



Technical Assistance Report

Project Number: 38349
December 2007

Nepal: Preparing the Civil Aviation Airport Project (Financed by the Japan Special Fund)

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 17 December 2007)

Currency Unit	–	Nepalese rupee/s (NRe/NRs)
NRe1.00	=	\$0.01585
\$1.00	=	NRs62.9520

ABBREVIATIONS

CAAN	–	Civil Aviation Authority of Nepal
EA	–	executing agency
EIA	–	environmental impact assessment
EIRR	–	economic internal rate of return
FIRR	–	financial internal rate of return
IEE	–	initial environmental assessment
MOCTCA	–	Ministry of Culture, Tourