The Decree stated that, at all 10 other locations except for Almaty, the airport and air carrier activities would remain integrated.

In mid-August, 1996, the management of Almaty Airport was taken over by an international consortium led by Lufthansa Air Ground Services under a 10 year contract.

It was reported that this also provided for extensive investments in the order of USD 45-48 million to:

- refurbish the main runway;
- · refurbish existing terminal buildings; and
- build new terminal buildings.

The Kazakhstan newspaper "Panorama", in an article published in Editlon No. 37 on 28 September, 1996, reported that the Government had decided to privatize Aktyubinsk airport through a closed tender process.

This guideline is intended to help decision-makers of the Government of Kazakhstan formulate a coherent strategy for the future ownership and corporate form of the 10 airports mentioned in the Decree number 1030. It will also provide similar guidance regarding the remaining 10 airports if it is ever decided to change their present corporate form and ownership.

### 2. OBJECTIVES

To determine appropriate corporate structures and forms of ownership which will help ensure that:

- in the national interests of Kazakhstan, the 10 airports designated in Decree number 1030 continue to operate;
- operations comply with the International Civil Aviation Organization's (ICAO)
   Standards and Recommended Practices (SARP's) for international operations or generally accepted safety standards for domestic operations;
- the airports will be developed and operated on a sound commercial basis; and
- any subsidization of airport development and operations to meet public policy
   obligations will be conducted in the most efficient way possible.

### 3. OPTIONS

There is an extensive range of options for the ownership and organization of these airports. The most common are listed below and each will then be discussed briefly in turn. Given the Government's stated intention to transform the 10 airports into open joint stock companies, some of these options would not be relevant in whole or in part. These have been included, however, because:

- they have been widely used elsewhere;
- they raise important issues which need to be considered during any major changes of airport ownership or management;
- it is possible the government could modify its approaches in the light of further information and experience; and
- because they could also be applicable to the 10 of the 11 airports whose corporate status remains unchanged for the time-being. (As previously indicated, the future of Almaty, the eleventh airport, has already been determined)

The 10 options offered appear below:

- 1) All airports integrated into the Ministry of Transport and Communications.
- 2) Create a single state-owned enterprise (SOE), which reports to the Government through a designated ministry or agency, to develop and manage all airports.
- 3) Fully or partially privatize ownership all of the airports under a single corporation.
- 4) Fully or partially privatize the ownership of the profitable airports under a single corporation, and integrate the unprofitable airports into the MOTC, or create an SOE for their continued management and development.
- 5) As per 4) but privatize the ownership of the profitable airports individually.
- As per 4) or 5) but privatize the <u>operation</u> of the unprofitable airports under a single corporation subsidized by the national government.

- 7) Corporatize the airports individually and transfer ownership to local governments which also subsidize as required.
- 8) As per 7) but allow the local governments to fully or partially privatize the ownership of the airports.
- 9) As per 1) to 9) but privatize all or selected airport operations and functions, as against ownership, through contracting out, concession agreements or management contracts.
- 10) Build, operate and transfer to the national or local governments all or part of any airport.

### Option #1 All airports integrated into the Ministry of Transport and Communications

In many countries, airports were originally integral components of a governmental entity such as the Ministry of Defence or the Ministry of Transport.

Under such an arrangement, each airport does not exist as a separate legal entity and only limited authority is delegated to airport management. Any airport revenues are usually credited directly to the state's consolidated revenue fund. Money for airport development and operations is allocated centrally from the same source through the governmental budgeting and appropriations process.

This arrangement still exists in many countries, although it is rapidly being superseded by separately corporatized entities, such as state-owned enterprises, or by various privatization options. In Kazakhstan or any of the former republics of the USSR, this arrangement never existed. Aeroflot, a state-owned enterprise, developed and operated airports, along with air carrier, general aviation and air navigation services.

The Civil Aviation Department (CAD) of the MOTC is a relatively new and small organization (an authorized strength of 40 persons as of June 1996), primarily responsible for air safety and economic regulation, and for providing policy advice to the Government on air transportation matters. It has insufficient staff and expertise to assume the increased airport management responsibilities that would come with this arrangement.

Another significant problem which would come with this arrangement in Kazakhstan, however, is that it would create a major conflict-of-interest problem. This is because the MOTC, through the CAD, would function as both the owner/operator of its own airports, and the safety and economic regulator of all airports in Kazakhstan. Almaty Airport is owned by the National Government under the custodianship of the State Property Committee and privately operated by Lufthansa. Furthermore, the remaining 10 airports whose corporate form is not affected by Decree number 1030 will probably be transferred to local government ownership but still be regulated by the MOTC.

A good example of this type of conflict-of-interest problem concerns the Civil Aviation Authority (CAA) of the United Kingdom which, along with the British Airports Authority and British Airways, has been a pioneer in the commercialization of the air transportation sub-system. The CAA's problem was cited in a recent World Bank study<sup>1</sup>:

"...the regulatory framework implemented in the United Kingdom has the important disadvantage in that supply/demand functions are performed by the same agency. Not only is the CAA the main supplier of ATC (Air Traffic Control) activities but it is also in a unique position to regulate its competitors. This arrangement holds potential conflict of interest implications. Moreover, the CAA also regulates both airport safety and economic activities, which could tead to inappropriate policy directives. The fact that the government is considering privatizing ATC services and restructuring the CAA indicates a partial awareness of this problem."

Option #2 Create a single state-owned enterprise (SOE) to develop and manage all airports which reports to the Government through a designated ministry or agency

This is one of the more common arrangements for airport ownership and organization world-wide. The state owns 100% of the equity. Capital financing is available from the government or from the commercial debt markets. Commercial debt is guaranteed by

<sup>&</sup>lt;sup>1</sup> CFS Discussion Paper Series, Number 115. "AIRPORT INFRASTRUCTURE: THE EMERGING ROLE OF THE PRIVATE SECTOR Recent Experiences Based on 10 Case Studies" Ellis J. Juan

the government and the interest on such debt may or may not be tax free to the debt holders. Revenues are retained by the corporation to fund development and operations and, in some cases, pay dividends to the owner (the government). The corporation may or may not pay taxes.

Sometimes, such SOE's can be a transitional arrangement whereby airports which are integrated into a governmental department are transferred to an SOE so that the management and operations can be upgraded to commercial standards. The airports can then be privatized individually or in groups. This approach was used in the United Kingdom with the British Airports Authority and is currently being used in Australia with the Federal Airports Corporation.

The management functions are the responsibility of a Board of Directors appointed by the Government. The designated minister or agency head is usually responsible for giving broad strategic policy and planning direction, and also for presenting the SOE's annual reports to the National Legislature.

The SOE is normally established with the intention of being financially self-sustaining. In this regard, it normally has the advantage of functioning as a full or partial monopoly. On the other hand, SOE's have often been subject to interference to serve narrow political interests which have adversely affected their efficiency. This can take the form of inappropriately qualified political appointees to the board of directors or requirements to provide economical unviable services. Some countries, such as Australia, have addressed this problem by ensuring that the legislation which establishes an SOE provides for safeguards against such interference.

In Kazakhstan, it appears that the State Property Committee is the governmental agency which is responsible for SOE's and would, therefore, likely assume this role for a National Airport SOE.

Option #3 Fully or partially privatize ownership of all airports under a single corporation

With this arrangement, a new corporation would be created comprising all 10 airports. All of the share capital would be fully or partially privately owned through public or institutional equity sales. For a partial privatization, some of the equity would remain under governmental ownership.

The only example to date of a group of airports being fully privatized is the British Airports Authority (BAA). It was an SOE operating seven United Kingdom airports owned by the central government until it was fully privatized in 1986. Since privatization, the BAA has proven to be very profitable, particularly regarding the generation of non-aeronautical commercial revenues which now account for 60% of total income, one of the highest levels world-wide.

There no known examples of a partial privatization of groups of airports, although partial privatization of the airline Air Canada was used in 1988 as an interim step towards full privatization about 2 years later.

The main prerequisite for a successful privatization is that the airport(s) must be profitable on a sustainable basis. If they are currently unprofitable but potentially profitable, they can be privatized by discounting the share offering price. For these reasons, governments often take preparatory steps to make airports profitable prior to taking privatization action.

A major impediment to privatization exists when the group of airports includes those which are unlikely ever to become profitable in the foreseeable future but which the government wishes to continue to operate for public policy reasons. Under these circumstances, investors are disinclined to consider equity purchases unless a viable subsidy regime is agreed to beforehand. From the limited information available on the 10 airports of Kazakhstan, which are the subjects of this discussion paper, it is probable that all or most of them are currently unprofitable, given their current low traffic levels, high operating costs and weak commercial management. The feasibility study on 5 of these airports at Akmola, Atyrau, Aktau, Aktyubinsk and Pavlodar, conducted by the Japan International Cooperation Agency (JICA) Study Team in October, 1996, should produce a sound assessment of their current and future profitability. The issue of subsidizing unprofitable airports will be dealt with separately later in this paper.

Option #4 Fully or partially privatize ownership of the profitable airports under a single corporation, and integrate unprofitable airports into the MOTC or create an SOE for their continued management and development

This is a combination of Options #1 and #3, or Options #2 and #3, so that most of the considerations already discussed under these headings will again apply. This option is far more likely to attract interest from private investors who would not have to be concerned about subsidizing the unprofitable airports. On the other hand, the government would receive revenue from the privatization sale and from corporate income tax paid by the private airport company, and would have the option of using such revenues for subsidizing the unprofitable airports. The government or the SOE would, however, still have the continuing responsibility for managing the unprofitable airports.

The full or partial privatization of individual airports has only occurred over the last few years or so and most of the examples have been in Europe, particularly in the United Kingdom. The East Midlands and Belfast airports in the U.K have both been fully privatized. The former was owned by a number of local governments and the latter by the national government. In the case of Belfast, a unique feature of the privatization was that it was sold to the airport's managers and employees. Liverpoot airport has been partially privatized, with the local government retaining a minority ownership position. Vienna and Copenhagen offer examples of the partial privatization of major airports in Continental Europe.

Option #5 Fully or partially privatize the ownership of profitable airports individually, and integrate unprofitable airports into the MOTC or create an SOE for their continued management and development

This is very similar to Option # 4 but has the advantage that one fully or partially privatized corporation would not monopolize all of the profitable airports. It would also probably attract more private investor interest than Option # 4 because of the lower financing requirements for single airports rather than for a group of airports.

Option #6 Fully or partially privatize the <u>ownership</u> of profitable airports individually, and privatize the <u>operation</u> of unprofitable airports subsidized by the national government.

The advantage of this arrangement over Option #5 is that it is possible to gain from the commercial efficiencies which can be achieved under private sector operation even though the airports are not profitable. The government would still own and subsidize the airports but would be relieved of managerial responsibilities. In implementing this option, the government needs to meet 3 objectives:

- The desired levels of service must be achieved in both quantitative and qualitative terms (e.g. hours of operation, handling capacity, terminal services for passengers, levels of charges, etc.).
- · Full compliance with air safety standards.
- The lowest levels of subsidy payments.

The usual approach would be to enter into management contracts with private sector companies for each or all of the airports. The contractors would normally be selected through a competitive tender process, in accordance with contract specifications based on the 3 aforementioned objectives to obtain the optimal combination of service and price, and always full compliance with safety standards. A fuller explanation of privatizing airport operations as against ownership will be given later under Option #9.

<u>Option #7</u> Corporatize airports individually and transfer ownership to local governments which also subsidize as required.

This is similar to Option #2, except that instead of having a single enterprise owned by the National Government, each airport would be operated by a single local government owned enterprise (LGOE). This option has the advantage that the local ownership would tend to encourage the development and operation of the airport to be more responsive to local needs.

Option #8 Corporatize the airports individually, transfer ownership to local governments which have the right to fully or partially privatize ownership

This is a derivation of Option #7. If the airport is currently or potentially profitable, then the probability of attracting significant private sector interest is high. If the airport is unprofitable and is likely to remain so for the foreseeable future, then the local government has to decide whether to:

- · close the airport altogether;
- own, operate and subsidize the airport, as per Option #7; or
- continue to own the airport but privatize its operation as per Option #6, and make subsidy payments to the private operator.

<u>Option #9</u> Privatize all or selected airport operations and functions, as against ownership, through contracting out, concession agreements or management contracts.

This is the longest-established privatization option for airports although, until the last 15 years or so, it was primarily confined to concession agreements with private-sector operators for groundside terminal services such as duty-free stores, restaurants, carparks, etc. It has since become more common to contract out airport operational services such as security, rescue and firefighting (RFF) and air traffic control.

Management contracts provide for all or a major part of any airport's operations to be contracted out to a single source, which will then provide a range of services directly or sub-contract these to various specialist private sector organizations. The Government of Kazakhstan recently entered into a 10 year management agreement with Lufthansa for Almaty Airport.

In all of these cases, the key feature is that ownership, whether it is private or governmental, remains unchanged but operation(s) or function(s) are contracted to another private entity.

### Option #10 Build, Operate and Transfer all or part of an airport

This is a form of management contract but the contractor also undertakes to build new or develop existing airport facilities, operate these over an extended period, whereupon these are transferred to the owner (usually the government). Such BOT agreements have become increasingly common in recent years, particularly in developing countries. According to a recent World Bank Study<sup>2</sup>:

"the use of this option maintains government ownership of the facilities and thereby limits political conflict. However, lack of ownership of the facilities under construction could become a financial obstacle to the private sector attempts to raise capital funds for the project. Financial institutions could assign a higher than normal contractual and political risk, thus increasing the project's capital costs. This is of particular relevance in developing countries whose governments lack experience of such transactions."

A recent example of an airport BOT agreement in a developing country is a 20 year agreement between the Government of Cambodia and a Franco-Malaysian consortium to develop and operate Pochentong Airport serving the capital of Phnom Penh. All airport operations, except for air navigation services, are contracted out to Aeroports de Paris.

Although 10 options have been presented, more are available. These include arrangements whereby ownership is privatized over defined periods of time through long term leasing agreements, rather than a permanent transfer of ownership. In practical terms, however, such arrangements tend to be very similar to those for permanent sale and BOT agreements and have, therefore, not been separately included in this discussion paper.

<sup>&</sup>lt;sup>2</sup> CFS Discussion Paper Series, Number 115. "AIRPORT INFRASTRUCTURE: THE EMERGING ROLE OF THE PRIVATE SECTOR Recent Experiences Based on 10 Case Studies" Ellis J. Juan

### 4. OPTION EVALUATION CRITERIA

In trying to assist the Government of Kazakhstan to reach the best choice of option or options for the 10 airports under consideration, it is necessary to evaluate each of the 10 options in turn against a set of criteria. Given the stated objectives in Section 2, the following criteria are offered and then briefly explained in turn:

### A. Access to Commercial Debt Markets

### B. Access to Equity Markets

Airports can either be financed from:

- internal governmental sources;
- the commercial debt markets; or
- · the equity markets.

If the airport is an integral part of a governmental department or agency, only the first option is available. If the airport is part of an SOE or LGOE where 100% of the equity is governmentally owned, financing is only available from the debt markets, although some internal governmental funding may be provided to subsidize public policy obligations. In the case of full or partial privatization of ownership, access is available to both the commercial debt and equity markets. Again internal governmental funding may be available to subsidize public policy obligations.

### C. Attractiveness to private investors

The more attractive an option is to private investors then the greater availability of private financing. The option would be most attractive if:

- the airport or group of airports are assessed as profitable over the foreseeable future;
- except for safety regulation, external constraints on airport management and operations are minimal; and

 there is no requirement to own and operate unprofitable airports which need to be subsidized from the revenues of profitable airports owned by the same company.

### D. Opportunity to enhance commercial revenues

Airports have two primary sources of revenues:

- <u>Aeronautical revenues</u> which are derived from the provision of capacity to aircraft, passengers and freight. Examples include landing charges, aircraft parking charges, passenger facility charges, etc.
- <u>Commercial revenues</u> which are derived from groundside commercial services not related to the airport's primary operational functions.

There is now much evidence to show that the levels of commercial revenues increases significantly after privatization, with many such airports deriving more than 50% or their revenues from commercial sources. In the case of the BAA it is 60%. These increased revenues can be used to subsidize airside operations, provide airport development funding, provide additional pay and benefits to employees, and pay dividends to shareholders.

### E. Public concern over privatization

Public concern over airport privatization is still quite common and the levels of concern tends to increase if foreign ownership is involved. Even though the inefficiencies often associated with governmental ownership are widely acknowledged, many still feel that their interests are best served by governmental organizations rather than private sector organizations more focused on making profits. Although evidence suggests that these concerns are generally misplaced and tend to lessen as privatization of public infrastructure becomes more widespread, they have to be acknowledged and taken into account by governmental decision-makers.

### F. Meeting public policy obligations

Governments are often required to provide services which are considered important but which can be very unprofitable. This is particularly true in the transportation sector.

Airports can provide transportation to remote communities, facilitating not only general access but also other public services such as those for health and safety. There is generally more flexibility regarding the establishment and operation of such airports in the public rather than the private sector.

### G. Immunity from political interference

While governmentally owned airports are often well placed to meet public policy obligations they are also more susceptible to interference to serve narrow political interests which tends to compromise their overall efficiency. This can take the form of the appointment of unqualified persons to senior positions as a reward for their political activities, or requirements to provide services to serve political rather than commercial needs. Legislative mechanisms are available to deal with this sort of problem. These can take the form of legislated qualifications and selection processes for directors or senior personnel, or requirements that any political directions must be made public and separately funded. There has been insufficient experience to date to determine how effective such mechanisms have been.

### H. Operating efficiency

The operating efficiency of any enterprise is the ratio of outputs, in terms of quantity and quality, versus costs. For an airport, the primary outputs are capacities for aircraft, passengers and cargo; the secondary outputs are commercial services, such as retail outlets and industrial parks. Private sector organizations generally enjoy a higher level of operating efficiency than public sector organizations. Because they need to make a profit to survive, they tend to be more focused. They are also less encumbered than their public sector counterparts with bureaucratic managerial styles, and unclear or changing mandates. One of the key features of almost every privatization is an early and comprehensive program to cut costs, and to redefine the market and products.

### J. Burden to government in terms of financing and management

If airports are integrated into governmental departments or agencies, then the government, through those organizations, bears the full burden of financing and

management. That burden still exists but to a lesser degree with SOE's. The burden is effectively reduced to zero in the case of full privatization of ownership. Regardless of ownership, the government must always retain responsibility for regulatory activities.

### 5. EVALUATION PROCESS

Once options and criteria for evaluating options have been identified, the actual evaluation process can take place. An evaluation grid chart plus information as how to assign point ratings for each option/criteria combination appears as Attachment I. A suggested approach for conducting an evaluation follows:

- Select senior representatives from those organizations which would be most influential or otherwise have an interest in the future ownership and management of the airports. A suggested list is:
  - the Ministry of Transport and Communications;
  - the Ministry of Finance;
  - the State Property Committee;
  - the State Privatization Committee;
  - the State Antitrust Committee; and
  - · representation from one of the Oblasts.
- 2) The representatives would gather together for a joint evaluation process under the guidance of a Facilitator.
- 3) It is extremely important that the Facilitator's role is one of helping the participants to conduct the evaluations while in no way trying to influence the evaluation ratings.
- 4) The process first entails each of the participants gaining a thorough understanding of each of the options and each of the criteria, and the method of assigning point ratings. This is the responsibility of the Facilitator who would explain each option and criteria in turn, clarify any misunderstandings and, if necessary, even allow some time for a debate on each between the participants.

- 5) Each participant then assigns their own point ratings for each option against each criteria and the results are totaled individually on their own grid sheet. The individual participant's results are then totaled to achieve collective point rankings which determine the final results.
- 6) Given such a large number of options, it may be appropriate to identify the top three or four options and repeat the process. If this is to be done, it should be decided upon by participants at the outset. For such a second round, it may also be appropriate to modify the criteria, provided that this is done through a facilitated and unanimous decision-making process.
- 7) The outcome will not only identify the preferred options but it will also serve to quickly educate all of participants on the key issues relating to airport ownership, management and operations. It will also allow the group or selected representatives of the group to recommended a clear strategy to the Government regarding the future disposition of the airports.

### 6. PRIVATIZATION PROGRAM

### Program Components and Expertise Required

In keeping with global trends regarding airport ownership, management and operations, most of the suggested options have constituent components involving some form of privatization of ownership or services. A recent World Bank Study<sup>3</sup> stated that there was no evidence that governments were following a similar pattern when privatizing their airport operations, or that a common approach to strategic decisions was shared among them. Based on recent privatization experiences, however, the World Bank has developed a summary of the key components of an airport privatization program and the

<sup>&</sup>lt;sup>3</sup> CFS Discussion Paper Series, Number 115. "AIRPORT INFRASTRUCTURE: THE EMERGING ROLE OF THE PRIVATE SECTOR Recent Experiences Based on 10 Case Studies" Ellis J. Juan

type of expertise required for successful implementation. This summary appears as Attachment II.

### Addressing Issues of Major Concern

Privatization can be an emotive issue, particularly regarding something like airports which tend to have a high safety profile, and are widely regarded as important national or regional assets. A proposed airport privatization can cause considerable public debate between prominent advocates and opponents. Opposition to airport privatization tends to center around three key issues: safety, loss of public services and the prospect of job losses. It is vital, therefore, that any government contemplating an airport privatization program deals with these issues in a clear and proactive manner. This requires a sound strategies and associated public relations campaigns. In terms of the key issues of safety and job losses, the following strategies are proposed:

- 1) Safety In creating a more commercially efficient airport system for the Republic of Kazakhstan, the National Government will ensure that airport safety standards will in no way be compromised. All airports, whether privately or publicly owned, will operate within the same safety regime controlled by the National Government which recognizes that improved efficiency and safety are interdependent and not mutually exclusive.
- 2) Public Services The National Government recognizes its obligations to provide a range of public services to enhance the health, welfare and security of the citizens of Kazakhstan, which usually cannot be provided on a commercial basis. It also recognizes that airports can play an important part in delivering such services. As part of any airport privatization program, therefore, the Government will carefully examine, in consultation with concerned citizens and interest groups, each public service supported by the airport to determine:
  - whether the service should be continued, modified, or phased out;

- · measures to improve the efficiency of any services which will continue; and
- transitional measures needed to alleviate any hardships or inconveniences attributable to the phasing out of a service.

The Government will also fund any continuing public services from its general revenue fund, rather than through subsidies required from the airport's owners.

3) Job Losses The creation of a more commercially efficient airport system will yield significant long term economic benefits for the Republic of Kazakhstan. It will require, however, an ongoing effort to improve efficiency in service delivery. This may involve some staff reductions. The Government undertakes to fully consult with affected employees to find ways of mitigating the adverse impact of such reductions. Options to be considered include: phased staff reductions; early retirement incentive programs; severance payments; and retraining and reassignment programs. In developing its options, the Government will to take a balanced approach by being sensitive to the needs and concerns of its employees while controlling any financial burdens on airport users or taxpayers.

# EVALUATION OF OPTIONS FOR MANAGING THE STRATEGICALLY AND ECONOMICALLY IMPORTANT AIRPORTS OF KAZAKHSTAN

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 5   Option 6   Option 7   Option 8   Option 9   Option 10	Option 8	Option 9	Option 10
Criteria A										
Criteria B										
Criteria C										
Criteria D										
Criteria E										
Criteria F										
Criteria G										
Criteria H					1					
Criteria J										
TOTAL			:							

# Options

- All airports integrated into the Ministry of Transport and Communications.
- Create a single state-owned enterprise (SOE), which reports to the Government through a designated ministry or agency, to develop and nanage all airports.
- fully or partially privatize ownership of all airports under a single corporation.
- Fully or partially privatize the ownership of the profitable airports under a single corporation, and integrate the unprofitable airports into the MOTC, or create an SOE for their continued management and development.
- As per 4) but privatize the ownership of the profitable airports individually.
- As per 4) or 5) but privatize the operation of the unprofitable airports under a single corporation subsidized by the national government.
- Corporatize the airports individually and transfer ownership to local governments which also subsidize as required. ଜବନଜନ
  - As per 7) but allow the local governments to fully or partially privatize the ownership of the airports.
- As per 1) to 9) but privatize all or selected airport operations and functions, as against ownership, through contracting out, concession igreements or management contracts.
  - Suild, operate and transfer to the national or local governments all or part of any airport. 10

## Criteria

Access to commercial debt markets

Access to equity markets

Opportunity to enhance commercial revenues Attractiveness to private investors

Least public concern over privatization

Meeting public policy obligations

Immunity from political interference

Operating efficiency

Least burden to government in terms of financing and management 水道の辺垣里の祖中

# Evaluation guide

Select and understand an option.

Assess the selected option in terms of each of the criteria A to J.

A point rating of 5 means that the option complies fully with that criteria. A point rating of 0 to 5 can be assigned for each criteria.

A point rating of 0 means that the option does not comply with the criteria at all

Point ratings of 1 to 4 means various degrees of partial compliance. 보려되었다

### AIRPORT PRIVATIZATION PROGRAM<sup>1</sup>

### **Key Components**

- Master Plan. An analysis of the national airport system including:
   financial modeling of the system (i.e., air navigation services, profitable airports, unprofitable airports, civil aviation authority, etc.);
   traffic forecasts; and 3) investment needs.
- 2. Restructuring Study. Separation of air navigation activities from airport activities (if necessary). Definition of airport activities to be privatized (i.e., airside, landside, or complete operation). Packaging of airports to be privatized (i.e., profitable airports, unprofitable airports, greenfield projects, etc.). Definition of the cross-subsidies mechanism. Future cash-flow of the system under the proposed privatization arrangement.
- 3. Analysis of the Institutional and Regulatory Framework. Diagnosis of the institutional capabilities of government agencies (i.e., civil aviation authority, regulatory agencies, etc.). Adaptation of existing regulations to private sector participation in the provision of airport services. Definition of pricing techniques and formulas for sound economic regulation.
- 4. Design and Implementation of the Privatization Transaction, Privatization option to be used (i.e., BOT, sale of assets, multiple service concessions, management contracts, etc.). Financial Design of the transaction (i.e., airport revenues, pricing formula, concession fees, level of investments, debt capacity, etc.). Bidding process (i.e., sales memorandum, bidding conditions, marketing process, etc.). Completion of the sale (i.e., sale transfer of assets, signing of the concession contract, etc.)

### Types of Experiise

Specialized Consulting Firm in the field of airport planning.

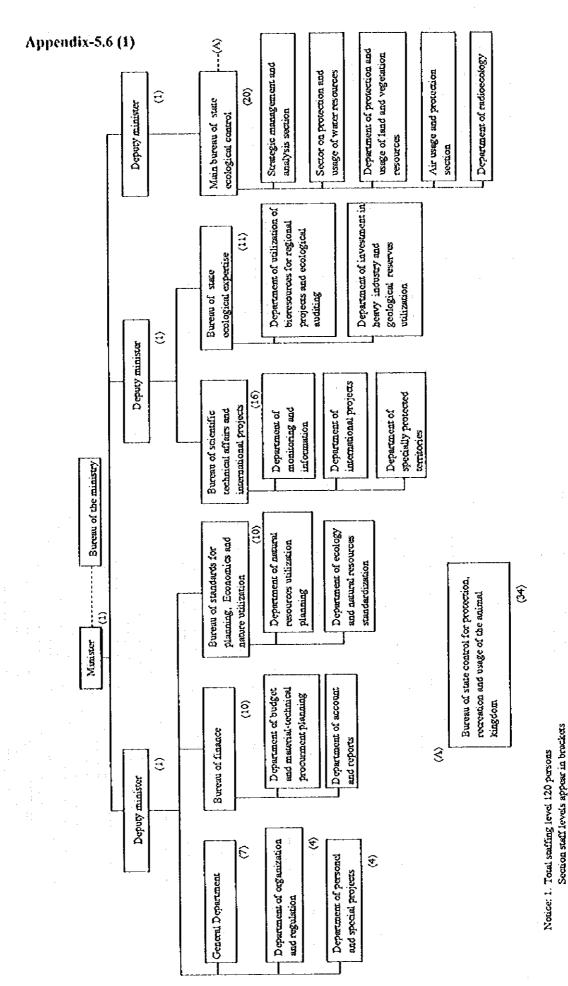
Specialized Consulting Firm in the field of sector strategic analysis and planning.

Specialized Consulting Firm in the field of regulatory and institutional economics.

Financial Advisor.

Investment Bank with experience in infrastructure transactions.

<sup>&</sup>lt;sup>1</sup> CFS Discussion Paper Series, Number 115. "AIRPORT INFRASTRUCTURE: THE EMERGING ROLE OF THE PRIVATE SECTOR. Recent Experiences Based on 10 Case Studies" Ellis J. Juan



Central Body Organizational Structure of Ministry of Ecology and Bioresources

2, 17/1/1996

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### Appendix-5.6 (2) Screening

Airnort: Akmola

i)	Airport: Akm	ola	يندين والمواجعة	
No.	Environmental Item	Description	Evaluation	Remarks
		Social Environment	Language	
	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[Y] <u>[N]</u> [?]	Existing airport to be used.
?	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[Y][N][?]	<i>"</i>
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[Y][N](?)	
\$	Split of Communities	Community split due to interruption of area traffic	[A][M][s]	"
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	(Y) <u>[N](?)</u>	None
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of	[Y][N][?]	Existing airport to be used.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[Y][N][?]	<i>II</i>
8	Waste	Generation of construction and demolition waste, debris and logs	[Y][N](?)	Not much waste generated
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][?]	The land use plan in the vicinity of airport in 2005 is unknown.
		Natural Environment		
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][?]	None
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[Y][N][?]	"
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[Y][N][?]	<i>y</i>
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y][N](?)	<i>II</i>
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][N](?)	II .
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	[Y][N][ <u>?]</u>	There are staging points for migratory birds.
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[Y][ <u>N][</u> ?]	None
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[Y][N][?]	<i>"</i>
		Pollution		
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[Y][N][?]	The land use plan in the vicinity of airport in 2005 is unknown.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[Y][N][?]	The surface water treatment system is unknown.
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	[Y][N][?]	None
21	Noise and Vibration	Noise and vibration generated by vehicles	[Y][N][?]	The land use plan in the vicinity of airport in 2005 is unknown.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[Y][N][ <u>?]</u>	The existence of soft ground is unknown.
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	[Y][N][?]	None
Over	rall Evaluation: Is eith		IYI	
	"Y": Some impact is "N": No impact is e			udy progresses.)

Airport: Aktyubinsk

2)	Airport: Akty	zubinsk – – – – – – – – – – – – – – – – – – –		
No.	Environmental Item	Description	Evaluation	Remarks
		Social Environment		
1	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[Y][N][?)	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[Y][N][?]	<i>II</i>
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[4][7][3]	<i>II</i>
4	Split of Communities	Community split due to interruption of area traffic	[אוואו[א]	11
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[8][8][8]	None
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[\$][N][\$)	Existing airport to be used.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[Y][N][?]	7/
8	Waste	Generation of construction and demolition waste, debris and logs	[Y][N][?)	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][?]	Aircraft accident
		Natural Environment		
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][?]	None
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[Y][N][?]	11
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[Y][N][2]	The pumping volume is unknown.
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y][X][?]	None
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][M][Y]	<i>II</i>
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	{Y][N][?]	11
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	נאומונאן	<i>II</i>
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by	(Y)[N][?]	#
·	L	structures	[]	
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from	[Y][N][?]	The number of flights in 2005 is
19	Water Pollution	vehicles and factories  Pollution by inflow of silt, sand and effluent into rivers and groundwater	[Y][N][?]	unknown. None
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	[X][V][3]	<i>II</i>
21	Noise and Vibration	Noise and vibration generated by vehicles	[Y][N][?]	There are residents in the area who will be affected.
22	I and Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[Y][N][7]	None
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	[Y] <u>[N][</u> ?]	#
			ΙΫ́	
Make	· "Y". Some impact is			

Note: "Y": Some impact is expected.

"N": No impact is expected. IEE/EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

3)	Airport: Alm	aty		
No.	Environmental Item	Description	Evaluation	Remarks
	·	Social Environment	*	
1	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[X][W][S]	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[X][N][3]	<i>H</i>
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[ <u>Y][</u> N][ <u>Y]</u>	The increase of traffic is unknown.
4	Split of Communities	Community split due to interruption of area traffic	[Y][N][?]	Existing airport to be used.
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[Y][ <u>N](?)</u>	None
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[X][N][?]	Existing airport to be used.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[4][ <u>H</u> ][3]	11
8	Waste	Generation of construction and demolition waste, debris and logs	[Y][N][7]	Not much waste generated,
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][?]	Aircraft accident
	<u> </u>	Natural Environment	<del></del>	
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][?]	None
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[Y][N][?)	<i>II</i>
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[Y][N][?)	<i>II</i>
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y][N][?]	<i>II</i>
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	{Y] <u>[N]</u> [?}	<i>II</i>
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	{Y][N][?]	H .
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	(Y] <u>[N][</u> ?]	
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	(Y) <u>[N]</u> [?]	
		Pollution		
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	נצוואונצו	There are many residents in the vicinity of the airport.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[ <u>{</u> ][N][ <u>{</u> ]	The surface water treatment system is unknown.
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	(Y) <u>[N](</u> ?)	None
21	Noise and Vibration	Noise and vibration generated by vehicles	( <u>Y</u> ][N][?)	There are many residents in the vicinity of the airport.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	(Y)(N)[?]	None
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	(Y][N][?]	//
Ove	rall Evaluation: Is eith	er IEB or EIA necessary for the project implementation?	IXI	

Note: "Y": Some impact is expected.

"N": No impact is expected. IEE / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

Airport: Shimkent 4)

4)	Airport: Shim	Kent		
No.	Environmental Item	Description	Evaluation	Remarks
		Social Environment		
1	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[Y][ <u>N</u> ][?]	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[Y][N][?]	
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[Y] <u>[N]</u> [?]	"
4	Split of Communities	Community split due to interruption of area traffic	[Y][N]{?}	Existing airport to be used.
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[X][V][3]	#
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[Y][N][?]	
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[Y][ <u>N</u> ][Y]	"
8	Waste	Generation of construction and demolition waste, debris and logs	(Y][N][?]	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][?]	Aircraft accident
	tural Environment			
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][?]	Existing airport to be used.
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[Y] <u>[N</u> ][?]	<i>"</i>
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[Y][N][ <u>Z</u> ]	The plans for groundwater usage are unknown.
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y] <u>[N]</u> [?]	Existing airport to be used.
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][N][?]	None
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	(Y)[N][ <u>?</u> ]	The state of fauna and flora is unknown.
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[Y][N][?]	None
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[Y][N][?]	Existing airport to be used.
	Pollution .		<del></del>	
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[X][N][3]	The number of flights in 2005 is unknown.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[Y][N][ <u>Y</u> ]	The capability of the water treatment plant is unknown.
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	[Y][N][2]	The usage of anti-freeze chemicals is unknown.
21	Noise and Vibration	Noise and vibration generated by vehicles	[X][N][X]	The number of flights in 2005 is unknown.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[X][N][X]	The existence of soft ground is unknown.
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	[Y][N][?]	None
Ove	rall Evaluation: Is eith	er IEB or EIA necessary for the project implementation?	ΪΫ́Ι	

Note: "Y": Some impact is expected.

"N": No impact is expected. IEB / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

<u>5)                                    </u>	Airport: Atyr		<b>_</b>	
VO.	Environmental kem	Description Social Environment	Evaluation	Remarks
	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[Y][N][?]	Existing airport to be used.
	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[Y][N][?]	//
	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[Y][N][?]	<i>II</i>
	Split of Communities	Community split due to interruption of area traffic	[Y] <u>IN][?]</u>	"
	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[A][W][s]	None
'	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[אַ][אַ][אַ]	Existing airport to be used.
	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[?] <u>[או[</u> ץ]	<i>II</i>
	Waste	Generation of construction and demolition waste, debris and logs	[Y][N][?]	Not much waste generated.
	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[X][N][ <u>X</u> ]	The countermeasures for the rising of the Caspian Sea and aircraft accidents are unknown.
		Natural Environment		
0	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	{\x\][\X][\si]	None
1	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	(x)[W][3]	11
2	Groundwater	Change of distribution of groundwater by large-scale excavation	[Y][N][?]	<i>II</i>
3	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y][N][?]	<i>II</i>
4	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	(Y) <u>[N]</u> (?)	11
5	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	(Y) <u>[N](</u> ?)	
6	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	(Y) <u>[N](?)</u>	# 1
7	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[Y][ <u>N</u> ][?]	<i>(1)</i>
		Pollution		
8	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[Y][N][ <u>?]</u>	There are many residents in the vicinity of the airport.
9	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[Y][N][ <u>?</u> ]	The capability of the water treatment plant is unknown.
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	(Y)[N][?}	None
21	Noise and Vibration	Noise and vibration generated by vehicles	( <u>Y</u> [[N][?]	There are many residents in the vicinity of the airport.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table  Generation of exhaust gas and offensive odor by	[Y][N][?]	None //
23	Offensive Odor			

Note: "Y": Some impact is expected.

"N": No impact is expected.

"N": No impact is expected. IEE / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

6)	Airpo	rt: Kr	aganda

6)	Airport: Krag	anda	<u> </u>	
No.	Environmental Item	Description	Evaluation	Remarks
		Social Environment		
1	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	(A)[M](S)	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[Y] <u>[N]</u> [?]	II
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[Y][N][?]	#
4	Split of Communities	Community split due to intercuption of area traffic	[Y][N][?]	II .
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[Y][N][?]	None
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[Y][N][?]	Existing airport to be used.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	(A)[M[[5]	<i>II</i>
8	Waste	Generation of construction and demolition waste, debris and logs	[X][X][3]	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave ins and accidents	[A][A][J]	None
		Natural Environment		
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[X][N][3]	None
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[A][W][5]	#
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[X][N][ <u>X</u> ]	The pumping volume is unknown
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfull and drainage inflow	[X][N][3]	None
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][N][?]	<i>"</i>
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	[X][N][ <u>\$</u> ]	The state of migratory birds is unknown.
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[Y][N][?]	None
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[Y][N][?]	#
	Latina e	Pollution	1 (22)(27)(02)	INCLUSION STATE
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[Y][N][?]	No people live in the area.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater		None
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	(A)[N](S)	
21	Noise and Vibration	Noise and vibration generated by vehicles	[Y][N] <u>[?]</u>	The number of flights in 2005 is unknown.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[A][VI[5]	None
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	[X][W][S]	#
Ove	rall Evaluation: Is eith	er IEE or EIA necessary for the project implementation?	LYA	

Overall Evaluation: Is either IEE or EIA necessary for the project implementation? 171

Note: "Y": Some impact is expected.

"N": No impact is expected. IEE / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

7) Airport: Kzyl-Olda

7)_	Airport; Kzyl	-Olda		
No.	Environmental Item	Description	Evaluation	Remarks
		Social Environment		
1	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[Y][N][?]	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	{Y][N][?]	11
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	(Y] <u>[N][</u> ?)	<i>"</i>
4	Split of Communities	Community split due to interruption of area traffic	[Y] <u>IN][?</u> ]	· II
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[Y] <u>[N][</u> ?]	Noné
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[Y][N][?]	Existing airport to be used.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[Y][N][?]	//
8	Waste	Generation of construction and demolition waste, debris and logs	[Y][N][?]	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][?]	None
		Natural Environment		
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][?]	None
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[Y][N][?]	11
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[X][N][S]	The pumping volume is unknown.
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y][N][?]	Existing airport to be used.
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][N][?]	None
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	[Y][N][?]	No rare species
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[Y][ <u>M][</u> (?]	None
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[3][7][3]	"
		Pollution		
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[Y][N][?]	No people live in the area.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[X][N][ <u>S]</u>	The countermeasures for the anti- freeze chemicals are unknown.
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	[X][N][ <u>S]</u>	"
21	Noise and Vibration	Noise and vibration generated by vehicles	[X][N][3]	No people live in the area.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[Y][N] <u>[?]</u>	The existence of soft ground is unknown.
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	[Y][N][?]	None
Over	all Evaluation: Is either		[X]	

Note: "Y": Some impact is expected.

"N": No impact is expected. IEB / BIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

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8)	Airport: Akta		g make all descent also and described between the territory	
No.	Environmental Item	Description	Evaluation	Remarks
		Social Environment	<u> </u>	
1	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[Y][N][?]	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[X][N][S]	<i>!!</i>
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[Y] <u>[N][</u> ?]	
4	Split of Communities	Community split due to interruption of area traffic	[7][N][?]	
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[1][N][1]	None
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[Y] <u>M</u> [[?]	Existing airport to be used.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[Y][ <u>N]</u> [?]	<i>II</i>
8	Waste	Generation of construction and demolition waste, debris and logs	[Y][N][?]	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][ <u>Y</u> ]	The countermeasures for the rising of the Caspian Sea are unknown.
		Natural Environment		
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][?]	None
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[Y][N][?]	ll .
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[Y][ <u>M]</u> [7]	<i>II</i>
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y][N][7]	Existing airport to be used.
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][N][?]	None
15	Fauna and Hora	Obstruction of breeding and extinction of species due to change of habitats condition	[ <u>{</u> [[N][Y]	The routes of migratory birds are unknown.
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[Y][N][?]	None
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[A][M][s]	"
		Pollution	·	
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[x][x][s]	No people live in the area.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[Y][ <u>N]</u> [?]	None -
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	{Y][N][?]	<i>"</i>
21	Noise and Vibration	Noise and vibration generated by vehicles	[A][M](3]	No resident
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[Y][N][?]	No people live in the area.
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	[Y][N][?]	#
Ove	all Evaluation: Is eith	er IEE or EIA necessary for the project implementation?	I¥I	

Note: "Y": Some impact is expected.

"N": No impact is expected. IEE / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

9) Airoort: Paylodar

9)	Airport: Pavle	odar		
No.	Environmental Item	Description	Evaluation	Remarks
		Social Environment		
l 	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[Y] <u>[N]</u> [?]	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[Y][N][?]	<i>"</i>
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[Y][N][?]	#
\$	Split of Communities	Community split due to interruption of area traffic	[Y]( <u>M</u> 1[?)	<i>"</i>
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[Y][N][?]	None.
5	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[X][V][S]	Existing airport to be used.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[3][ <u>W</u> ][3]	<i>!!</i>
8	Waste	Generation of construction and demolition waste, debris and logs	[Y][N][?]	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][?]	Aircraft accident
		Natural Environment	<b></b>	
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][ <u>M][</u> (?]	None
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[X][X][S]	<i>"</i>
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[Y][N][?]	
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y] <u>[N][</u> [?]	"
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][N][Y]	//
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	[Y][N][?]	"
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[Y][N][?]	<i>II</i>
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[Y][N][?]	
		Pollution	[22.02.000	
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[X][N][Y]	The number of flights in 2005 is unknown.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[X][W][S]	None
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	[A][M][3]	<i>II</i>
21	Noise and Vibration	Noise and vibration generated by vehicles	[X][N][ <u>S</u> ]	The number of flights in 2005 is unknown.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[Y][NI[?]	None
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	[Y][N][?]	#

Note: "Y": Some impact is expected.

"N": No impact is expected. IEB / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

10) Airport: Uralsk

10)	Airport: Ural			
No.	Environmental Item	Description	Evaluation	Remarks
	**************************************	Social Environment		
1	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	[Y][N][?]	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[Y][N][?]	<i>II</i>
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[Y][N][?]	li .
4	Split of Communities	Community split due to interruption of area traffic	(Y] <u>[N]</u> [?]	II .
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[Y][N][?]	None
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[Y][N][?]	Existing airport to be used.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[Y][N](?)	11
8	Waste	Generation of construction and demolition waste, debris and logs	[X][V][S]	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][?]	None
	tural Environment		·	
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][?]	None
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[Y][N][?]	<i>II</i>
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[X][N][ <u>3</u> ]	The drinking water supply system is unknown.
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y][N][?]	None
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][N][?]	"
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	(A)[W](s)	11
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[Y] <u>[M]</u> [?]	<i>II</i>
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[נ][אַ][אַ]	<i>II</i>
	Pollution		·	
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[Y][N][Y]	The number of flights in 2005 is unknown.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[X][N][X]	The capability of the water treatment plant is unknown.
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	[Y][N][?]	None
21	Noise and Vibration	Noise and vibration generated by vehicles	[Y](N)[ <u>}</u> ]	The number of flights in 2005 is unknown.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[Y][N][?]	None
23	Offensive Odor	Generation of exhaust gas and offensive odor by facility construction and operation	[A][N][s]	//
Over	all Evaluation: Is eithe		<u>[Y]</u>	

Note: "Y": Some impact is expected.

"N": No impact is expected. IEE / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

11)	Airport: Ust-	Kamenogorosk, Balkhash, Kostanay, Semip	alatinsk	
No.	Environmental Item	Description Social Environment	Evaluation	Remarks
1	Resettlement	Resettlement due to land occupancy (transfer of rights	[Y][N][?]	Existing airport to be used.
•	1000000	of residence / land ownership)	(110711.)	1. Misting amport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and	[Y][N][?]	#
		change of economic structure		
3	Traffic and Public	Impacts on schools, hospitals and present traffic	[Y][N][Y]	The condition of access roads is
	Facilities	conditions, such as the increase of traffic congestion		unknown.
		and accidents	<u> </u>	
4	Split of	Community split due to interruption of area traffic	(Y)[N][?]	Existing airport to be used.
5	Cultural Property	Damage to or loss of the value of churches, temples,	(VIENDIO)	<i> </i>
,	Cultural Flopelty	shrines, archaeological remains or other cultural assets	[Y][ <u>N]</u> [?]	"
6	Water Rights and	Obstruction of fishing rights, water rights, rights of	[Y][N][?]	//
_	Rights of Common	common	(-)μιχι(-)	
7	Public Health	Deterioration of public health and sanitary conditions	[Y][N][?]	11
	Condition	due to generation of garbage and the increase of		
· 		vermin		
8	Waste	Generation of construction and demolition waste,	[x][N][s]	Not much waste generated.
9	Hazards (Risk)	debris and logs Increase in risk of landslides, cave-ins and accidents	LVHANGO	Aircraft accident
	(Mazalus (Kisk)	Natural Environment	[Y][N][?]	Auterant accident
10	Topography and	Changes of valuable topography and geology due to	[Y][N][?]	Existing airport to be used.
	Geology	excavation or filling work	[ , 17:77[,]	is a string unport to be used.
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and	[Y][N][?]	#
<del></del> -		vegetation removal	. ,	
12	Groundwater	Change of distribution of groundwater by large-scale	[Y][N][ <u>?]</u>	The plans for groundwater usage
		excavation		are unknown.
13	Hydrological Situation	Changes of river discharge and riverbed condition due	[Y][N][?]	Existing airport to be used.
14	Coastal Zone	to landfill and drainage inflow  Coastal erosion and sedimentation due to landfill or	[Y][N][?]	None
	Contract Econo	change in marine condition	[1][[][[1]	None
15	Fauna and Hora	Obstruction of breeding and extinction of species due	[Y][N][?]	The state of fauna and flora is
		to change of habitats condition	( ) X 122	unknown.
16	Meteorology	Changes of temperature, precipitation, wind, etc. due	[Y][N][?]	None
. ;		to large-scale land reclamation and building		
17	Landaman	construction Change of topography and vegetation due to	(MICATIO)	P-1-11
'	Landscape	reclamation. Deterioration of aesthetic harmony by	(Y)[N][?)	Existing airport to be used.
		structures		
		Pollution	L 'n	
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from	[Y][N][?]	The number of flights in 2005 is
		vehicles and factories		unknown.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers	[Y][N][ <u>2]</u>	The capability of the water
	0.11.0	and groundwater	£111/51/401	treatment plant is unknown.
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	[Y][N][?]	The countermeasures for the anti- freeze chemicals are unknown.
2ì	Noise and	Noise and vibration generated by vehicles	[Y][N][?]	The number of flights in 2005 is
•	Vibration	Troisy and Troisiton generated by venicles	[ 1][1][1]	unknown.
22	Land Subsidence	Deformation of land and land subsidence due to the	[Y][N][ <u>?]</u>	The existence of soft ground is
		lowering of groundwater table	f - Mr. Mr.	unknown.
23	Offensive Odor	Generation of exhaust gas and offensive odor by	[Y][N][?]	None
		facility construction and operation	L	
)ver	all Evaluation: Is either	er IEB or EIA necessary for the project implementation?	IYI	

Note1: "Y": Some impact is expected.

"N": No impact is expected. IEB / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

Note2: Information taken from maps.

12)		alyk, Ekibastuz, Kokchetau, Petropavlovsk,		
No.	Environmental Item	Description	Evaluation	Remarks
	· · · · · · · · · · · · · · · · · · ·	Social Environment		
ا ا	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	(Y) <u>[N]</u> [?]	Existing airport to be used.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	(Y)[N][?]	//
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[Y][N][?]	There are no residents in the vicinity of airport.
	Split of Communities	Community split due to interruption of area traffic	(Y)[N][?]	Existing airport to be used.
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	{Y][N][?]	<i>II</i>
5	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[Y][N][?]	<i>II</i>
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[Y][N][?]	<i>II</i>
8	Waste	Generation of construction and demolition waste, debris and logs	[Y][N][?]	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][?]	There are no residents
		Natural Environment		
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][7]	Existing airport to be used.
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	(A)[M](A)	<i>#</i>
12	Groundwater	Change of distribution of groundwater by large-scale excavation	(Y)[N][ <u>?]</u>	The plans for groundwater usage are unknown.
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	(Y) <u>[N](</u> ?)	Existing airport to be used.
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	{Y] <u>[N][</u> ?]	None
15	Fauna and Hora	Obstruction of breeding and extinction of species due to change of habitats condition	[X][N][X]	The state of fauna and flora is unknown.
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[A][M][s]	None
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[A][ <u>M][</u> [3]	Existing airport to be used.
50	Ata Dallada	Pollution	ryman	The makes of Bisbacis coops in
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from vehicles and factories	[Y][N](?)	The number of flights in 2005 is unknown.
19	Water Pollution	Pollution by inflow of silt, sand and effluent into rivers and groundwater	[X][N][ <u>3</u> ]	The capability of the water treatment plant is unknown.
20	Soil Contamination	Contamination of soil by dust and chemicals, such as herbicides	[X][N][ <u>3]</u>	The usage of anti-freeze chemicals is unknown.
21	Noise and Vibration	Noise and vibration generated by vehicles	[Y][N][?]	The number of flights in 2005 is unknown.
22	Land Subsidence	Deformation of land and land subsidence due to the lowering of groundwater table	[X][N][ <u>S]</u>	The existence of soft ground is unknown.
		Generation of exhaust gas and offensive odor by	[Y][N](?)	None

Note1: "Y": Some impact is expected.

"N": No impact is expected. IEB / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

Note2: Information taken from maps.

13)	Airport: Urd	Izhar, Zaysan		
No.	Environmental Item	Description	Evaluation	Remarks
	Y	Social Environment		
1	Resettlement	Resettlement due to land occupancy (transfer of rights of residence / land ownership)	(Y)[N][ <u>?]</u>	The existence of residences is unknown.
2	Economic Activities	Loss of bases of economic activities, such as land, and change of economic structure	[Y][N][?]	None
3	Traffic and Public Facilities	Impacts on schools, hospitals and present traffic conditions, such as the increase of traffic congestion and accidents	[X][N][S]	The state of access roads is unknown.
4	Split of Communities	Community split due to interruption of area traffic	[Y][N][?]	<i>II</i>
5	Cultural Property	Damage to or loss of the value of churches, temples, shrines, archaeological remains or other cultural assets	[Y][N][?]	The state of cultural property is unknown.
6	Water Rights and Rights of Common	Obstruction of fishing rights, water rights, rights of common	[Y][N][?]	The state of water rights, rights of common is unknown.
7	Public Health Condition	Deterioration of public health and sanitary conditions due to generation of garbage and the increase of vermin	[X][V](3)	None
8	Waste	Generation of construction and demolition waste, debris and logs	[Y][N][?]	Not much waste generated.
9	Hazards (Risk)	Increase in risk of landslides, cave-ins and accidents	[Y][N][Y]	The existence of residences is unknown.
		Natural Environment		
10	Topography and Geology	Changes of valuable topography and geology due to excavation or filling work	[Y][N][ <u>?]</u>	The state of topography and geology is unknown.
11	Soil Erosion	Topsoil erosion by rainfall after reclamation and vegetation removal	[Y][N][ <u>?]</u>	The condition of soil is unknown.
12	Groundwater	Change of distribution of groundwater by large-scale excavation	[Y][N][?]	The plans for groundwater usage are unknown.
13	Hydrological Situation	Changes of river discharge and riverbed condition due to landfill and drainage inflow	[Y][N][?]	None
14	Coastal Zone	Coastal erosion and sedimentation due to landfill or change in marine condition	[Y][N][?]	#
15	Fauna and Flora	Obstruction of breeding and extinction of species due to change of habitats condition	[3][4][3]	The state of fauna and flora is unknown.
16	Meteorology	Changes of temperature, precipitation, wind, etc. due to large -scale land reclamation and building construction	[Y] <u>[N]</u> [?]	None
17	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structures	[X][N][ <u>3</u> ]	The state of topography is unknown.
18	Air Pollution	Pollution caused by exhaust gas or toxic gas from	(Y)(N)(?)	The existence of residences is
19	Water Pollution	vehicles and factories Pollution by inflow of silt, sand and effluent into rivers	[Y][N][2]	unknown. The capability of the water
20	Soil Contamination	and groundwater  Contamination of soil by dust and chemicals, such as		treatment plant is unknown. The countermeasures for the anti-
21	Noise and	herbicides Noise and vibration generated by vehicles	[Y]{N][?]	freeze chemical are unknown.  The existence of residences is
22	Vibration Land Subsidence	Deformation of land and land subsidence due to the	[Y][N][?]	unknown. The existence of soft ground is
23	Offensive Odor	lowering of groundwater table Generation of exhaust gas and offensive odor by		unknown. None
	Il Fughistions to airb-	facility construction and operation	[77]	<del></del>
	: "Y": Some impact is	r IEB or EIA necessary for the project implementation?	[¥]	

Note1: "Y": Some impact is expected.

<sup>&</sup>quot;N": No impact is expected. IEB / EIA is not necessary.

"?": Extent of impact is unknown (Examination is needed. Impact may become clear as study progresses.)

Note2: Because there is no information available these airports, the evaluations were based on common sense.

#### **Appendix-5.6 (3)**

#### Scoping

1) Airport: Akmola

1)	Апрон: Актова		·		
No.	Environmental Item	Evaluation	Reason for Evaluation		
Social	cial Environment				
1	Resettlement	-	Existing airport to be used.		
2	Economic Activities	•	"		
3	Traffic/Public Facilities		#		
4	Split of Communities	-	И		
5	Cultural Property	•	None		
6	Water Rights and		Existing airport to be used.		
	Rights of Common				
7	Public Health	-	"		
	Condition				
8	Waste	•	Not much waste generated		
9	Hazards(Risk)	Ç	The land use plan in the vicinity of airport in 2005 is unknown.		
Natur	al Environment				
10	Topography and	-	None		
	Geology	·			
11	Soil Erosion		"		
12	Groundwater		"		
13	Hydrological Situation		11		
14	Coastal Zone	•	"		
15	Fauna and Flora	С	There are staging points for migratory birds.		
16	Meteorology	-	None		
17	Landscape	-			
Pollut	ion				
18	Air Pollution	С	The land use plan in the vicinity of airport in 2005 is unknown.		
19	Water Pollution	С	The surface water treatment system is unknown.		
20	Soil Contamination	-	None		
21	Noise and Vibration	C	The land use plan in the vicinity of airport in 2005 is unknown.		
22	Land Subsidence	C	The existence of soft ground is unknown.		
23	Offensive Odors	•	None		

Note 1) "A": Serious impact is expected.

"B": Some impact is expected.

"C": Extent of impact is unknown, (Examination is needed. The impacts may become clear as study progresses.)

"-": No impact is expected. IEE / EIA is not necessary.

Note 2) The evaluation should be made with reference to the "Environmental Guide Lines for Infrastructure Projects, Airport, 1994,1, Japan International Cooperation Agency"

Airport: Aktyubinsk 2)

4)	Aupott: Aktyuolisk			
No.	Environmental Item	Evaluation	Reason for Evaluation	
Social	Social Environment			
1	Resettlement	-	Existing airport to be used.	
2	Economic Activities	-	II .	
3	Traffic/Public Facilities		ll .	
4	Split of Communities	-	II .	
5	Cultural Property	-	None	
6	Water Rights and Rights of Common	-	Existing airport to be used.	
7	Public Health Condition		11	
8	Waste	-	Not much waste generated.	
9	Hazards(Risk)	В	Aircrast accident	
Natur	at Environment			
10	Topography and Geology	•	None	
11	Soil Erosion	-	H .	
12	Groundwater	С	The pumping volume is unknown.	
13	Hydrological Situation	-	None	
14	Coastal Zone	-	ll .	
15	Fauna and Flora	-	11	
16	Meteorology	-	\ II	
17	Landscape	-	, II	
Pollut	ion			
18	Air Pollution	С	The number of flights in 2005 is unknown.	
19	Water Pollution	<u> </u>	None	
20	Soil Contamination	•	ll .	
21	Noise and Vibration	В	There are residents in the area who will be affected.	
22	Land Subsidence	<u>-</u>	None	
23	Offensive Odors	•	ll .	

Note: Evaluation categories ("A", "B", "C", "- ") are the same as those used for Akmola airport.

Airport: Almaty 3)

No.	Environmental Item	Evaluation	Reason for Evaluation		
Socia	Social Environment				
1	Resettlement	-	Existing airport to be used.		
2	Economic Activities	-	[#		
3	Traffic/Public Facilities	С	The increase of traffic is unknown.		
4	Split of Communities	•	Existing airport to be used.		
5	Cultural Property		None		
6	Water Rights and Rights of Common	-	Existing airport to be used.		
7	Public Health Condition	•	ll .		
8	Waste	-	Not much waste generated.		
9	Hazards(Risk)	В	Aircrast accident		
Natur	al Environment				
10	Topography and Geology	•	None		
11	Soil Erosion	•	II .		
12	Groundwater	•	<i>II</i>		
13	Hydrological Situation	•	II .		
14	Coastal Zone	•	<i>"</i>		
15	Fauna and Flora	-	<i>(</i>		
16	Meteorology	•	<i>II</i>		
17	Landscape	-	<i>"</i>		
Pollut	ion				
18	Air Pollution	C	There are many residents in the vicinity of the airport.		
19	Water Pollution	С	The surface water treatment system is unknown.		
20	Soil Contamination	•	None		
21	Noise and Vibration	В	There are many residents in the vicinity of the airport.		
22	Land Subsidence	-	None		
23	Offensive Odors	•	//		

4) Airport: Shimkent

No.	Environmental Item	Evaluation	Reason for Evaluation		
	Social Environment				
1	Resettlement	•	Existing airport to be used.		
2	Economic Activities	-			
3	Traffic/Public Facilities	_	"		
4	Split of Communities	-	Existing airport to be used.		
5	Cultural Property	-	II .		
6	Water Rights and Rights of Common	-	"		
7	Public Health Condition		"		
8	Waste	-	Not much waste generated.		
9	Hazards(Risk)	В	Aircraft accident		
Natur	al Environment				
10	Topography and Goology	•	Existing airport to be used.		
11	Soil Erosion	-	И		
12	Groundwater	С	The plans for groundwater usage are unknown.		
13	Hydrological Situation		Existing airport to be used.		
14	Coastal Zone	-	None		
15	Fauna and Flora	C	The state of fauna and flora is unknown.		
16	Meteorology	-	None		
17	Landscape	-	Existing airport to be used.		
Pollut	ioa				
18	Air Pollution	C	The number of flights in 2005 is unknown.		
19	Water Pollution	С	The capability of the water treatment plant is unknown.		
20	Soil Contamination	С	The usage of anti-freeze chemicals is unknown.		
21	Noise and Vibration	С	The number of flights in 2005 is unknown.		
22	Land Subsidence	С	The existence of soft ground is unknown.		
23	Offensive Odors		None		

Note: Evaluation categories ("A", "B", "C", "-") are the same as those used for Akmola airport.

5) Airport: Atyrau

No.	Environmental Item	Evaluation	Reason for Evaluation		
Social	Social Environment				
1	Resettlement	•	Existing airport to be used.		
2	Economic Activities		"		
3	Traffic/Public Facilities	•	u u		
4	Split of Communities	<u>-</u>	II -		
5	Cultural Property	<b>-</b>	None		
6	Water Rights and Rights of Common		Existing airport to be used.		
7	Public Health Condition	-	[II		
8	Waste	-	Not much waste generated.		
9	Hazards(Risk)	С	The countermeasures for the rising of the Caspian Sea and aircraft accidents are unknown.		
Natus	al Environment				
10	Topography and Geology	•	None		
11	Soil Erosion	•	"		
12	Groundwater	-	"		
13	Hydrological Situation	•	"		
14	Coastal Zone	•	"		
15	Fauna and Flora	-	#		
16	Meteorology	•	"		
17	Landscape	-	l l l		
Pollul	lion				
18	Air Pollution	C.	There are many residents in the vicinity of the airport.		
19	Water Pollution	C	The capability of the water treatment plant is unknown.		
20	Soil Contamination	-	None		
21	Noise and Vibration	В	There are many residents in the vicinity of the airport.		
22	Land Subsidence	-	None		
23	Offensive Odors	-	# h) are the secre as those wood for Al-wale pircord		

6) Airport: Karaganda

	7 inport, rangardo		Danas for Parlington		
No.	Environmental Item	Evaluation	Reason for Evaluation		
	Social Environment .				
1	Resettlement		Existing airport to be used.		
2	Economic Activities				
3	Traffic/Public Pacilities	•			
4	Split of Communities	•			
5	Cultural Property	-	None		
6	Water Rights and Rights of Common	-	Existing airport to be used.		
7	Public Health Condition	_	//		
8	Waste	-	Not much waste generated.		
9	Hazards(Risk)	-	None		
Natur	al Environment				
10	Topography and Geology	-	None		
11	Soil Erosion	-	II .		
12	Groundwater	С	The pumping volume is unknown.		
13	Hydrological Situation	-	None		
14	Coastal Zone	-	II .		
15	Fauna and Flora	C	The state of migratory birds is unknown.		
16	Meteorology	-	None		
17	Landscape	-	ll .		
Pollut	ion				
18	Air Pollution	-	No people live in the area.		
19	Water Pollution	-	None		
20	Soil Contamination		И		
21	Noise and Vibration	С	The number of flights in 2005 is unknown.		
22	Land Subsidence	-	None		
23	Offensive Odors	•	II .		

Note: Evaluation categories ("A", "B", "C", "-") are the same as those used for Akmola airport.

7) Airport: Kzyl-Olda

No.	Environmental Item	Evaluation	Reason for Evaluation		
Social	Social Environment				
1	Resettlement	*	Existing airport to be used.		
2	Economic Activities	-	II .		
3	Traffic/Public Facilities	-	II .		
4	Split of Communities		11		
5	Cultural Property	-	None		
6	Water Rights and Rights of Common	-	Existing airport to be used.		
7	Public Health Condition	•	II .		
8	Waste	-	Not much waste generated.		
9	Hazards(Risk)	•	None		
Natur	al Environment				
10	Topography and Geology	-	None		
11	Soil Erosion	•			
12	Groundwater	C	The pumping volume is unknown.		
13	Hydrological Situation		Existing airport to be used.		
14	Coastal Zone		None		
15	Fauna and Flora		No rare species		
16	Meteorology		None		
17	Landscape	-	<i>II</i>		
Pollut	lion				
18	Air Pollution	• .	No people live in the area.		
19	Water Pollution	С	The countermeasures for anti-freeze chemicals are unknown and undecided.		
20	Soil Contamination	С	"		
21	Noise and Vibration	•	No people live in the area.		
22	Land Subsidence	С	The existence of soft ground is unknown.		
23	Offensive Odors	-	None		
		An alba ala a	- ") are the same as those used for Akmola airport.		

'- ") are the same as those used for Akmola airport. App. 5 - 39

Airport: Aktau 8)

9)	mpon nada				
No.	Environmental Item	Evaluation	Reason for Evaluation		
Social	Social Environment				
1	Resettlement	•	Existing airport to be used.		
2	Economic Activities	-	//		
3	Traffic/Public Facilities	-			
4	Split of Communities	-	<i>"</i>		
5	Cultural Property	-	None		
6	Water Rights and Rights of Common	*	Existing airport to be used.		
7	Public Health Condition	-	#		
8	Waste	-	Not much waste generated.		
9	Hazards(Risk)	C	The countermeasures for the rising of the Caspian Sea are unknown.		
Natur	al Environment				
10	Topography and Geology	-	None		
11	Soil Erosion	-	ll .		
12	Groundwater	•	II .		
13	Hydrological Situation	<u>-</u>	Existing airport to be used.		
14	Coastal Zone	•	None		
15	Fauna and Flora	С	The routes of migratory birds are unknown.		
16	Meteorology		None		
17	Landscape	-			
Pollui	lion				
18	Air Pollution	•	No people live in the area.		
19	Water Pollution	•	None		
20	Soil Contamination	-	<i>II</i>		
21	Noise and Vibration		No resident		
22	Land Subsidence	-	No people live in the area.		
23	Offensive Odors		//		

Note: Evaluation categories ("A", "B", "C", "-") are the same as those used for Akmola airport.

Airport: Pavlodar 9)

No.	Environmental Item	Evaluation	Reason for Evaluation		
Socia	Social Environment				
1	Resettlement	•	Existing airport to be used.		
2	Economic Activities	•	"		
3	Traffic/Public Facilities	•	#		
4	Split of Communities	•			
5	Cultural Property	-	None		
6	Water Rights and Rights of Common	-	Existing airport to be used.		
7	Public Health Condition	-			
8	Waste	-	Not much waste generated.		
9	Hazards(Risk)	В	Aircrast accidents		
Natur	al Environment				
10	Topography and Geology	•	None		
11	Soil Erosion	-			
12	Groundwater	•	II .		
13	Hydrological Situation	•			
14	Coastal Zone	•			
15	Fauna and Flora	•	II .		
16	Meteorology	-	<i>II</i>		
17	Landscape	•	<i>"</i>		
Pollu	lion				
18	Air Pollution	С	The number of flights in 2005 is unknown.		
19	Water Pollution	•	None		
20	Soil Contamination	-	"		
21	Noise and Vibration	С	The number of flights in 2005 is unknown.		
22	Land Subsidence		None		
23	Offensive Odors	-	["		
		An Bu "C"	'- ") are the same as those used for Akmola airport.		

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Airport: Uralsk 10)

Airport: Utaisk		
Environmental Item	Evaluation	Reason for Evaluation
Environment		7
Resettlement	•	Existing airport to be used.
Economic Activities	-	
Traffic/Public Facilities	•	ll .
Split of Communities	-	l II
Cultural Property	-	None
Common	-	Existing airport to be used.
Public Health Condition	-	
Waste	-	Not much waste generated.
Hazards(Risk)	-	None
al Environment		
Topography and Geology	-	None
Soil Erosion	-	#
Groundwater	С	The drinking water supply system is unknown.
Hydrological Situation	-	None
Coastal Zone	-	#
Fauna and Flora	•	II .
Meteorology	-	II .
Landscape	-	
ion		
Air Pollution	C	The number of flights in 2005 is unknown.
Water Pollution	C	The capability of the water treatment plant is unknown.
Soil Contamination	-	None
Noise and Vibration	C	The number of flights in 2005 is unknown.
Land Subsidence	-	None
Offensive Odors	-	
	Environmental Item Environment Resettlement Resettlement Economic Activities Traffic/Public Facilities Split of Communities Cultural Property Water Rights and Rights of Common Public Health Condition Waste Hazards(Risk) al Environment Topography and Geology Soil Brosion Groundwater Hydrological Situation Coastal Zone Fauna and Flora Meteorology Landscape ion Air Pollution Water Pollution Soil Contamination Noise and Vibration Land Subsidence	Environmental Item Environment Resettlement Resettlement Conomic Activities Traffic/Public Facilities Split of Communities Cultural Property Water Rights and Rights of Common Public Health Condition Waste Hazards(Risk) Hazards(Risk) Henvironment Topography and Geology Soil Brosion Groundwater CHydrological Situation Coastal Zone Fauna and Flora Meteorology Landscape ion Air Pollution CSoil Contamination Noise and Vibration CL Land Subsidence

Note: Evaluation categories ("A", "B", "C", "-") are the same as those used for Akmola airport.

11) Airport: Ust-Kamenogorosk, Balkhash, Kostanay, Semipalatinsk

No.	Environmental Item	Evaluation	Reason for Evaluation		
Social	Social Environment				
1	Resettlement	-	Existing airport to be used.		
2	Economic Activities	-	"		
3	Traffic/Public Facilities	C	The condition of access roads is unknown.		
4	Split of Communities	-	Existing airport to be used.		
5	Cultural Property	-	"		
6	Water Rights and Rights of Common	-	"		
7	Public Health Condition	•	<i>"</i>		
8	Waste	-	Not much waste generated.		
9	Hazards(Risk)	В	Aircrast accident		
Natur	al Environment				
10	Topography and Geology	<b>-</b> :	Existing airport to be used.		
11	Soil Erosion	•	<i>"</i>		
12	Groundwater	С	The plans for groundwater usage are unknown.		
13	Hydrological Situation	•	Existing airport to be used.		
14	Coastal Zone	•	None		
15	Fauna and Flora	C	The state of fauna and flora is unknown.		
16	Meteorology	-	None		
17	Landscape	•	Existing airport to be used.		
Pollut	ion				
18	Air Pollution	C	The number of flights in 2005 is unknown.		
19	Water Pollution	C	The capability of the water treatment plant is unknown.		
20	Soil Contamination	С	The usage of anti-freeze chemicals is unknown.		
21	Noise and Vibration	С	The number of flights in 2005 is unknown.		
22	Land Subsidence	С	The existence of soft ground is unknown.		
23	Offensive Odors	•	None		
	Evaluation estangarios (#	I II HATE BEEN B	") are the same as those used for Abritola airport		

12) Airport: Arkalyk, Ekibastuz, Kokchetau, Petropavlovsk, Zhambul, Zhezkazgan

No.	Environmental Item	Evaluation	Reason for Evaluation		
Social	Social Environment				
1	Resettlement	•	Existing airport to be used.		
2	Economic Activities	•	[4		
3	Traffic/Public Facilities	-	There are no residents in the vicinity of airport.		
4	Split of Communities	<b>-</b>	Existing airport to be used.		
5	Cultural Property	-	11		
6	Water Rights and Rights of Common	-	"		
7	Public Health Condition	•	11		
8	Waste	<u></u>	Not much waste generated.		
9	Hazards(Risk)	-	There are no residents in the vicinity of airport.		
Natur	al Environment				
10	Topography and Geology	•	Existing airport to be used.		
11	Soil Erosion	-	//		
12	Groundwater	c	The plans for groundwater usage are unknown.		
13	Hydrological Situation	-	Existing airport to be used.		
14	Coastal Zone	-	None		
15	Fauna and Flora	C	The state of fauna and flora is unknown.		
16	Meteorology	<del>-</del>	None		
17	Landscape	-	Existing airport to be used.		
Pollu	ion				
18	Air Pollution		No people live in the area.		
19	Water Pollution	C	The capability of the water treatment plant is unknown.		
20	Soil Contamination	C	The usage of anti-freeze chemicals is unknown.		
21	Noise and Vibration	•	No people live in the area.		
22	Land Subsidence	· C	The existence of soft ground is unknown.		
23	Offensive Odors	•	None		

Note: Evaluation categories ("A", "B", "C", "-") are the same as those used for Akmola airport.

13) Airport: Urdzhar, Zaysan

No.	Environmental Item	Evaluation	Reason for Evaluation
Social	Environment		
1	Resettlement	С	The existence of residences is unknown.
2	Economic Activities	-	None
3	Traffic/Public Facilities	C	The condition of access roads is unknown.
4	Split of Communities	С	II .
5	Cultural Property	. <b>C</b>	The state of cultural property is unknown.
6	Water Rights and Rights of Common	С	The state of water rights, rights of common is unknown.
7	Public Health Condition	-	None
8	Waste	•	Not much waste generated.
9	Hazards(Risk)	С	The existence of residences is unknown.
Natur	al Environment		
10	Topography and Geology	С	The state of topography and geology is unknown.
11	Soil Erosion	С	The condition of soil is unknown.
12	Groundwater	C	The plans for groundwater usage are unknown.
[13]	Hydrological Situation	-	None
14	Coastal Zone	-	[#. ·
15	Fauna and Flora	C	The state of fauna and flora is unknown.
16	Meteorology	-	None
17	Landscape	C	The state of topography is unknown.
Pollu	tion		
18	Air Pollution	С	The existence of residences is unknown.
19	Water Pollution	С	The capability of the water treatment plant is unknown.
20	Soil Contamination	С	The usage of anti-freeze chemicals is unknown.
21	Noise and Vibration	С	The existence of residences is unknown.
22	Land Subsidence	С	The existence of soft ground is unknown.
23	Offensive Odors		None
	Production entrancing (#	AR ROS PER I	" ") are the same as those used for Akonola airport

Appendix-5.6 (4)

OECF-Environmental Check List (Airport)

	:		-	
1) Airport: Akmola				
Check Item	Evaluation	Point at Issue	Measures & Policy for Management	Remarks
Pollution; 1. Aquatic organisms, fisheries & other water utilization	1		•	
2. Water pollution caused by sewage and soil	U	-Treatment of surface water from	- Surface water from the airport will be dealt	88
erosion. 3. Aircraft noise pollution.	O	airport -Aircraft noise	with by treatment plants following water quality standards.  -As necessary, consider measures	Notice2
			agains: aircraft noise.	
Natural Environment; 1. Ecological effects.	U	-Migratory birds	-As necessary, consider measures	
2. Erosion of river and beach 3. Effects on landscape	1 1	: • • •	regaroung use commer of onos and aircraft.	
Social Environment:				
1. Effect on historical ruins and cultural assets.			•	
<ol> <li>Effect on existing infrastructure.</li> <li>Resettlement.</li> </ol>				
Others;	,			
1. Environmental impact during construction phase.	J	-Muddy water discharge	- As necessary, consider measures against	neukan senaknan
2. Environmental monitoring system (In the	,	-Monitoring systems of aircraft noise	muddy water discharge.	-
case of no existing plan: "-")	:		- As necessary, establish environmental monitoring systems.	*******************************

Notice1)"A": An adverse effect would unquestionably be induced by the project.
"B": An adverse effect is likely to be induced by the project.
"C": It cannot be confirmed at this stage whether an adverse effect is likely or not.

Notice2) Water quality standard for fishery of Kazakhstan, 0.02 mg/l for Chrome, 0.1 mg/l for Iron, 0.001 mg/l for Copper, 0.01 mg/l for Zinc(2+), 0.0001 mg/l for Mercury, 0.05 mg/l for Arsenic, 0.05 mg/l for Oil-Products ".": There is no possibility of an adverse effect being induced by the project.

2) Airport: Aktyubinsk				
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquatic organisms, fisheries & other water utilization.	4		1	
2. Water pollution caused by sewage and soil erosion.	- 1	•		
3. Aircraft noise pollution.	ρά	-Aircraft noise	- As necessary, consider incasures	
•			agama, aircraft noise.	
Natural Environment;				
1. Ecological effects.	•	•		
2. Erosion of river and beach	·•	•	•	
3. Effects on landscape	•	1		
All Items of Social Environment	4			
All Items of Others are the same as Akmola airport	airport			
		• •		

\* The Evaluation scores ("A", "B", "C", "-") are the same as those used for Akmola airport.

3) Airport: Almaty				
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquatic organisms, fisheries & other water utilization.			•	
2. Water pollution caused by sewage and soil	U	-Treatment of surface water from	- Surface water from the airport will be dealt   See	See
erosion.		airport	with by treatment plants following water	Notice1
	-	•	quality standards.	
3. Aircraft noise pollution.	μ		- As necessary, consider measures	
		- Aircraft noise	against aircraft noise.	
Natural Environment;				
1. Ecological effects.		•		
2. Erosion of river and beach	1		•	
3. Effects on landscape	,	•		
All Items of Social Environment	•	ŧ	•	
	1			

All Items of Others are the same as Akmola airport.

• The Evaluation scores ("A", "B", "C", "-") are the same as those used for Akmola airport.

• The Evaluation scores ("A", "B", "C", "-") are the same as those used for Akmola airport.

Notice1) Water quality standard for fishery of Kazakhstan, 0.02 mg/l for Chrome, 0.1 mg/l for Iron, 0.001 mg/l for Copper, 0.01 mg/l for Zinc(2+), 0.0001 mg/l for Mercury, 0.05 mg/l for Arsenic, 0.05 mg/l for Oil-Products

4) Airport: Shimkent				
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquatic organisms, fishence & other water utilization.	•		•	
2. Water pollution caused by sewage and soil	O	-Treatment of sewage	- Sewage will be dealt with by treatment	Se
crosion.			plants following water quality standards.	Noticel
3. Aircraft noise pollution.	O	-Aircraft noise measures	- As necessary, consider measures	
			against	
			aircraft noise.	
Natural Environment;				
1. Ecological effects.	O	-Fauna and flora	-Investigation of fauna and flora	
2. Erosion of river and beach	,			
3. Effects on landscape	•		•	
All Items of Social Environment	•			
All Items of Others are the same as Altmola aimort	1204			,

Notice1:Sewage effluent standards in Japan: 20 mg/l for BOD, 60 mg/l for nitrate, 8 mg/l for Phosphate, 70 mg/l for SS, 3000 numbers/100ml for Coliform. Ail Items of Others are the same as Akmola airport.

The Evaluation scores ("A", "B", "C","-") are the same as those used for Akmola airport.

Check lich	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
<ol> <li>Aquanic organisms, fishences &amp; other water utilization.</li> </ol>	,	ı		
2. Water pollution caused by sewage and soil	Ų	-Treatment of sewage	- Sewage will be dealt with by treatment	
erosion.			plants following water quality standards.	See
3. Aircraft noise pollution.	ф	-Aircraft noise measures	- As necessary, consider measures	Notice
			against	
			aircraft noise.	
Natural Environment;				
1. Ecological effects.	•		1	
2. Erosion of river and beach	•	E	1	
3. Effects on landscape			•	
All Items of Social Environment	•	1		
4 17 TALLEY OF CHAIN AND AND AND AND AND AND AND AND AND AN				

Notice1:Sewage effluent standards in Japan: 20 mg/l for BOD, 60 mg/l for nitrate, 8 mg/l for Phosphate, 70 mg/l for SS, 3000 numbers/100ml for Coliform. \* The Evaluation scores ("A", "B", "C", "-") are the same as those used for Akmola airport.

6) Airport: Karaganda				
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Kemarks
Pollution;				
1. Aquatic organisms, fisheries & other water utilization.	•		1	
2. Water pollution caused by sewage and soil erosion. 3. Aircraff noise pollution.	. 0	-Aircraft noise	- As necessary, consider measures	
			aircraft noise.	
Natural Environment; 1. Ecological effects.	)	-Migratory birds	-As necessary, consider measures	
			regarding the conflict of birds and	
2. Erosion of river and beach	,	•	aircraft.	
3. Effects on landscape	•	ŀ		
All Items of Social Environment				
All Items of Others are the same as Akmola airport.	irport.			
The Evaluation corres ("A" "P" "C" "-") are the same as those used for Akmola airport.	the same as thos	se used for Akmola airport.		

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<u>ب</u>	Airport: Kzyl-Orda					
	Check Item	Evaluation*	Poi	Point at Issue	Measures & Policy for Management	Remarks
Pollution;	2.1					
1. Aquatic or	1. Aquatic organisms, fisheries & other water utilization.		· .		•	
2. Water pol	2. Water pollution caused by sewage and soil crosson.	1			1	
3. Aircra	3. Aircraft noise pollution.		•		1	
Natural E	Natural Environment;			-		
1. Ecolog	1. Ecological effects.	١	•		•	
2. Erosio	2. Erosion of river and beach		•		•	
3. Effects	3. Effects on landscape		•			
All Items	All Items of Social Environment	1	1			
All Items	All frems of Others are the same as Akmola aimont	port.				

All items of Others are the same as Akinota airport.

The Evaluation scores ("A", "B", "C", "") are the same as those used for Akinola airport.

o) Alport: Axiati				
Check Item	Evaluation.	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquatic organisms, fisherics & other water utilization.	•		1	
2. Water pollution caused by sewage and soil erosion.	1		•	
3. Aircraft noise pollution.	•	*		
Natural Environment;				
1. Ecological effects.	U	-Migratory birds	-As necessary, consider measures	
	:		regarding the conflict of birds and	
2. Erosion of river and beach	•	,	aircraft.	
3. Effects on landscape		•		
All Items of Social Environment	•		,	
All Towns of Others are and the same	1			

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Others	tion sc
ms of	Evalua
All Items of Others are the same as Akmola airport.	* The Eva
	•

9) Airport: Pavlodar				
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquane organisms, fishence & other water utilization.	•		•	
2. Water pollution caused by sewage and soil erosion.	ı			
3. Aircraft noise pollution.	U	-Aircraft noise measures	- As necessary, consider measures	
			against	
			aircraft noise.	
Natural Environment;				
1. Ecological effects.	•	•		
2. Erosion of river and beach	•			
3. Effects on landscape	•	•		
All Items of Social Environment				
All Items of Others are the same as Akmola airport	airport,			

The Evaluation scores ("A", "B", "C","-") are the same as those used for Akmola airport.

10) Airport: Uralsk				
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquatic organisms, fisheries & other water unlivation.	•	•		
2. Water pollution caused by sewage and soil	U	-Treatment of surface water from	- Surface water from the airport will be dealt	
erosion		arroort	with by treatment plants following water	88
	í.		quality standards.	Noticel
2 Airmst noise noillition	C		- As necessary, consider measures	
ייי שיייים אינים אינים אינים אינים יי	)	•	South	
		-Auctali noise	aircraft noise.	
Natural Environment;				
1. Ecological effects.	,			
2. Erosion of river and beach	;	•	ı	
3. Effects on landscape	-		ŧ	
All Items of Social Environment	4	•	2	
				•

\* The Evaluation scores ("A", "B", "C", "-") are the same as those used for Akmola airport.

Notice1: The water quality standards for fishenes in Kazakhsian are 0.02 mg/l for Chrome, 0.1 mg/l for Iron, 0.001 mg/l for Copper, 0.01 mg/l for Zind(2+:, 0.0001 mg/l for Mercury, 0.05 mg/l for Arsenic, 0.05 mg/l for Oil-Products.

11) Airport: Ust-Kamenogorosk, Balkhash. Kostanay, Semipalatinsk	. Kostanay, Sem	ipalatinsk		
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquatic organisms, fishcrics & other water utilization.	•	•		
2. Water pollution caused by sewage and soil	υ	-Treatment of sewage	- Sewage will be dealt with by treatment	
erosion.			plants following water quality standards.	See
3. Aircraft noise pollution.	υ	-Aircraft noise measures	- As necessary, consider measures	Notice1
•			against	
			aircraft noise.	
Natural Environment;				
1. Ecological effects.	U	-Fauna and Nora	-Investigation of fauna and flora	
2. Erosion of river and beach	,		1	
3. Effects on landscape	•	-	•	
All Items of Social Environment	,	4	_	
All Items of Others are the same as Akmola ain	irport.			

Notice1:Sewage effluent standards in Japan: 20 mg/l for BOD, 60 mg/l for nitrate, 8 mg/l for Phosphate, 70 mg/l for SS, 3000 numbers/100ml for Coliforn. \* The Evaluation scores ("A", "B", "C",".") are the same as those used for Akmola airport. Notice2: Information taken from maps.

All Items of Others are the same as Akmola airport.

12) Airport: Alkalyk, Ekibastu, Kokchetau, Petropavlovsk, Zhambul, Zhezkazgan	Petropavlovsk,	Zhambul, Zhezkazgan		
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquatic organisms, fisheries & other water utilization.	•	•	•	
2. Water pollution caused by sewage and soil	ပ	-Treatment of sewage	- Sewage will be dealt with by treatment	-1.
crosion.			plants following water quality standards.	See
3. Aircraft noise pollution.	•		ŀ	Notice1
Natural Environment;				
1. Ecological effects.	U	-Fauna and flora	-Investigation of fauna and flora	
2. Erosion of river and beach	1	•	•	
3. Effects on landscape	,	•	•	
All Items of Social Environment	,			
All Items of Others are the same as Akmola air,	airport.			

Notice1:Sewage effluent standards in Japan: 20 mg/l for BOD, 60 mg/l for nitrate, 8 mg/l for Phosphate, 70 mg/l for SS, 3000 numbers/100ml for Coliform. \* The Evaluation scores ("A", "B", "C", "-") are the same as those used for Akmola airport. Notice2: Information taken from maps.

13) Airport: Urdzhar, Zaysan				
Check Item	Evaluation*	Point at Issue	Measures & Policy for Management	Remarks
Pollution;				
1. Aquanic organisms, fisheries & other water utilization.	υ	-Aquatic organisms, water utilization	-As necessary, consider aquatic	***
2. Water pollution caused by sewage and soil	U.	-Treatment of sewage	organisms	
erosion.			- Sewage will be dealt with by treatment	See
3. Aircraft noise pollution.	U	-Aircraft noise measures	plants following water quality standards.	Notice1
:			- As necessary, consider measures	
			against	
			aircraft noise.	
Natural Environment;				
1. Ecological effects.	O	-Fauna and flora	-Investigation of fauna and tlora	
2. Erosion of river and beach	•	•		
3. Effects on landscape			6	
All Items of Social Environment	•			
All frems of Others are the same as Akmola aimon	room			

\* The Evaluation scores ("A", "B", "C", "-") are the same as those used for Akmola airport.

Notice1:Sewage effluent standards in Japan: 20 mg/l for BOD, 60 mg/l for nitrate, 8 mg/l for Phosphate, 70 mg/l for SS, 3000 numbers/100ml for Coliform. Notice2: Because there is no information available these airports, the evaluations were based on common sense.

### Appendix-5.7.1 (1)

#### Runway Length Requirement

			2005				2020	
Airport	Assumpted direction	<b>N</b> C	Assumpted distance (km)	Runway length requirement	Assumpted direction	٨/c	Assumpted distance (km)	Runway length requirement
Akmola	•	IJ	•	3,500	•	IJ	-	3,500
Aktau	Almaty	SJ	2,100	2,000	West-Europe	SJ	3,200	2,200
Aktyubinsk	Almaty	SJ	1,700	1,900	Almaty	SI	1,700	1,900
Almaty	<b>-</b>	Į.J	-	3,600	-	IJ	-	3,600
Atyrau	Almaty	SJ	2,000	1,800	Almaty	SJ	2,000	1,800
Karaganda	Russia	SJ	2,400	1,900	West-Asia	SJ	3,600	2,200
Pavlodar	Russia	SJ	3,900	2,700	Russia	SJ	3,900	2,700
Shimkent	Russia	SJ	2,700	2,100	Russia	SJ	2,700	2,100
Ust-Kamenogorsk	Akmola	SJ	800	1,300	Russia	SJ	3,000	

#### Note

Accordance with charter flight for VIP, following procedure is adapted in case of Akmola and Almaty airport.

1. The basic runway length (Aircraft: Boeing 747SP)

2,670 m

-Assumption: sea level, 15°C, zero wind, zero R/W gradient

2. The basic runway length was corrected as main report 5.7.2 (3) i.

-Assumption for the basic R/W length correction:	Airport	Elevation (m)	Temp (°C)
	Akmola	353	35.0
	Almaty	681	30.8

# Appendix-5.7.1 (2) Comparison of Airport Standard

No Item	ICAO Recommendation	Russian Standard
1 Aircraft	Category Wing size Wheel track    m	Index of Plane Wing size Wheel track  m m  1 24 4 2 24-32 4-6 3 24-32 6-9 4 32-42 9-10.5
2 Runway Width	D 36-52 9-14 E 52-65 9-14	5         32-42         10.5-12.5           6         42-60         10.5-14
	4 D, E 45 7	Class   R/W+s/d   R/W   Shoulder   m   m   m
3 Overrun Length		
	Reference code         Length           4         D, E         60           3         D         60           3         A, B, C         30           2         C         30           2         A, B         23           1         C         23           1         A, B         18	Class Length
4 Longitudinal Slope	Code         Slope           4         1.00%         0.80%           3         1.00%         0.80%           2         2.00%         2.00%	Max. Slope Slope Slope Slope 1.25% A, B1, B2 1.00% 0.80% 1.25% 1.25% C 1.00% 0.80% 1.15% D 1.00% 1.50% 1.15%
	Note L means a runway length.	2.00% E 1.70% 1.50% 2.00% Note L means a runway length.

### Comparison of Airport Standard

No.	Item	ICAO Rec	ommendati	on		Russian	Standard	
	nway End fety Area							
		Code No. R/W width	width	length		Class	width	length
		m	m	m				m
		3D, 4D, 4H 45	90	90		A, B, B1, C, D		150
		30	60	90		Е		120
		1, 2 of 45	90	90				
		instrument 30 R/W	60	60				
Ler	nway strip ngth and each e width							
	ĺ	Code No.	width	length		Class	width	length
			m	nı	l	Chias	m	m
		3, 4	150	L+2x 60		A,	150	L+2 x75
		3,4 non-instrument 1,2 instrument R/W	75	L+2x 60		B, B1,	150	L+2 x 50
	:	2 non-instrument R/W	40	L+2x 60		C, D	75	L+2 x 30
		1 non-instrument R/W	30	L+2x 30		Е	75	L
	:	Note L means runway lengtl	h ·			÷		· :
	ety Sideband dth			·				
								ì
					1	Class	width	
					1	A, B	60	
						Bl, C	50	
						D	40	
						E	30	
8 Tav	xiway Width							
			, <del></del>		1.			
		Code T/W	Shoulder	T/W+s/d		Class T/W	Shoulder	T/W+s/d
		m a c	m	m		m m	m	m
		A 7.5 B 10.5				E 7		7
		C 15	5.0 x 2	25		D 10 C 13		10
		D 18	10.0 x 2	38		B2 17	5.0 x 2	13 27
		E 23	10.5 x 2	44		B1 19	5.0 x 2	29
		L				A 22.5	9.0 x 2	40.5
					1'	<u> </u>		
	1							

## Comparison of Aliport Standard

No Item	ICAO Recommendation	Russian Standard
9 Taxiway Clearance between Wheel and Edge	Code	Class         T/W         Clearance           m         m           1         7         1.5           2         10         2           3         13         2           4         17         3.25           5         19         3.25           6         22.5         4.25
10 Radius of Curvature at internal Edges of Taxiway	Code Radius  A to be adjusted B with fillet C D E Note Radius of fillet is decided using figure or formula.	Code Radius  m E 10 D 20 C 30 B1,B2 50 A 50
11 Clearance to Obstacle at Taxiways	Code   Clearance   m	Code         Clearance           m         E           E         25           D         29.5           C         29.5           B1,B2         38           A         47.5

### Comparison of Airport Standard

No Item	ICAO Recommendation	Russian Standard
12 Minimum Distance between Center Lines of Taxiways	Code   Center L to Center L   m   A   23.75   B   33.5   C   44   D   66.5   E   80	Code   Center L to Center L
13 Turning around		
		Class Width  A, B, V Minimum 75  G, D Minimum 45
	·	
÷		

## Appendix-5.7.1 (3)

Existing Condition of Pavement

Runway Taxiway 1 Pavement 1.1 R/w, T/w										Kamenogorsk
Taxiway  1 Pavement  1.1 R/w, T/w		4400×60	3100 x60	2350×44m	2511×49	2655 x 45	3300 × 60	2500 x 45	2800×44	2500×42
1 Pavement 1.1 R/w, T/w		3484 x 18		202 x 18 m	3484 × 18		600 x 22.5	600(?) x 18	3600(7) x 23	3400 (7) × 18 (7)
1.1 R/w, T/w										
3	Z.	36/R/B/X/T	20/RVA/X/T	17/R/A/X/T	28/R/B/X/T	36/F/C/Y/T	40/R/AXXT	14/R/A/X/T	22/R/A/X/T	22/R/AXXT
Commission	RC	24 (RC)	24 (RC)	5+8 (AC)	12 (AC)		24 (CC)	20-24 (AC)		
Structure	Concrete	20 (CC)	; (3) (3)	14 (RC)	12 (AC)		22 (CC)	22-24(CC)		
	pues	3 (Sa)		16 (C.stb)	24 (CC)		8 (AG)			
	Base course	15 (MC)	8 (MC)	10 (sand)	35 (8G)		38 (SG)			
	Sub-base	10 (SG)	38 (SG)							
	total	72	26		83	-	92	42-48		
As	Assumed Aircraft	B767-200	F-28	F-28	TU154(55t)	B737-200	B747-100	Tu-154		
1.2 Appropri	Midth w I amough	ATT. 7007-1616	200 ~ 100	Turos, turos	125.2 -560	16,15,050 2005	*C*****	00-17		
	Icui y Lengui		4V0 X 140	1000	15.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	X 200	4 4 4 4			
	Ž	20/F/CY/T	26/R/AXT	26/R/AXX1	16/R/B/X/T	36/F/C/Y/T	49/R/B/X/T	9/K/A/X/I		
		122000	1/1/2/20/2/	11/KWW1	1/1/2/2/77	1/2/0/2/12	19/K/A/A/1	10/0/3/4		
		45/R/CX/T		11/F/C/Z/T	27/RVB/X/T	25/F/C/Y/T	23/E/C/Y/T			
		27/R/CY/T			23/R/B/X/T	9/E/C/Y/T	19/R/A/X/T			
		62/F/C/Y/T								
	<u>i-</u>	18/F/C/Y/T								
		34/RVC/W/T								
	RC	28 (RC)	14 (RC)							
Structure	C.Stabi	24 (CC)	16 (CC)	:						
	Sand	3 (SA)				-				
	Subbase	15 (SG)								
	total	70	30							
	Apron Spots	14-Tu154	4-Tul34	3-An24	3-Tul 54	4-Yak40	2-1186,76	4-An24		
		12-1186	16-Yak40	2-Tu154	12-An24	6-170154	9-Tul 54	5-Yak-40		
	-	8-AN24	22-An24	10-1136	1-Tu134	8-An24	9-Tu134,			
		16-Tul34	4-Tu154		1-Yak40	24-An2	An24		···· •	
	-	8-Yak	2-1186							
2 Terminal Bldg.		13,722	3,884	2,880	1,050	215	13,500	3,600	1,177	394,4
Design Pax/hour	<b>1</b>	1,000	400	200	200	81	1,200	500	200	200
	m2/pax.	13.7	9.7	14.4	5.3	2.2	11.3	18.0	5.9	2.0
3 Control tower	m2	1.612	456	1,403	1,473	94	94	360	883	1488
4 Service premise		152	886	1.271	490	131.3	342.8	329	107	822
5 Fire fighting station	tion	69	115	53	438	64	339	35	120	820
<ol> <li>Equipment Category</li> </ol>	gory	8	7	9	7	9		7	9	9
7 Hanger	m2	16.067	•	066	ı	•	2,200	•	105	,
8 Fuel Storage	32	22,000	000.6	000'6	8,000	2,000	10,000	7	7,000	6

### Appendix 5.7.4 (1) Cost Estimation (Breakdown)

Civil Work   Institute   Control Work   Institute	Akmola Airp	Akmola Airport Project Cost Estimation (Break Down)	(Break)	Jown)			70.3
Pavernont Work   Excavation   Date	Work Item				Unit Rate	Amount	Remarks
Exchangion			) Carr	Outv	SSO	SS	
Earthwork         Excussion         m3         225,129           Pavement Work         Runway extension         m3         112,564           Pavement Work         Runway extension         m2         20,335           R/W Shoulder & Overria         m2         10,740           R/W Shoulder & Overria         m2         10,740           R/W Overlay         m2         10,740           R/W Overlay         m2         2,000           R/W Overlay         m2         1,500           R/W Overlay         m3         3,534           Excavation         m3         3,534           Extra Works         Demolition         m2         2,600         1,5           Range Total         Subtotal         m3         3,534         1,500         1,5           Range Total         Subtotal         m3         1,500         1,5           Mi	1 Airside		-				
Pavement Work   Embankment   m3   112,564	irthwork	xcavation	B	225,129		2,510,817	
Pavement Work   Subtoral   Runwer acterision   m2   50,355		mbankment	£	112,564		494,183	
Pavement Work   Runway extension   m2   42,335   10,0740   10,07		ubtota	-			3,005,000	
New Shoulder & Overna   New Shoulder   N	vement Work	unway extension	32	50.355	66.75	3.361.189	
Total   Tota	***************************************	AV Shoulder & Oversio	ç	47 335	31.41	1 270 754	P-122-10-10-10-1-1-1-1-1-1-1-1-1-1-1-1-1-
T. N. C.	***************************************	AV overlay	,	110 720	27.00	241 004 7	A P+24A I V II 4B VA II 4B AA TV 28A CA VII 5B C VII 4B C V I F II T II I
According to the control of the co	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		1	2500	***************************************	4,440,43	
Taxiway Shoulder   23,94,20	***************************************	/ w cxpansion	Ä	000,01	**********	116,067	***************************************
Agriculture   Taxiway Shoulder   m2   32.850	***************************************	EXIWEY OVERTHE		39,420		1,469,481	
Apros overlay   Maccillancous   Apros overlay   m2 2,000     Aff expansion   m2 10,125     Subtotal   m2 16,275     Subtotal   m2 16,275     Subtotal   m3 17,670     Subtotal   m3 17,670     Subtotal   m3 17,670     Excavation   m3 17,670     Subtotal   m2 1,880     Subtotal   m2 1,880     Subtotal   m2 1,880     Subtotal   m3 17,670     Subtotal   m3 17,670     Subtotal   m3 17,670     Subtotal   m2 1,880     Subtotal   m2 1,880     Subtotal   m2 1,880     Subtotal   m3 17,670     Subtota		axiway Shoulder	m7	32,850		1,031,827	-
Miscellancous   A/P. expansion   m2   72,900		prop overlav	m2	2,000		74.555	
Miscellancous   Marking & Traffic Sign Board   1s   1   1   1   1   1   1   1   1		/ extransion	É	22,900		4 866 065	
Miscellancous   Perimeter Road   m2   63.180     Subtoral   Subtoral   m2   16.275     Subtoral   Subtoral   m2   16.275     Subtoral   Subtoral   m3   3.534     Earth Works   Demolition   m3   3.534     Earth Works   Demolition   m3   3.530     Subtoral   Subtoral   m2   58,900     Miscellancous   Marking & Traffic Sign Board   m3   3.500     Miscellancous   Marking & Traffic Sign Board   m2   58,900     Miscellancous   Marking & Traffic Sign Board   m3   3.500     Fence   Subtoral   m2   3.500     Miscellancous   Marking & Traffic Sign Board   m3   3.500     Miscellancous   Marking & Traffic Sign Board   m2   3.500     Miscellancous   Marking & Traffic Sign Board   m3   3.500     Miscellancous   Marking & Control Tower   m2   3.500     Miscellancous   Marking & Control Tower   m2   3.500     Miscellancous   Marking center   m2   3.500     Miscellancous   Marking center   m2   3.500     Miscellancous   Marking center   m2   3.500     Miscellancous   m3   m2   3.500     Miscellancous   m4   m2   3.500     Miscellancous   m3   m3   1.500     Marking   m4   m4   m4   m4   m4   m4   m4   m		CT Don't	1	20101		310 000	· .
Miscellancous   Vernmeter Kood   m2   03.180     Miscellancous   Marking   m2   16.275     Subtotal   Subtotal   m3   3.534     Subtotal   Subtotal   m3   3.534     Excavation   m3   3.534     Excavation   m3   3.534     Subtotal   m3   3.534     Subtotal   m2   3.800     Miscellancous   Marking & Tarffic Sign Board   1s   1     Miscellancous   Marking & Tarffic Sign Board   1s   1     Miscellancous   Marking & Tarffic Sign Board   1s   1     Miscellancous   Marking & Control Tower   m2   1.800     Subtotal   m6side Total   m6side Total   m2   1.800     Miscellancous   Marking & Control Tower   m2   1.800     Miscellancous   m2   1.800     Miscellancous   m3   1.800     Marking & Control Tower   m2   1.800     Marking & Control Tower   m2   1.800     Miscellancous   m3   1.800     Marking & Control Tower   m2   1.800     Marking & Control Tower   m3   1.800     Marking & Control Tower   m3   1.800     Marking & Control Tower   m3   1.800     Marking   Marking   m3   1.800     Marking   Marking   m3   1.800	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		+	2	***************************************	240,047	
Miscellancous         Subtotal         m.2         16,275           Macking         Cable Duct & manhole         1.s         1           rside Total         Subtotal         m.3         3,534           Earth Works         Excavation         m.3         3,530           Pavement Work         Exavation         m.3         3,500           Miscellancous         Marking & Traffic Sign Board         1.s         1,800           Miscellancous         Marking & Carpark         m.2         28,900           Miscellancous         Marking & Control Tower         m.2         28,000           resempt Terminal Building         Control Tower         m.2         25,000           resempt Terminal Building         Control Tower         m.2         25,000           P         m.2         1,500         1,500           Incompanion Building         M.2         1,500           Incompanion B	<b>1</b>	enmeter Koad	<b>1 1 1 1 1 1 1 1 1 1</b>	63,180		1,984,501	
Miscellancous         Marking         m.2         16,275           Riscellancous         Cable Duct & manhole         1.s         1           rside Toral         Subtotal         m.3         3,534           mdsside         Toral         m.3         3,534           Earth Works         Demolition         m.3         3,534           Pavement Work         Road & Carpark         m.2         58,900           Miscellancous         Marking & Traffic Sign Board         1.s         1           Miscellancous         Marking & Traffic Sign Board         m.2         28,900           Miscellancous         Marking & Traffic Sign Board         m.2         2,800           Miscellancous         Marking & Traffic Sign Board         m.2         2,800           Miscellancous         Marking & Control Tower         m.2         2,800           Nijescilancous         Marking & Control Tower         m.2         2,500           respect Terminal Building         m.2         2,500           respect Terminal Building         m.2         3,500           respect Terminal Building         m.2         3,500           respect Terminal Building         m.2         3,500           respect Terminal Building center         <		ubtotal				19,294,426	
Subtotal	scellancous	larking	721	16,275	3.40	55,335	
Subtotal		able Duct & manhole	3			X00.000	
Trick Total   Trick Total   Trick Total		ubtota]	-			855.335	
Earth Works   Demolition   m3 3,534	de Toral					194 PS 1 EC	
Earth Works         Demolition         m3         3.534           Earth Work         Excavation         m3         17,670           Pavement Work         Road & Carpark         m2         58,900           Miscellancous         Marking & Traffic Sign Board         1s         1           Miscellancous         Marking & Traffic Sign Board         1s         1           Miscellancous         Marking & Traffic Sign Board         1s         1           Miscellancous         Marking & Traffic Sign Board         m2         28,900           Miscellancous         Marking & Traffic Sign Board         m2         2,600           Seager Terminal Building         Control Tower         m2         2,600           resenger Terminal Building         Control Tower         m2         4,000           resenger Terminal Building         Control Tower         m2         3,500           P         m2         3,500         750           P         m2         1,500         750           Misc Station         m2         1,200           Misc Station         m2         1,200           Marking         m2         1,200           Marking         m2         1,200           Mare	TOTAL CANADA		1		1	200 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Excevation   Except   Exce			•	2000	0000	007.002	
Subjoid   Excavation   m.5   17.670		cmolinos	3	1000	30.00	060,621	********************************
Sublotal   Is   Is   Is   Is   Is   Is   Is   I		Kcavation	E	17,670	11.15	197,070	
Navigation System   Naving & Traffic Sign Board   1s   1   1   1   1   1   1   1   1		1btota!	_	•		320,760	
Miscellancous         Marking & Traffic Sign Board         1s         1           Subtotal         Subtotal         12,800           Subtotal         m2         22,600           Vil Total         m2         1,890           vgo Terminal Building         m2         1,890           rgo Terminal Building         m2         1,800           rgo Terminal Building         m2         1,500           rgo Terminal Building         m2         1,500           rgo Terminal Building         m2         1,500           re Station         m2         1,500           ric Station and cooling station         m2         350           rgo Station         m2         350           rgo Mar Station         m2         1,500           rgo Mar Station         lad Architectural Work         lad Architectural Work         lad Architectural Work           related Lighting         lad Architectural Observation System         lad Architectural Architectural Navitem         lad Architectural Navitem	vement Work	oad & Carpark	m2	58,900	31,41	1,850,065	
Fence   Fence   Subtoral   Subt	scellancous	larking & Traffic Sign Board	S.I	7-9		300,000	
Subtoral   Subtoral   Subtoral   Subtoral   Subtoral		2000	8	12,800	100.00	1,280,000	edd quadd чил дай сурган буйн на буйн на бай на бай бай бай бай бай бай бай бай бай ба
Note   Control	***************************************	ubtotal				1.580,000	
Senger Terminal Building   m2   1,890	side Total					3.750.825	
Scanger Terminal Building	Civil Total		-		-	26 905 586	
Second Common   Building   May   1,890   May   1,990   May   1,900   M						200100	
Type Terminal Building         m.         1.8500           Immistration Building         4.000           Immistration Building         4.000           In Sweet Station         m.         1.500           In Sweet Station         m.         1.500           In Shabon and cooling station         m.         750           In Shabon and cooling station         m.         2.500           In Shabon and cooling station         m.         2.500           In Shabon and cooling station         m.         2.500           In Shabon and cooling station         m.         1.500           In Shabon and cooling station System         1.8         1           In Arbitectural Work         1.8         1           In Arbitectural System         1.8         1           In Arrivation System         1.8         1           In Arrivation System         1.8         1           Wert Supply         1.8         1           Apark Lighting         1.5         1	7-		5	1003.55	200000	000 000 30	
Property	or of the state of		2	2005.	20000	000,200,000	
Manage   M	Z Cargo I cramar Durionn		j j	266,1	70.00	DOV, CGO, 2	
The control of the	5 Administration English .	control Tower	7	00,4	1,500,00	000,000,0	
in Power Station m2 1500  iller Station and cooling station m2 750  this office and pilopt training center m2 350  P m2 1500  inger  in	4 Fire Mation		112	1,500	1,700.00	2,550,000	
	5 Main Power Station	71, 177, 177, 177, 177, 177, 177, 177,	2 2	1,500	1,000.00	1,500,000	
P	6 Boiler Station and cooling	station	12	750	1,000.00	750,000	
P m2   500     Max Station   m2   1,200     dar Station   m2   1,200     her building   l.s   1     tal Architectural Work   l.s   1     tal Architectural Work   l.s   1     tal Architectural Observation System   l.s   1     tal Air Navigation System   l.s   1     har Air Navigation System   l.s   1     har Lighting   l.s   1     har Lighting   l.s   1     har Lighting   l.s   1	7 Airline office and pilopt to	aining center	E 2	350	1,000.00	350,000	
1,200   1,20	8 VIP		Ę	500	2,000.00	1,000,000	
dar Shation         m2         100           her building         1.s         1           tal Architectural Work         1.s         1           r. Navigation System         1.s         1           r. Navigation System         1.s         1           retorological Observation System         1.s         1           rat Air Navigation System         1.s         1           wer Supply         1.s         1           rpark Lighting         1.s         1	9 Hangar	•	m2	1,200	2,000.00	2,400,000	
15   1   15   1   15   1   15   1   15   1   1	10 Radar Station		m2	81	1,000.00	100,000	마장 소소를 맞장하고 하면 가지 않는데 얼마 있는데 보다 있는데 얼마 있는데 되었다. 그 것이 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면
tal Architectural Work  I Navigation System  field Lighting  recorbiogcal Observation System  ral Air Navigation System  wer Supply  Apark Lighting	111Other building	마시 후 보이 마시 수 있는 것이 되었다. 그 가장 아이를 보는 것이 되었다. 그 가장 아이들에 가장 보는 것이 되었다. 그 것이 되었다면 되었다. 그 것이 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면	-S			6.268.500	电影 医乳蛋白 医电子性 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白
r Navigation System ffeld Lighting ffeorological Observation System fall Air Navigation System wer Supply wer Supply	Total Architectural Work					68,953,500	
r Navigation System field Lighting etcorological Observation System fal Air Navigation System wer Supply	r Navigation Systems		L				
Aurited Lighting Meteorological Observation System Total Air Navigation System Power Supply Carpark Lighting	13		_	F		8,000,000	
Neteorological & Total Air Navigation System Total Air Navigation System Power Supply Carpark Lighting	2 Airfold I selling			+-		200,000,0	
Total Air Navigation System Power Supply Carpark Lighting		10000000000000000000000000000000000000	3	7	******************	707715070	7
Power Supply Carpark Lighting	The state of the s		1	1		17,00,000	
Power Supply Carpark Lighting		ur.	1			18,101,207	
	promise racinoes		ļ	ľ			
	I rower Supply		5	H		4,400,000	***************************************
	1 Cleatpark Lighting		 	<b>7</b> ₹*** ·····	7	່ ໄດ້ດວ່າດວ່ວ	

_	SALON CHIEF OF	日 リン・ハー・ハー・コー・コー・コー・コー・コー・コー・コー・コー・コー・コー・コー・コー・コー	,	-	-	TRADICASE	
i	***************************************	Sewerage System	15		***************************************	500,000	***************************************
Ĺ.		Solid Waste Disposal	1			20.000	***************************************
_	Carp total			+	-	1 260,000	
.1.	two Charles		1	+		000,000,1	
	4 Commucation system		S.	-		1,004,215	
1	S Air-conditioning and Hearing system	cating system	1,8	1		19,469.027	
i	6 Fuel Supply System	hydrant system	8"	Г		15,929,204	15,929,204 Pipeline and pump station
	Total Supporting Facilities	ities	I.s	•		59.749.438	
V Special Equipment				-			
L	1 Conveying System	Dep. Baccage Conveyer	a	m	127.349	382.047	
		Weighing Scale	00	14	20.498	286.972	***************************************
		Art. Radosce Conveyer	2	2	200 000	170 909	
		Car. Dayyage Conveyer	8	+	7#6507	140'070	
		Spare raris					3% of above total
_1		Subtotal		-		1,334,736	
	2 Elevator	Elevator	ou	7	61,055	122,111	
		Escalator	ou	77	161.048		
		Spare Parts		-			3% of above total
		Schretz			-	A57 C22	
1.	2 724 82	D. C.	<del> </del>	,		500,00	
		KCITICATOI	2	7	13,214	13,214	
	-	Freezer Room	00	7	3,592	3,592	
		Cargo Weighing Scale	00	2	35,456	70,912	
. •		Spare Parts				2,632	3% of above total
		Subtotal		-	-	90.350	
	4 Boarding Bridge		og	2	750.000	3 750 000	
	· ·	Spare Parts	÷			115 280 26	20% of about total
					-	036 598 £	
1_	5 Fire Piobting Car	Major Vehicle	2	'n	1 150 274	2 469 000	
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		777047011	
		Nation thick could be	200	7	000,000	000,000	
		Autousance	2	T	42,015	CI0,23	, , , , , , , , , , , , , , , , , , ,
			00	-	//ç*cç	2	
		Spare Paris	y:	-			3% of above total
		Subtotal				4,507,346	
	Maintenance	Gader	음	77,	90,973.45	181,947	
	Equipment	Sewege pump	2	60	16,991.15	50,973	
_1	7	Storm water drainage pump	2	8	2,123.89	6,372	
_1	<sub>T</sub>	Snow plow	8	77	40,221,24	80,442	
1		<b>Lawn</b> mower	읂	77	12,233.63	24,467	
	·	Grass plow	2	2	6.017.70	12.035	
L.,_i		Road sweeper	100	1	102,345,13	102.345	and the second s
		Subtotal	-	-		458.582	
L	Total Special Equipment	nt	-	-	-	10.255.346	
General Preliminary						2000	
	Thence		1	-		2 690 300	
İ	2 Mobil/ Demobilization		9	7	***************************************	200,670,0	
	2 Con Proceedings	***************************************	2	-	***************************************	706.810.0	***************************************
.1.	Serie Lythonia III Cal		S			7,358,603	
j	4 Nite Establishment (Off	(\$0	5	1		3,679,302	
	Employers, Housing		S	-		3,679,302	
	Vehicle		<u></u>	-		1,000,000	法计划法 电电子电子 化二甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基
	5 Site miscellancous		1.5	-		5.518.952	
	6 Soil investigation			-	-	500.000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
:	7 Training	· · · · · · · · · · · · · · · · · · ·		+-		200,000	***************************************
L_	8 Miniature Model	· · · · · · · · · · · · · · · · · · ·	× 1			20,000	***************************************
<b>L</b> .	9 Over bead	***************************************		,	***************************************	300 514 91	***************************************

Civil Work  1) Earthwork  Embankt  2) Pavement Work  R.W. Sion  R.	ent ment  cxtension  outder & Overun  riay  zansion  overlay  Shoulder  crelay  and  ad  r Road	Unit	Outh	USS	USS	
1) Earthwork 2) Pavement Work 2) Pavement Work 3) Miscellaneous 3) Miscellaneous 2) Landside 1) Earth Works	ion & Overna V, der	i i			200	
2) Pavement Work  2) Pavement Work  3) Miscellaneous  3) Miscellaneous  2) Landside  1) Earth Works	k Overtun k Overtun v der	E				
ment Work  Ilancous  Cotal	k Overtun V Overtun V der	E	20070	1	130 730	
nent Work  Illancous  Cotal	k Overtun V V der		51,72	CT.FT	+C2.000	
nent Work Illancous Illancous Cotal	k Overtun V V der	= E	15,963		70,079	
ment Work  Ilancous  Total	k Overtun V V V der	-			476.133	
nent Work Illancous Cotal	k Overtun V V der	1	1	36.77		
Illancous  Total	k Overna V der	<b>ع</b> ر	0	C/.00		
llancous  Total	7. 7. 7.	2 E	46.950	31,41	1,474,505	
Illancous Fotal	X X Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	÷-	124 450	2010	A 646 645	
Illancous Fotal	रूप प्रमुख्य स्थापना स	٠	200	07.		
llancous  Total	X,	27	ō	66.75	0	
Illancous Fotal		,	10.580	37.28	394.396	
llancous  Total	770					***************************************
llancous Fotal		#5 #5	900,	31.41	710,700	
Hancous Total c Works		čE	100.000	34.7X	4.025.974	
llancous  Total		1				APP 000 PT VII DUNE OUD CURE CORRESPONDENT
llancous Fotal		3	5	00.72		· · · · · · · · · · · · · · · · · · ·
llancous Total			10.000	31.41	314.059	
llancous Fotal	meter Koad total	÷	Š			
llancous Total C	(otal)	7E	5		>	
llancous Fotal Works					11,072,280	
llancous Fotal Works		╊╌		107	XXX >1	
Fotal c Works	SUCK.	i i		10.1	COCK TO THE OWNER OF THE OWNER OWNER OF THE OWNER	
Fotal c Works	Cable Duet & manbole	E	8	572.33	171,700	
Fotal Works		-	<b>†</b> -		1X7 7XX	
Fotal e Works	0.121	1			0003,101	
Works					11,685,701	
Works						
Works				_L		
***************************************	Demolition	E	1.354		13,695	
		ŕ	064.7	11.14	2007 27	
	Excavanon	î	5	_£	No.	
Subtotal	total				89,204	
1	7.00000	ç	092 41	31.41	545 206	
	Road of Calibath		3			
3) Miscellancous Mar	Marking & Traffic Sign Board				350,030	***************************************
	- 8	E	11,750	100.00	1,175,000	
7:5	Sulvioral				1.505.000	
		-			7 120 410	
Landside Total					2,4.5. 1V	
Civil Total			•		13,825,111	
ii Archicaulai works		1	1	2000	000	
1 Passenger Terminal Building	<b>D</b>	_ <u>:</u>	12,110	150000	16,665,000	***************************************
2 Caroo Terminal Building		-	1.650	00000	1,650,000	·
		1	000	0000	,,,,,,	A DOO DOO Yearly die a America America
3 Administration Building	100000000000000000000000000000000000000	É	3,4	3		
A Tive Cotton		, E	1.500	200:00	3,800,000	==
***************************************				20000		* C***********************************
5 Main Power Station		ď	3	20.00	770,00+,1	/
A Dellar Station		ÇE	200	00000	200,000	
DOTTO CHANGE CHANGE			200			
7 Water Supply Station		2	3	2000	200,00	
		Ç	C	500.00	C	
			***************************************		***************************************	
9 Hangar		ğ	2 2 3		300,000	4,500,000 ror two madic jets (5/5/)
10 Do do Totalion		-	Š		160.000	
יייייייייייייייייייייייייייייייייייייי			+			
11 Other building		S	11	1.	32,530	1.
Total Asshitement Work		_			37,860,350	
1		1	Ī			
III Air Navigation Systems						
1 Air Navieation System		S.	7		9,656,637	
**************************************	**************************************	-			272 445	
Zivinga Thang	· ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	3				***************************************
3 Meteorological Observation	System	3.	1		1,444,243	
Total Air Navigation System	15				20,998,230	
v Supposituig Cacaindes		}	ŀ		200 030 0	
1 Power Supply		3	-	***************************************	2,850,000	
2 Osmark Lighting			-		420.000	

	**************************************	***	************	***************************************		
	Sewerage System	S.I	7		397,910	
	Solid Waste Disposal	1.5	-		21,210	
Sub-total					2,020,740	
4 Communication System	cm	l.s			160,000	
Sl Fuel Supply System	1000	1.5	0			Existing 3,000 kl > required 1,580 kl
Total Supporting facilities	litics				5,450,740	
V Special Equipment						
1 Conveying System	Dep. Baggage Conveyer	2	3	127,349	382,047	
	Weighing Scale	옵	14	20,498	286.972	
	Arr. Baggage Conveyer	8	3	208,947	626.841	
	Spare Parts		-	į	38.876	38,876,3% of above total
<del>,</del>	Subtotal	_			1,334,736	
2 Elevator	Elevator	202	2	61.055	122,111	
	Escalator	8	3	161,048	483,144	. 64 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -
	Spare Parts	÷		-	18,158	3% of above total
	Subtotal	_			623,413	
3 Cold Storage	Refrigerator	유 유	2	13,214	26,428	
	Freezer Room	2	2	3,592	7,184	
	Cargo Weighing Scale	飳	m	35,456	106,368	
	Spare Parts		<b>-</b>		4,199	4,199 3% of above total
	Subtotal	_			144,179	
4 Boarding Bridge		00	3	750,000	2,250,000	
	Spare Parts		777	-	71,951	3% of above total
	Subtotal				2,321,951	
5 Fire Fighting Car	Major Vehicle	ΟĽ	2	1,154,274	2,308,548	
	Rapid Intervention	č	F-1	835,850	835,850	
	Ambulance	ខ្ព	-	42,015	42,015	
	Command Car	얍	-	35,377	35,377	
	Spare Parts	1.5	1		96,654	96,654 3% of above total
- 1	Subtotal			_	3,318,444	
Total Special Equipment	nent				7,742,723	
VI General Preliminary		-		-		
1 Insurance	***************************************	S	-		808,772	
2 Mobil/ Demobilization	30		1	***************************************	1,617,543	
3 Site Establishment		1.5	1	-	1,213,157	
4 Site Establishment (Off	)fice)	I.s		-	1,213,157	
Employers' Housing		Ţ	-	-	808,772	二番 信信 自衛 甲毒素 甲 田田 田子 子 自 日本 は 日本 日本 日本 トラー・ファック ファー・ティック ランド・ファック マー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
Vehicle		1.5	7		960,000	podeck za droc sa race pos reperações dos de la sobe de sa se desta de sobe de para de sobe de para de sobe de
5 Site miscellaneous		1.5			808,772	
6 Soil investigation		3.			200,000	
7 Training		 	7		150,000	
8 Miniature Model		1.5	<b>F</b> -4		50,000	
9 Over head		1.5			6,470,172	

Work	Work Item	Work Item	<u> </u>	-	Unit Rate	Amount	Kemarks
Work				1			
Civil Work			Unit	Outv	CSS	USS	
.*	1 Airside						
	1) Earthwork	Excavation	m3	43,485	11.15	484,975	
-	はなる はららせ はくちがく てんかけいかく がら そうしゅ イナララウィナル マヤレラ さん	Embankment	- Em3	21,742	4.39	95,453	
-		Subsect				580.428	
•		Succession	ç	c	36.33	0	
	2) Pavement Work	Kunway extension	2				
		R/W Shoulder & Overrun	m2	100,200	51.41	3,140,507	***************************************
		R/W overlay	3 2 5	139,500	37.28	5,200,217	
<u>.</u>		T/W expansion	m2	700	66.75	46,725	
	6 6 7 5 6 7 6 7 6 7 6 7 7 8 7 7 7 7 7 7 7 7 7 7	Taxiway overlay	- 2 10 10 10 10 10 10 10 10 10 10 10 10 10	31,500	37.28	1,174,242	
		Taxway Shoulder	Cm.	21,000	31.41	659.523	
		TOPICO AND A CONTROL OF THE CONTROL	19		20 02	0	54 4 4 6 6 7 7 4 4 4 7 7 7 7 7 7 7 7 7 7
•		Apron overlay	ř	0	07:10		***************************************
•		A/P expansion	m2	81,000	8	5,400,738	
-		GSE Road	Ë	2,000	31,41	157,029	
-	***************************************	Venture Road	m2	17.325	31.41	544,107	
	***************************************	Subtotal				16,335,449	
		Submittee	ç	16 205	101	C85 91	
	3) Miscellaneous	Marking	2H	CKC'OT	10.1	70707	
		Cable Duct & Manhole	S. I		57.75	7/6	
		Subtotal				17,154	
	Airside Total					16,933,031	
-	2 Landside						
J.	1) Early Works	Demolition	щ3	20°S	10.11	860'5	
		The state of the s	70.3	2.520	11.15	28,105	
	1010204041171101111111111111111111111111	Cubental				33,203	
	4.40	Daniel P. Comments	C	007 X	21.41	90x F3C	
	2) Pavement work	ROAU CALDAIA	7.	22.5	4.4.5	00005	
	3) Miscellancous	Marking & Irathe Sign Board	S.T.	7	00 00	2000 200	401 0497 14 744 14 14 14 14 14 14 14 14 14 14 15 15 14 17 18 17 17 17 17 17 17 17 17 17 17 17 17 17
	14414-9900000000000000000000000000000000	Fence	E	19,850	100:00	000,500,0	
		Subtotal				0,000,000,000	
	Landside Total			-		2,332,012	
L	1					19,265,043	
Architectural Works							
	1 Passenger Termin	aal Building	ZII.	2,690	2,000.00	11,380,000	
<b>i</b> _	2:Carvo Terminal Building	100	5E	<u>§</u>	1,500.00	000'096	
1_	2 Administration Buildin	10	2E	4,000	2,000.00	8,000,000 In	8,000,000 Including control tower
.i.			C	1 500	1 700.00	2.550.000	化甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基
_1	4 Fire Station	***************************************	3	200	20000	000 001 5	
	S Main Power Station		7 m	1,400	ON ONC'T	20000017	
<u></u>	6 Boiler Station		m2	200	1,500.00	300,000	***************************************
1_	7 Water Supply Station		m2	2002	1,500.00	300,000	
.i	X Incidentator		<b>m</b> 2	150	500:00	75,000	
_ <b>i</b> _			Ç	2,200	2 000 001	14 400.000 F	14 400.000 For two middle jets (B737)
_1	yrlangar	***************************************	*	2000	1 500 00	200 000	7
. i	10 Kadar Station		1	200		009 360	
	11 Other office		5"			A,030,300	
L	Total Architectural Work	Work		-		14,401,500	
II Air Navigation Systems	tems					, ,	
<u>.</u>	1 Air Navioation System		1.5	1		9,996,460	
٠.	2 Airfield Lichting		I.S			10,789,381	
.1	2 Marconological Observ	Observation System				1,444,248	
.1.	Translation of the Translation	Contain				22, 230, 088	
	FOCE ALF NEWS	adon system					
V Supporting Facilities	SS.		,	-		773 647	
i	1 Power Supply	***************************************	5-7		•	4,0/2,00	
	2 Carreark Lighting.			<del></del>		800,000	

_				***************************************		
	Sewerage System	3.5		***************************************	200,000	
	Solid Waste Disposal	ì.s		-,	10,000	
Sub-total					1,010,000	
4 Communication System	177	1	-	-	160.000	
Heating and air-condi	tioning system	1	-		3.539,823	
S Fuel Supply System 440 kl	440 ki	1.5	10		0	
Total Support facilities	soi				6,642,566	
V Special Equipment						
1 Conveying System	Dep. Baggage Conveyer	OH C	-	127,349	127.349	
3	Weighing Scale		10	20.498	204,980	***************************************
	Art Bancace Conveyer	00		208 947	417 894	****************
· · ·	Scott Parts				20 507 20, of the	30, of the above
	Subtota 1				772 740	222
	Elector	  -  -	,	230.73	1111001	
2 Edevator	EXCALO	20		CCATTO	777677	
	ESCELETOT	200		101,048		*****************
-	Spare Parts				18,158 3% of th	the above
	Subtotal				623,413	
3 Cold Storage	Refrigerator	OH.	2	13,214	26,428	
	Freezer Room	90	<u></u>	3.592	7.184	
	Careo Weighing Scale	CH	5	35.456	106.368	***************************************
	Spare Parts				4.199 3% of th	3% of the above
	Subtotal		_		144.79	
4 Boarding Bridge		g	6	750.0001	2.250.000	
)	Spare Parts	<u>!</u> _	<u>1</u> _		71.951 3% of the above	te above
	Subtotal		-		2,321,951	
5 Fire Fighting Car	Major Vehicle	ou	2	1,154,274	2,308,548	
	Rapid Intervention	00	rd	835,850	835,850	- 7 - 7 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9
	Ambulance	00		42,015	42,015	
	Command Car	oq	<u> </u>	5.377	35,377	
	Spare Parts	5.1		•	96,654 3% of the above	above
	Subtotal				3,318,444	
Total Special Equipment	ment				7,180,717	
VI General Preliminary						
1 Insurance		S-1	1		930,773	
2 Mobil/ Demobilizatio	ation	3,5	F		2,792,320	
3 Site Establishment		S.T	н		2,792,320	
4 Site Establishment (C	(Office)	Ls	-		930,773	
Employers Housing			-		930,773	***************************************
Vehicle		1.5			800,000	
S Site miscellaneous		Ls	1		1,396,160	
6 Soil investigation		3.5			200,000	
7 Training		1.5	-	***************************************	300,000	***************************************
8 Minjature Model		].s			50,000	***************************************
OlOver Head		3.5			7 446 188	

2) Noise pollution 2) Noise pollution Total 1 Airside 1) Earthwork 2) Pavement Work 2) Pavement Work		Unit	L	-		!
Slution Slution at Work		þя	- -	USS KZT	USS	Т.
2) Noise rollution  Total  1 Airside  1) Earthwork  2) Pavement Work			240	100,000	24,000,000	
Total 1 Airside 1) Earthwork 2) Pavement Work		1.5	-		400,000	
1 Airide 1) Earthwork 2) Pavement Work			-		24 400 000	
1) Earthwork 2) Pavement Work			-			
n Work	000	l,	127015	11.15	1.426.615	
nt Work	10 km	Ë	127 915	4.39	561.577	
nt Work	Va.				1.988.192	
	usy extension	Ę	c	66.76	C	
	Aliandy Calcuaton	T.		7.		
	K/W Shoulder & Overrun		0 0	4.15	0	***************************************
E E E C C	overlay	2	271,200	37.29	566,111,01	
E.F. C. C.	/W expansion	E 2	121,550	66.75	8,113,445	_
F 4 4 0	axway overlay		41.400	37.29	1,543,645	
	Taxing Shoulder	Ę	40 500	31.41	1.271.937	
		ľ		56.35	0	*****************
	1. The state of th	î	177 500	17.70	6 6 18 286	.44.79.744.507.44.11.505.11.14.44.11.154.654.1
***************************************	7.4C174.4	1	3	2007		***************************************
	Koad		0	40.98	0 000	***************************************
	Penmeter Road	ε	57,000	46.98	1,738,207	
Subtotal	otal				29,397,576	
Γ	ine	ε	22.763	0.23	5.207	
	Carlo Dark & Heathole	-	-		(000, 269	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Caore	Zuci et instantic	Ī	1		702 207	
Subtota	otal				102,207	
Airside Total					30,099,782)	
2 Landside						
1) Farrb Works Demo	Demolition	5.00	14,504	10,11	146,634	
	Excess fion	É	28.283	5	315,433	
Elotary	Ma.]				462 066	
2) December 19/2-1	Daniel C. Camparit	í	1062 66	46 98	3 407 004	
41011	, m - m - m - m - m - m - m - m - m - m	ŀ			000	
(3) Miscellancous (Mark	Marking & Hame Sign Coard	1		7, 0,0	77.5	
Dox	culver	E		1,049.40	477 KCK'7	************************
	1	E	14,610	100.00	1,461,000	
Subtotal	otal		-		4,426,144	
otal					8,295,214	
Civil Total					38,394,996	
ctural Works						
1 Passenger Terminal Building	Q.	m2	42.470	2,000.00	84,940,000	
2 Care Terminal Building	***************************************	Ę	2,720	1.500.00	4 080 000	
2 - A American Charles	***************************************	CE	200	2 000 00	10,000,000	
A City No. 10.	も v → + + p d d A → + p p p p p p p p p p p p p p p p p p	ŝ	2,700	700 00	4 590 000	
TOTAL OF THE	000 J = 1,24 = 110110 A T = 1101 A T = 1101 A T = 1100		000	20000	750 000	
Nain Power Station		ď	3	20.000	2007	***************************************
6 Poiler Station, and heating a	and airconditioning	1	3	20.00	000,000	
7 Water Supply Station		Ę,	380	1,500.00	450,000	
8 VIP building		E E	880	2,000.00	000,000,1	
9 Hangar		뎚	12,000	2,000.00	24,000,000	
10 Radar Station		검		1,000.00	300,000	
11 Other building	医骨骨骨 化甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基		-		1,304,100	
Total Architectural Work			-		131.714.100	
III Air Navieration Nesterns			-			
1 Air Navigation System		1.5	-		9.982.000	
O. Anna L. Company			-		21,232,000	***************************************
ליארות המשומל	***************************************				222,24.4.4	***************************************

IV Supporting Facilities						
1 Power Supply		J.S			3,115,000	***************************************
ij	可急的 野田 芸術 明子内 自然の がほうてき 他 はっぱん はっしょう くうしょうじょく ライ・カー・カーカー カーフィック・フィック・ファット	7,5	-		133,000	
3 Sanitany works	Water Summiy System	Ė	-		2.400.000	
	Source South	<u></u>		**********	800.000	***************************************
	Solid Waste Disnowal	1			100,000	
Sub-total		-			3,300,000	
A Communication See	######################################	,-	-  -		l	<b>!</b>
S Fire Surply System		.3			20,000,000	***************************************
Total of supporting Facilities	2 Facilities				3,248,000	
V Special Equipment						
1 Conveying System	Dep. Baggage Conveyer	2	6	127,349	1,146,141	
		2	3		1,721,832	
	Art. Baoware Conveyer	g			1.880.523	
	Noare Parts	-			142,455	3% of above total
-	Subtotal	-			4.890,951	<u> </u>
215100000	Flexator	5	-	550.19	366 333	
	1 5 4 2 1 2 4 4 5	2	o	ľ		
	State Date				54.473	3% of above total
	Spare Fairs	-			360 000 1	
	Subtotal	$\frac{1}{1}$	ľ		0000000	
3 Cold Storage	Refrigerator	5	2		25,428	
	Freezer Room	5	_	i	7,184	******************************
	Cargo Weighing Scale	9	3	35,456	106,368	***************************************
	Spare Parts				4,199	3% of above total
:	Subtotal				144,179	
4 Boarding Bridge		2	18	750,000	13,500,000	
	Spare Parts					3% of above total
	Subtotal				13,909,451	
5 Fire Fighting Car	Major Vehicle	Out	7	1,154,274	4,617,096	
	Rapid Intervention	83			835,850	
	Ambulance	2			42,015	
	Command Car	OH I	-	35,377	35,377	
	Spare Parts	1.5	1		165,910	3% of above total
	Subtotal		]		5,696,248	
Total Special Equ	cial Equipment				26,511,067	
VI General Preliminary		•		•		
1 Insurance		1	7	***************************************	2,525,262	
2 Mobil/ Demobilization	tion		Ī		3,787,892	
3 Site Establishment		S.	1		5,050,523	
4 Site Establishment (Office)	(Office)	1			1,262,631	
S Employers Housing	5.5	1	*7		2,525,262	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
6 Vehicle	マルボル フマルル はんかい かいかん そうちゅう アルカル カルカル カルカル カルカル カルル カルル カルル カルル カルル	1.	-	***************************************	1,000,000	
7 Site miscellancous		-	-		2,525,262	
8 Soil investigation		1.	7		200,000	
9 Training	化二甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基	1		# # # # # # # # # # # # # # # # # # #	150,000	
10 Miniature Model		-1	7	***************************************	50,000	
11 Over Head		1.s			7.575.785	*****

1 Civil Work   1 Airvide   1 Civil Work   1 Excess   1 Extract   1 Exess   1 Exess   2 Exess	Work Item Unit Out's		1	Unit Rate	Amount	Remarks
10   0   0   0   0   0   0   0   0   0		ž	ا ا	SSO	SSO	
7		1				
\(\tau_1 \neq \neq \neq \neq \neq \neq \neq \neq	Excavation	_	30,034	11.15	334,958	4444
	Embankment	m3		4.39	65,927	
0	Subtotal	ļ			- 1	
ν	Runway extension		2,470	66.75		444444444444444444444444444444444444444
[0] [7] [7] [7] [7] [7] [7] [7] [7] [7] [7	R/W Shoulder & Overrun	<b>3</b> 5	37,050	31.41	1,163,587	
1   1   1   1   1   1   1   1   1   1	R/W overlay		111,150	37.28 4,	4,143,398	
η	T/W expansion	댿	2,020	66.75	134,835	
[4] [4] [4] [5] [5] [6] [6] [6] [7] [6] [7] [7] [7] [7] [7] [7] [7] [7] [7] [7	Taxway overlay	4	7.272	37.28	271,082	
[4] [4] [5] [6] [6] [7] [6] [7] [7] [7] [7] [7] [7] [7] [7] [7] [7	Taxiway Shoulder	:	3.030	31,41	95,160	
4 LIN W 4 N W 10 L	Ancon overlav	+	80 300	37.78	2 993 386	50 40 55 76 76 76 77 77 77 77 77 77 77 77 77 77
4 LINIWIA NINIWI 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	A D ASSESSMENT OF THE PROPERTY		-	>C 23		
0	CVE CAPALISACII	٠i-	5 5		C-40 32 1	***************************************
4 LINIWIA W W W W W W W W W W W W W W W W W W	202 202	1	0001	770	6/0/6/1	***************************************
4 LINIWIA WINIWINIO	Penmeter Koad	711	40.200	_	1,450,951	
4 10 10 10 10 10 10 10 10 10 10 10 10 10	Subtotal				10,593,144	
4 LINIW 4 W W W W W W W W W W W W W W W W W W	Marking	m2	14,663	1.01	14,830	
				572.33	100,000	
4 10 10 10 10 10 10 10 10 10 10 10 10 10	Subtotal	-	-	<del></del>	114,830	
□   □     □			-		11,108,859	
10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-	$\mid$			
1000 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	•	ĵ.	2352	10.11	23.788	
10004000000000000000000000000000000000	Fycatafion	# 3	2 528	11.15	39 347	
1000 4 W W W W W W O I I	Subtota 3		-		63 136	
10 0 4 0 0 c 2 0 0 c	Succession of the Community of the Commu	ç	11.740	21 41	255 035	
110161410101 × 10101	NOAL IX CALLOLIA			****	200000	
10 0 10 10 10 10 10 10 10 10 10 10 10 10	Marking & Triffic New Board		4		200,000	
1016 4 N 0 C 2 0 0 C	Pence	E		100:00	1,175,000	
1000 4 N 0 C 2 0 0 C	Nubtotal	1	1		1,475,000	
10 0 4 0 0 C × 0 0 C			-		1,907,469	
10 10 10 10 10 10 10 10 10 10 10 10 10 1			_		13,016,328	
1 Passenger Terminal B 2 Cargo Terminal Build 3 Administration Build 4 Fire Station 5 Main Power Station 6 Boiler Station 7 Water Supily Station 8 Incinerator 9 Hangar 10 Radar Station 11 Other building						
2 Cargo Terminal Build 3 Administration Build 4 Fire Station 5 Main Power Station 6 Boiler Station 7 Warer Supply Station 8 Incidental 9 Hangar 10 Radar Station 11 Other building	Building	117	7,520	2,000.00	15,040,000	
3 Administration Buildi 4 Fire Station 5 Main Power Station 6 Boiler Station 7 Water Supply Station 8 Inchestrator 9 Hangar 10 Radar Station 11 Other building	1 Con	m2	730	1,500.00	1,095,000	
4 Fire Station 5 Main Power Station 6 Boiler Station 7 Water Supply Station 8 Incinerator 9 Hangar 10 Radar Station 11 Other building	disc	H2	2,400	2,000,00	4,800,000	4,800,000 [Including control tower
5 Main Power Station 6 Boiler Station 7 Water Supply Station 8 Incincrator 9 Hangar 10 Radar Station 11 Other building	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	i –	500	1.700 80	2.550.000	日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日
6 Boiler Station 7 Wester Supply Station 8 Incincrator 9 Hangar 10 Radar Station 11 Other building	, - 4 . + · · · · · · · · · · · · · · · · · ·	<u>.                                    </u>	2 200	1,500,00	6	
7 Water Supply Station 8 Incinctator 9 Hangar 10 Radar Station 11 Other building	***************************************		300	1,500,00	450.000	
8 Incincrator 9 Hangar 10 Radar Station 11 Other building	100		200	1,500,00		
9 Hangar 10 Radar Station 11 Other building		•	d	50000	0	***************************************
10 Radar Station 13 Other building		5	7 200	2000	000 008 01	10 800 000 For two middle jets (B737)
17 Other building	70年 2015年 2016年 2016年 2016年 2016年 2016年 2018年 20	-	100%	500.00	450.000	
		1 2			3 ×7× 500	
Total Architectural Work	J Work	-	-		42,663,500	
III Air Navigation Systems		-	ļ			
1 Air Navivation System	we	<u>-</u>	-		9.656.637	
2 Averal Creation		-			0 614 150	
2 Meteorological Observation	enistion System	1	+-		1 444 248	
The Colon of the C		+	†		20 21 500	
lotal Auf Navyganon System	n System		1		10,717,02	
I V Supporting Factifics		-	-		20000	
Aldala Subbia		5		***************************************	777777	
Zi Carpark Lighting		 S	Ħ		3/1,081	

	,						
	۳,	Sanitary works		25			707,965
	_	***************************************	Sowerage System	2.5	-		353,982
			Solid Waste Disposal	5.1	ō		
		Sub-total					1,061,947
	4	4 Communication System	<b>6</b>	1.5	FT		160,000
		Heating and air-conditioning system	joning system	1.8	-		9,307,318
	S	5 Fuel Supply System		I.S.	0		0
	L	Total of supporting facilities	facilities				13,423,070
V Special Equipment	1						
	Į	1 Conveying System	Dep. Baggage Conveyer	8	1	127,349	127,349
			Weighing Scale	202	14	20,498	700000000000000000000000000000000000000
			Ап. Васдаес Conveyer	<u>i —</u>	3	208,947	626,841
			Spare Parts	<del>!</del>			31,235
			Subtotal		-		1,072,397
	2	2 Elevator	Elevator	OL	2		122,111
			Escalator	알	3	161,048	<u>.                                    </u>
		:	Spare Parts	-			18,158
			Subtotal		•		623,413
	3	3 Cold Storage	Refrigerator	OT	ī	13,214	13,214
			8	9	1	3,592	3,592
			Cargo Weighing Scale	2		5,456	70,912
			Subtotal				90,350
	4	4 Boarding Bridge		92	3	750,000	2,250,000
			Spare Parts				70,289
			Subtotal				2,320,289
	S	Fire Fighting Car	Major Vehicle	OL	2	1,154,274	2,308,548
			Rapid Intervention	욢	Ħ	835,850	835,850
			Ambulance	Q	-	42,015	42,015
			Command Car	2	F	35,377	35,377
			Spare Parts		_		
	_]		[Subtota]	_			3,318,444
		Total Special Equipment	cnt				7,424,892
VI General Preliminary	5						
		1 Insurance		1.5	F-4		972,428
	۲,	Mobil/ Demobilization		1.5	F		1,458,643
	т.	Site Establishment		1.5	Ë		1,166,914
	4	Site Establishment (Offi	tice)	1.5	-		
		Employers' Housing		5.7	][		1,458,643
		Vehicle		 	7		800,000
	Ś	5 Site miscellancous		1.5	=		972,428
	9	Sorl investigation		-1	Ţ,		200,000
	-	Training		1.5			
	æ	8 Miniature Model		1.5	P-4		20,000
	ာ	Over head		1.5	F-4		79,427
	_	Total of General and Preliminary	Preliminary		_		15,980,911

	Work item				Unit Rate	Amount	Remarks
			Unit	Outk	SSO	CSS	
	1. Airside						
Ē	1) Earthwork	Excavation	Çus			43.268	-
-	:	Embankment	-	1.940	96.3	8.51	-
-		[Subtota]				\$1,785	
4(4	2) Pavement Work	Runway extension	Ę	5	52,99		
· <u>·</u>		K/W Shoulder & Overna	3	C	31.38		>
	******************************	R/W overlay	5	0	37.28		
1_	***************************************	TAN expansion	2	650	27. 33	X2 27	Z
	**************************	Towns overlan		20.250	XC CE	36.090.1	
		To the second se	Ç	0.750	27 72	205 07	
<u>.</u>		A PASSAGE CHICAGO	Ş	270 50	37.75	2 503 157	7
. <u>.</u>	P1111119446641111114966491011111111467	Agon oventer	1		54.7	2	
		AV expansion	É	0	66.73	,	4
		GSE Road	ğ	Ö	31.38	)	***************************************
	-	Perimeter Road	m2	0	31.38	0	,
		Subtotal				4,942,885	2
10	3) Miscellancous	Marking	m <sub>2</sub>	16,875	3.40	\$7.37	
11		Cable Duct & machole	E			300.00X	
		Subtotal				367 378	
	A Samilar Takes		I			2 X C2 CZK	
\  -	Alexand Louis						
3	-andside		ŀ	ı			
	1) Earth Works	Demolition	ď	1.180	35.00	41.317	
	***************************************	Excavation	Ê	1	11.13	18,00	
		Subtotal				107.129	
	2) Pavement Work	Road & carpark	щ2	17,360	31.38	544.78	2
	3) Miscellaneous	Marking & Traffic Sign Board	Ę			300,000	
		Fence	٤	0	100.00	)	0
_		Subtotal				300,000	
	Landside Total		_			951,917	1
	Civil Total					6,803.962	3
Il Archtectural Works							
111	assenger Terminal Building	lding	m2	11,130	00.0	0	
200	Cargo Terminal Building	ži	m2	002	00.0	Ü	
3	3 Administration Building	× 1	m2	4,000	00.0	3	Including control tower
417	ire Station	ファー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	겉	1,750	00.0		(
5	Main Power Station		님	2. 84.	8.0		
-	John Carlon	***************************************	Æ	300	000		]
	Voter Summy States		î	300	000	,	
		ŢŢŢĠĬĬŢĬĬĬŢĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸ	î	300	100	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***************************************
	do to train	4 7 4 4 4 4 4 4 4 7 4 5 4 7 4 7 4 7 5 5 5 5	î	7 200	000		O'Nor two middle lets (\$737)
100	Sadar Station		CE	505	800	) C	
					-	, ,	
<b>*</b>	Atten ordinaries		7				
	otal Achitectural Work	<del>,</del>					
toon System			1				
1 Air Na	Vir Navigation System		1.5	1		558,600	
ते	urfield Lighting		1.8	-		641,617	
33	Meteorogical Observation	on System	1.4	1		290,000	
_	Total Air Navioation System	vstem			<del></del>	1,490,217	
IV Supporting Facilities							
	ower Supply		1.3	F		855,000	
2 C	2 Carpark Lighting		1.8	1		400,000	
3 Sant	sanitary works	Water Supply System	1.3	1		9	0 enough: Existing 1,200 ton > Required 300 kl
					-		

Sub-total					100.000
	E	1.5	ĩ		160.000
5 V Fuel Supply System		1.3	1		Olenough; Existing 10,000 kl > Required 970 kl
Total of supporting facilities	hities		-		1.515.000
V Special Equipment					
1 Conveying System	Dep. Baggage Conveter	22	m	127,349	382,047
	Weighing Scale	90	14	20,498	286,972
	AII. Baggage Conveyer	2		208.947	626.841
	Spare Parts		-		38.876(3% of above total)
	Subtotal		-		1.334.736
2 Elevator	Elavator	QĽ	2	61.055	122.111
	Escarator	욘	6.0	161.048	483.144
	Spare Parts				18.158.3% of above total
	Subtotal				623.413
3 Cold Storage	Refrigerator	2	2	13.214	26.428
1	Freezer Room	<u> </u>	:	3.592	7.184
	Cargo Weighing Scale	;	67	35,456	106.368
·····	Spare Parts	:	•		4,199(3% of above total
	Subtotal		┞	-	144,179
4 Boarding Bridge		2	6.7	750.000	2.250,000
	Spare Parts	<del>-</del>	<u> </u>		71.951 3% of above total
	Subtotal		-		2.321.951
5 Fire Fighting Car	Major Vehicle	20	2	1.154,274	2,308,548
	Rapid Intervantion	2	-7	835,850	835,850
	Ambulance	5	7	42.015	
	Command Car	8		35,377	35,377
	Spare Parts	1.8	. 1		96,654 3% of above total
	Subtotal				3,318.444
Total Special Equipment	ent	-		-	7.742,723
VI General Preliminary					
] Insurance		5.1	Ħ	-	175,519
2 Mobil/ Demobilization		5.	r-1		438,798
3 Site Establishment		s.l	7		351,038
4 Site Establishment (O	fice)	s:I	-		175.519
Emplyers Houring		S.I	Ξ	1	351,038
Vehicle		<u>د</u>			000'009
5 Site miscellancous		s-1	-		263,279
6 Soil anvestigation		ž.	-		500,000
7 Training		s	H		300,000
8 Miniture Model		2	-		50,000
9 Over head					526.557

*****		_				
		Unit	Sur.	TISS	SSI	CVINITAL
I Civil Work 1 Airside		L				
1) Earthwork	l	E	29,052	L	324,006	
	Embankment	£	14.526	4 30	63.777	***************************************
***************************************		-		ı	787 777	
2) Pavement Work	Punusy extension	2,	000	26 38	002,009	
	Σ ⊗α	3,2	45.000		1413 264	\$P\$\$P\$
***************************************	ρ	Ļ	113 660	27.22	030 301 7	
***************************************		1	200 777		007,07,14	
34644644464444444444444444444444444444	I/W CXDARNOR	1	200		120,150	## - 0 ### - 0 * 0 * 0 * 0 * 0 * 0 * 0 * 0 * 0 * 0
	Taxiway overlay	_	9 9 8 9		241,558	
	Taxiway Shoulder	m2	٠. 8		169,592	
-	Apron overlay		7,000		260.943	
	₹	- E	5000		2 000 496	***************************************
***************************************					0.0000	
	VOC KORD	76	3	31.41	188,435	
111111111111111111111111111111111111111	Penmeter Road	m2	4,245	31.41	133,318	
	Subtota!	-			9,326,464	
3) Miscellancous	Marking	m2	15 450	-	15.678	
Tower T	TANGE TO SERVICE TO SE		125	22 243	000,000	4
	Subsection 2	;		7/2	200,000	
	Subiola				815,626	
Aurside Total		-			10,529,867	
2 Landside						
1) Earth Works	Demolition	m3	823	10.11	8,326	
	Excavation	m3	4.116	11.15	45,905	***************************************
	Subtotal	_			156 23	
2) Pavement Work		ÇE.	13 770	31 41		
3) Miscellandous	1	<u> </u>	٠		2000	
***************************************		4	11 620	8 90	200,000	
194417777 D00014401177700401411	r Caledon		OCO T	100.00	000,001,1	
	Suototal				1,193,000	
ו שוכצות ביו		-			1,247,231	
					11,777,098	
Architectural Works			:			
1 Passenger Terminal	Building	m2	8,750	2,000.00	17,500,000	
2 Cargo Terminal Bu	lding	m2	670	1,500.00	1.005.000	
3 Administration Buil	ding	m2	4,000	2,000.00	8,000,000	Including control tower
4 Fire Station		m2	500	170000	2 550 000	
S Main Power Station	7+++++++++++++++++++++++++++++++++++++	į	1 400	1 500 00	2 100 000	
6 Boiler Station		ļ	ç	2000	20000000	***************************************
TOTAL STREET			3 6	3333	000000	888489811111111111111111111111111111111
	W. '' '' '' '' '' '' '' '' '' '' '' '' ''	70	3	00000	200,000	
6 inchemical	4 6 6 1 7 6 6 1 11 1 1 1 1 1 1 1 1 1 1 1	1112	100	1,500,00	150,000	
y Hangar		TE 2	7,200	1,500,00	10,800,000	For two middle jets (B737)
10 Radar Station	***************************************	m2	8	1,500.00	300,000	
11 Other building		m2	-1		430,050	
Total Architectural Work	l Work				43.435.050	
Il Air Navigation Systems						
1 Air Navigation Syst		ř	F		0 656 627	
2 Airfield Liabsing				***************************************	0 000 0	4
	++++++++++++++++++++++++++++++++++++++	4	7	***************************************	C451/69/	
5 Meteorological Obs		5	-	-	1,444,248	
Total Air Navigation System	n System				20,998,230	
V Supporting Facilities						
1 Power Supply		1.5	ī		2,850,000	
2 Carpark Lighting		3	<b>F</b>		420.000	

	Sewerage System				0	0 enough; Existing 12,000 ton > Required 250 ton
	Solid Waste Disposal	S	<b>-</b> -		100,000	
Sub-total					100.000	
4 Communication System	1	J.S	1		160.000	
5 Fuel Supply System		S.	ō	-	0	0 enough: Existing 10,000 kl > Required 1,020 kl
1.	iries				3,530,000	
V Special Equipment						
1 Conveying System	Dep. Baggage Conveyer	Off	77	127,349	254,698	
	Weighing Scale	임	o	20,498	184,482	
	Arr. Baggage Conveyor	2	2	208.947	417.894	
	Spare Parts	1	-		25,017,20	30 of shale total
	Subtotal		-		AVT CSS	
2 Elevator	Flevator	í	r	230 53	130,110	
1	A THE PARTY OF THE	2	4 (	0000	77777	
	Escalator	00	N	161,048	322,096	
	Spare Parts	1.5	. 1		13,326	3% of above total
	Subtotal				457.533	
3 Cold Storage	Refrieerator	٤	F	13.214	12 214	
	Transact December		,	200		)
		2	T	7600	7,600	
	Cargo weigning Scale	õ	2	35,456	70,912	
-	Spare Parts	].s	1		2,632	2,632 3% of above total
	Subtotal		_		90,350	
4 Boarding Bridge		2	4	750,000	3,000,000	
	Spare Parts	3,	-		92, 789	02 780 3% of above total
	Subtotal				2 000 780	
5 Fire Fighting Car	Maior Vehicle	Ç	r	1150 270	302 6	
STIPPE AND A		3 1	-i-	4/7/4/1	040,000,7	
	Mary Andreading	OH .	1	020,020	000,000	***************************************
	Autourance	e e	I I	42,015	42,015	***************************************
	Command Car	임	Ĺ	35,377	35,377	
	Spare Parts	l <sub>.S</sub>	1		4	3% of above total
	Subtotal				3,318,444	
Total Special Equipment	ent		-		7,841,902	
VI General Preliminary						
1 Insurance		1.5			875.823	
2 Mobil/ Demobilization		1.5	1		1 212 724	
3 Site Establishment	<u> </u>	3.5			1 050 087	
4 Site Establishment (Off		-		***************************************	F-50 C3C +	***************************************
	***************************************	9		***************************************	100,000,1	**************************************
בייים אכנא עופתאיונול		1.5	1	_	1,576,481	
Vehicle		1.5	1		1,000,000	
S Site miscellancous		1.8			1,313,734	***************************************
6 Soil investigation		7.5			200,000	
7 Training		1.5			200 000	7.11.6.11.11.8.4.11.1.2.4.11.11.11.1.1.1.1.1.1.1.1.1.1
8 Miniature Model		1.5	1	***************************************	000 05	
9 Over head		18			7 006 582	
			•			

			}	-				
Work Item			1	į.	Unit Rate	Amount	Kemarks	
Civil Work	1 Airside							
	1) Fambwork	Excavation	, E	K2.091	11.15	915.540		ĺ
			-	71.045	4 20	301 031		
		candalikaneni		C+0,	7.53	100,1,001		İ
		Subtotal			-	X57.540,1		ł
	2) Pavement Work	Runway extension	е С	13,500	66.75	901,123		
		R/W Shoulder & Overrun	£	28,160	31.41	884,513		
		R/W overlay	- m2	125,440	37.28	4,676,095		
		TW extransion	- E	40.250	66.75	2.686.682	ロシナウ・ドルナウ ベトロー うりのり シェート・トラー・ト・ラフ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	
	***************************************	Thomas		50.370	37.75	1 877 670		
		I a Niway Oycellay		200	7.7.7	100 100 1		
	)	I AXIWAY Shoulder		1000,20	14.10	17011001	***************************************	
	***************************************	Apron overlay	п2	93,975	66.75	6,272,818	4114644119,	
		A/P expansion		40,500	37.28	1,509,740		
		GSE Road	-	20,000	31.41	628,205		
		Perimeter Road	Ę	4.125	37.47	129.567		
		Subtotal	1-			20,598,241		
	2) Micoeffinancis	Marking	Ç#	16.275	101	16.460		
	NICONALIMATION OF	Cable Dang & machale	1.	10,401	2	000 000		
		Cable Duct to manner	1	1-		X36.460		
	F. 14. H	Sporora	‡			22 610 430		l
	Auriae 1 otal		1			24,010,000		l
	2 Landside					9		ļ
	1) Earth Works	Demolition	E E	928	10.11	6,685		
		Excavation	m3	4,788	11.15	53,400		
		Subtotal				63,085		
	2) Pavement Work	Road & carpark	п2	15,960	31.41	501,308		
	3) Miscellancous	Marking & Truffic Sign Board	1.5	77	_	300,000		
		Fence	٤	12,800	100.00	1,280,000		
		Subtotal				1,580,000		
	Landwide Total					2,144,393		
	Civil Total					24,654,832		
Architectural Works	83							
	1 Passenger Terminal	Building	三二	10,140	2,000.00	20,280,000		
	2 Cargo Terminal Bui	Jding	<b>m</b> 2	740	1,500.00	1,110,000		
	3 Administration Build	ding & Control Tower	m2	4,000	2,000.00	8,000,000		
	4 Fire Station		日	2,700	1,700.00	4,590,000		
-	5 Main Power Station		Ę	2,200	1,500.00)	3,300,000		
	6 Boiler Station		H2	200	1.500.00	300,000	***************************************	
•	7 Water Supply Statio		n2	Ö	1.500.00	0		
•	8 Incinerator	50+50+6444444	- m2	0	1.000.00	10		
	9 Hancar	***************************************	m2	11,200	2,000,001	22.400.000	For two large jets (B747-400)	
-	10 Radar Station		ÇE.	200	1.500.00			
	11 Other building	0 P	5 [	1		602.800	#**	
•	Total Architectural Work	Work			:	60.882,800		l
III Air Navigation Systems	stems							
)	<b>.</b>	Navigation System	l.s	1		000,000,9		
	2 Airfield Lighting	ひょうけん かんしゅう アアルザイク アライ・カー・アイル・アイル・アイル・アイル・アイル・アイル・アイル・アイル・アイル・アイル	1.5	1		4,685,467		
•	3 Meteorological Observation System	rvation System	1.5	1		1,450,000		
,	Tota	n System				12,135,467		
V Supporting Facilities								
	1 Power Supply		1.5	11		2,850,000		
	O Carnork I sobting		,	=		420.000		

	***************************************	**************************************		***************************************	***************************************		
		Sewerage System	5.	0		0	cnough
	-	Solid Waste Disposal	1.8	ō	-	C	()
	Sub-total		-		-		
			†  -	†			
	4 Communication System	lem	۲.	=		160,000	
	5 Heating and air-cond	litioning system	1.5	0	-	0	
	6 Fuel Supply System		1.5			0	0 cnough
	Total Supporting Facilities	icilities	<u>.</u>	Į.		3.430.000	
V Special Equipment							
•	1 Conveying System	Den Baggage Conveyer	٤	67	177 340	282 047	
	, , , , , ,	W. C. W. C. C. C.	2		00,00	2000	
		WEIGHING SCALE	2	147	20,436	7/6'097	
		Aп. Baggage Conveyer	og	Ŕ	208,947	626,841	
		Spare Parts				3X X7K	2% of above total
		C. Propri	-				
		Carolina				00/14/00	
	2 Elevator	Elevator	9	2	61,055	122,111	
		Escalator	2	54	161 04x	483 144	自在 日日 日本 自自 日 で ちゅうし マン アミトレット リイトラフィッナ ひゅうかい ロ チチャルン マックタマント もしんしん
		Carrie Dante		2		1500	
		STAIL FALLS				18,138	5% of above total
		Subtotal				623,413	
	3 Cold Storage	Retriverator	og	1	13.214	13.214	
	,	***************************************	?		2 502	2 603	71.040-1004-1000-1000-1000-100-100-100-100-
		7	2		27.72	245	
		Cargo Weighing Scale	ខ្ព	2	35,456	70,912	
		Spare Parts				2.632	3% of above total
		Subtotal		-		055 06	
	4 Boarding Bridge		02	*	750.000	2 250 000	
	)	Court Dark	<u>!</u>	i.		0000	40 400 90 at 12 at 12
			+	+		*02,U1	270 OL ACOVE LOLA:
	i i		1			687,075,7	
	o Fire Fighting Car	Major Vehicle	얺	2	1.154,274	2,308,548	
		Rapid Intervention	no	FI	835,850	835,850	
		Ambulance	2	1-4	42.015	42 015	
	<u> </u>	Command Car	2	-	35 277	25 277	
		Creat Dute	1	-	***************************************	433 30	
			5	1		40,0%	S.a of above total
		Surforat	-	1		3,318,444	
	Total Special Equipment	ment				7,687,231	
VI General Preliminary	irv						
	1 Insurance			1		1.087.903	
	2 Mobil/ Demobilization	30	,	_		1 521 455	
	2 Cite Establishmen					C C C T C C C C C C C C C C C C C C C C	***************************************
	San Landon Million	***************************************	1.5	-		2,175,807	
	4 Nite Establishment (C	)ffice)	3	H	-	1,087,903	
	Employers' Housing		<u>s</u>	7		2.175.807	
	Vehicle	-	S	1		1,000,000	
	5 Site miscellaneous	医甲基 电子产电池 医骨骨骨的 化丁烯甲酰胺 医甲甲氏尿 医奎二氏菌素 医牙髓性 医性腹膜 医腹膜 医皮肤 医中枢 医甲基氏征	,		***************************************	333 123 1	
:	6 Soil investigation				***************************************	000 000	***************************************
	7 Training	***************************************	1.	7	***************************************	200.00	
	Y Tarring	***************************************	S.,	- I		300,000	
	8 Miniature Model		s:	g-4	-	50,000	
	9 Over head		2.5	ы	-	8.703.226	

Comparison		Work Item	Ę	_	-	Cost Xate	Amount	XCHILLY
Second Process   Seco				Unit	Oatv	USS	USS	
The Activation   The	ork .	Arreide		_				
Checked   Chec	l	1) Earthwork	Excavation		56.336	11.15		***************************************
December 1   Subrotal   Control			Embankmen	-	28.168	4.39		
Precenter Work   Runway cotenation   m2			Subtotal				751.962	
Column   C		The second second	Outside the second	ç	1089.6	54 75	012 630	
The control of the	_	,	Pure Calculation	***************************************			***************************************	***************************************
INAV evertisy			KW Shoulder & Overrun	e	39,500	31.41	1,24,424	
Traverse   Traverse			R/W overlay	m2	110,040	37.28	4,102,020	
Taxway Shoulder   Taxway Sho		***************************************	T/W expansion	B.2		66.75	1.101.373	
April		***************************************	T	•	OUT 05		300 FLC C	***************************************
Care   Tracrowy Shoulder	***************************************	I AXIWAY OVERIAY	***************************************	3	07.70	007'af7'7	***************************************	
Approx overlay   App			Taxiway Shoulder	덭		31.41	1,554,590	
Act   Act		***************************************	Apron overlay	m2		66.75	6,674,986	
CSE   Foundation   Fou		***************************************	A 10 events and an	C#	٠.	37.78	754 870	********
Nixecilaneous   Perimeter Koad		***************************************		÷			1000	
Nixecilanceas   Perinter Road   m2   15.000   0.23   18.524.803			ICSE Koad	٠,		40.35	100,107	*************************
3. Miscellaneous   Subrosat   18,624,862   18,624,862   18,624,862   18,624,862   18,624,862   19,616   19,624,862   19,616   19,624,862   19,616   19,624,862   19,616   19,624,862   19			Perimeter Road	$\neg$		46.98	193,793	
S. Miscellaneous   Matching   15,000   0.23   3,431     Astrode Total   Subrotal   1,431   1,432   1,435     Landesde Total   Subrotal   1,432   1,435   1,435   1,435     Landesde Total   Subrotal   1,432   1,435   1,435   1,435     Demonstration   Demonstration   1,430   1,435   1,435   1,435     Demonstration   Matching & Target   1,430   1,435   1,435   1,435     Demonstration   Matching & Target   1,430   1,430   1,430   1,430   1,430     Demonstration   Matching & Target   1,430   1,430   1,430   1,430   1,430   1,430     Demonstration   Demonstration   1,430			Subtotal	_			18,624,862	
Assisted Lighting & Control Tower Supply Statem   La   1   1,500   1	•	2) Missellandon	Varion	Ę	15,000	0.23	3.431	
Autorition		of the state of th		***************************************			000 000	
Name of the control			Cable Liber & Manhoic	4		1	OVN'MO	
Description			Subtotal				803,431	
1) Earth Works   Demolition   m3   1,042   10,11   10,230     2) Pavement Work   Road & Carpark   m2   5,208   46,98   244,673     3) Miscellaneous   Marking & Traffic Sign Board   1s   13,800     3) Miscellaneous   Marking & Traffic Sign Board   1s   13,800     46,98   244,673     3) Miscellaneous   Marking & Traffic Sign Board   1s   13,800     46,98   244,673     3) Miscellaneous   Marking & Traffic Sign Board   1s   13,800     46,98   770   1,500   1,500,00     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,673     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   244,67     46,98   24,97     46,98   24,97     46,98   24,97     46,98   24,97     46,98     46,98   24,97     46,98   24,97     46,98   24,97     46,98     46,98   24,97     46,98     46,98   24,97     46,98     46,98   24,97     46,98     4		Airside Total					20,180,255	
1) Earth Works   Demolition   m3   1,042   10,11   10,539     2) Miscellaneous   Subtotal   Subto	L.						-	
Excavation   Tile   T	1.		-	ř.	1 042		10.5301	
Subscription		*) Let L		1			TOY 64	474444
Subtoral   Subtoral			Excavation	Ę	700-1		11,463	
2) Pavement Work         Road & Carpark         m2         5.20%         46.98         244.673           3) Miscellancous         Marking & Traffic Sign Board         1s         1         300,000           1 Subtotal         Subtotal         1.050.00         1.380.00           Landerde Total         Marking & Traffic Sign Board         1         2.000.00           Landerde Total         2.000.00         1.360.00         1.360.00           Chul Total         2.000.00         1.360.00         1.360.00           Chul Total         2.000.00         1.360.00         1.360.00           Cago Treminal Building & Control Tower         m2         2.700         1.360.00         1.360.00           Fire Station         m2         2.700         1.500.00         3.300.00           Main Fower Station         m2         2.700         1.500.00         3.300.00           Boilet Station         m2         2.00         1.500.00         3.300.00           Main Fower Station         m2         2.00         1.500.00         3.000.00           Incher building         Ls         1         4.400.00         1.400.00           Radar Station         ns         1.500.00         3.000.00         1.400.00			Subtotal		-	-	27.956	
300,000   1,380,		2) Pavement Work	Road & Carpark	m2	5.20×	46.98	244,673	
Fence		3) Micrellanems	Narking & Traffic Sion Board		-		300,000	
February   Preside   Nathoral   National			£		12 500	900	1 280 000	
Long Architectural Work   Subfortal   Long Architectural Work   Long		***************************************	Fence	5	10.000	20001	000,000,1	
Landside Total			Subtotal		-		1.680,000	
Civil Total         Civil Total         22,132,884           Passenger Terminal Building         m2         6,820         2,000.00         13,640,000           Caygo Terminal Building         m2         770         1,500.00         1,156,000           Administration Building & Control Tower         m2         2,700         1,500.00         8,000.00           Main Power Station         m2         2,700         1,500.00         8,000.00           Boiler Station         m2         2,700         1,500.00         3,300.000           Boiler Station         m2         2,00         1,500.00         3,300.000           Boiler Station         m2         2,00         1,500.00         3,00,000           Water Supply Station         m2         2,00         1,500.00         3,00,000           Hangat         m2         2,00         1,500.00         24,00,000           Radar Supply Station         m2         2,00         1,500.00         24,90,000           Radar Supply         m2         1,500.00         24,90,000           Add Nater Supply         1,500.00         1,494,847           Add Station System         1,500.00         1,494,847           Rower Supply         1,500.00         1,494,847 </td <td></td> <td>Landside Total</td> <td></td> <td></td> <td></td> <td></td> <td>1,952,628</td> <td></td>		Landside Total					1,952,628	
Passenger Terminal Building	L	Civil Total					22,132,884	
Passenger Terminal Building         m2         6,820         2,000.00         13,640,000           Cago Terminal Building         Control Tower         m2         770         1,500.00         1,1155,000           Administration Building         & Control Tower         m2         2,700         1,700.00         4,500.00           Fire Station         m2         2,700         1,500.00         4,500.00           Main Fower Station         m2         2,000         1,500.00         4,500.00           Boiler Station         m2         2,00         1,500.00         450.00           Water Supply Station         m2         2,00         1,500.00         450.00           Insayat         m2         2,00         1,500.00         300.00           Cher building         m2         2,00         1,500.00         300.00           Cher building         ls         ls         1         4,49,847           Adata Station         System         ls         1         4,49,847           Adata Station System         ls         l         1,1944,847           Anticled Lighting         ls         l         1,1944,847           Power Supply         ls         l         1,20,000	otney Works							
Administration Building & Control Tower   m.2   770   1500.000   1.1555.000     Fire Station   Building & Control Tower   m.2   4,000   2,000.000     Fire Station   Main Power Station   m.2   2,700   1,500.000   4,500.000     Main Power Station   m.2   2,700   1,500.000   3,500.000     Boiler Station   m.2   2,000   1,500.000   3,500.000     Brite Station   m.2   2,000   1,500.000   3,000.000     Brite Station   m.2   1,000   1,500.000   1,500.000     Att Navigation System   1,5   1   1,944,847     Brower Supply   1,5   1,5   1,5     Brower Supply   1,5     Br		The same of the sa	Dut 1 dien.	CIT		200000	13 640 0001	
Cargo Terminal Building         Cargo Terminal Building         L135,000         1,135,000         1,135,000           Administration Building & Control Tower         m.2         2,700         1,500,000         4,500,000           Main Fower Station         m.2         2,700         1,500,000         3,300,000           Boiler Station         m.2         2,200         1,500,00         3,500,000           Water Supply Station         m.2         2,00         1,500,00         450,000           Main Fower Supply Station         m.2         2,00         1,500,00         450,000           Main Supply Station         m.2         2,00         1,500,00         22,400,000           Adar Station         m.2         2,00         1,500,00         22,400,000           Adar Station         m.2         2,00         1,500,00         22,400,000           Adar Station         m.2         1,500,00         22,400,000           Adar Station         l.s         1         4,494,387           Add Total Architectural Work         l.s         1         4,494,387           Mcteorological Observation System         l.s         1         1,494,387           Power Supply         l.s         1         2,850,000	1	t tasenyer returnar	DWIGHT	†		7.000	A CONTRACTOR OF THE PARTY OF TH	***************************************
Administration Building & Control Tower         m2         4,000         2,000         8,000,000           Fire Station         m2         2,700         1,700,000         4,500,000           Main Power Station         m2         2,000         15,000         30,000,000           Boiler Station         m2         200         1,500,000         300,000           Water Supply Station         m2         200         1500,000         300,000           Hangar         m2         200         1,500,000         300,000           Gher building         m2         200         1,500,000         300,000           Other building         ls         l         544,000         300,000           Addar Navigation System         ls         l         44,95,000           Addictoriological Observation System         ls         l         44,95,000           Power Supply         ls         l         1,944,847           Power Supply         ls         l         2,850,000           Sanisary works         Water Supply System         ls         l		2 Cargo Terminal Buil	ding	7	770	1.500.00	1,155,000	***************************************
Fire Station         m.2         2,700         1,700,00         4,550,000           Main Power Station         m.2         2,200         1,500,00         3,300,000           Boilet Station         m.2         200         1,500,00         3,300,000           Mater Supply Station         m.2         200         1,500,00         450,000           Hangar         m.2         200         1,500,00         3,400,000           Cherr building         l.s         1         5,400,000           Other building         l.s         1         5,400,000           Other building         l.s         1         4,490,000           Att Navigation System         l.s         1         4,490,000           Actronological Observation System         l.s         1         4,490,000           Total Air Navigation System         l.s         1         1,490,000           Power Supply         l.s         1         1,490,000           Carpark Lighting         l.s         1         2,850,000           Sanisary works         Water Supply System         1.s         1         2,850,000		3 Administration Build	ling & Control Tower	12	000,4	2,000.00	8,000,000	
Main Power Station         m.2         2.200         1.500.00         3.300.000           Boiler Station         m.2         2.00         1.500.00         3.00.000           Water Supply Station         m.2         2.00         1.500.00         3.00.000           Hangar         m.2         2.00         1.500.00         3.00.000           Radar Supply Station         m.2         2.00         1.500.00         22.400.000           Radar Supply         m.2         2.00         1.500.00         22.400.000           Ant Navigation System         l.s         1         4.494.327           Artfield Lighting         l.s         1         4.494.347           Power Supply         l.s         1         4.494.347           Artfield Lighting         l.s         1         2.850.000           Power Supply         l.s         1         2.850.000           Carpark Lighting         l.s         1         2.850.000           Samilary works         Water Supply System         1.s         1         2.850.000	<u>l</u>	Elire Station		m2	2.700	1.700.00	4.590,000	
Main   Power Station   Mater Supply   Station   Mater Supply   Station   Mater Supply   Station   Mater Supply   Station   Mater Supply   Station   Mater Supply   Station   Mater Supply   Station   Mater Supply   M		***************************************	99 00 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1000	9	2 200 000	*******************
Boilet Station	•	Man Power Station	***************************************	- T	7,700	30.00	3,500,000	
Water Supply Station         m2         300         1,500.00         450.000           Incinctator         m2         200         1,500.00         300.000           Hangar         m2         200         1,500.00         300.000           Radar Station         m2         200         1,500.00         300.000           Other building         ls         ls         1         5,400.00           Att Navigation System         ls         ls         1         4,494.847           Matfield Lighting         ls         l         1,450.00           Total Air Navigation System         ls         l         1,450.00           Total Air Navigation System         ls         l         1,450.00           Power Supply         ls         l         2,850.00           Carpark Lighting         ls         l         2,850.00           Carpark Lighting         ls         l         2,850.00		6 Boiler Station		m2	200	1.500.00	300,000	•
Definition of the control of the c	<u>:</u>	7 Water Surney Station		- 68	Š	00005	450.000	
Incinciator   Incinciator		The second second		1				******
Hangar   H	•	S Incinerator	* >	}		3.3	300,000	
Radar Station         m.2         200         1500.00         300,000           Other building         Toral Architectural Work         1.s         1         544,350           Ari Navigation System         1.s         1         6,000,000           Metrorological Lighting         1.s         1         44,948,847           Metrorological Observation System         1.s         1         1,450,000           Total Air Navigation System         1.s         1         1,444,447           Power Supply         1.s         1         2,850,000           Carpark Lighting         1.s         1         420,000           Sanisary works         Water Supply System         1.s         1		9 Hanear		-			22,400,000 For two large	; jets (B747-400)
Coral Architectural Work	<u>.</u> =	Radar Station		_	300	2 500.00	300,000	
Tonal Architectural Work   1-5   1	•		# * * * * * * * * * * * * * * * * * * *	-			0 2 2 2 X	***********************
Total Architectural Work   18   1   18   1   18   1   18   1   1	1	United ouritaing		3	1		0.000	
Air Navigation System		Total Architectural	Work		-		54,979,350	
Air Navigation System         1.s         1           Airfield Lighting         1.s         1           Mctecorological Observation System         1.s         1           Total Air Navigation System         1.s         1           Power Supply         1.s         1           Carpark Lighting         1.s         1           Sanitary works         Water Supply System         1.s         0	vigation Syste	:W:		_	•		The second secon	
Astronomy   1-5   1     Metronological Observation System   1-5   1     Total Air Navigation System   1-5   1     Power Supply   1-5   1     Carpark Lighting   1-5   1     Sanitary works   Water Supply System   1-5   0	L	Air Navigation Syste	H.	5"	H		000'000'9	
Metronological Observation System   Ls   1     Total Air Navigation System   Ls   1     Power Supply     Ls   1     Carpark Lighting                     Sanitary works		2 Airfield Lighting	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1.5	1	-	4.494.847	***************************************
Total Air Navigation System  Power Supply  Carpark Lighting  Sanitary works  Water Supply System  1.5  1.5  1.5  1.5  1.5  1.5  1.5  1.	j_	Mercentomen Ober	station Curton		-	•	1.450.000	
Total Air Navigation System   Power Supply   I.s.   1	J	Tarcicolological Actor	TANDON SASKIN	9	†		20000000	
Power Supply [Carpark Lighting 1.8 1.8 1.8 1.8 Saniary works Water Supply System 1.8 0.0	_		n System			:	11,944,847	
Power Supply Carpark Lighting Lamiary works Water Supply System Lis 0	ting Facilities	,						
1.3 1 1.8 1		Power Supply		. 21	1		2,850,000	
Water Supply System	<u> </u>	2 Carpark Lighting		2	1		420,000	
Water Supply System	L	Carried State Contraction	Milator Committee Communica	-	2		3-11-10	
		A VATILIATY WORKS	Water Viganic Veneral	_				

		Color Marca Theorem	1.			000	
	Sub-total		-			000 05	
	4 Communication System			ľ		2000	
	T COURT OF STATE OF S	Cin	<u> </u>	7		160,000	
	Siruel Supply System		5.1	0		. 0	O enough
	Total 'Supporting Facilities	acilities	-			3,480,000	
V Special Equipment	- 1				_		
	1   Conveying System	Dep. Baggage Conveyer	92	£	127,349	382,047	
		Weighing Scale	2	4.	20,498	286,972	
		Art. Baggage Conveyer	2	6	٠	626.841	
		Spare Parts			<u>-</u>	38.876	38,876 3% of above total
		Subiotal				1,334,736	
	2 Elevator	Elevator		2	61,055	122,111	
		Escalator	-	ਨਾ	161.048	483,144	・ うち 田田 日うらく 自用 ひろび かかめ ひりかなんかん トントン・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
	-	Spare Parts				18,158	18,158 3% of above total
		Subtotal				623,413	
	3 Cold Storage	Reingerator	OU	1	13,214	13,214	
		Freezer Room		2		7.184	
		Cargo Weighing Scale	_	-		70.912	
		Spare Parts				2,739	2,739 3% of above total
		Subtotal	_			94,049	
	4 Boarding Bridge		ы	3	750,000	2,250,000	
		Spare Parts		_		70,404	70,404 3% of above total
						2,320,404	
	5 Fire Fighting Car	Major Vehicle	QĽ	2	1,154,274	2,308,548	
		Rapid Intervention	_		835.850	835,850	できます。 マリス・マー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
		Ambulance		г	42,015	42,015	
		Command Car	2	$\overline{}$	35,377	35,377	
		LLCS.	1.5	1		96.654	96.654 3% of above total
:		Subtotal				3,318,444	
	Total Special Equipment	ment				7,691,045	
VI General Preliminary	ary						
	) Insurance		- S-	Т		1.002,281	
	2 Mobil/ Demobilization	no.	1,5	1		1,503,422	
-	3 Site Establishment		s			2.004,563	
	4 Site Establishment (Office,	)ffice)	S.			1,002,281	
	Employers' Housing		S.	,-q		2,004,563	
	Vehicle		Si.	1	***************************************	800,000	
	5 Site miscellaneous		S.	1		1,503,422	
	6 Soil investigation		s.	1		500,000	
	7 Training		ç	1		300,000	
	Si Miniature Model		3.	F-4		50,000	***************************************
	9 Over head		8.	1		8,018,250	
	Total of General and Preliminary	Preliminary	_			18,688,781	
		-					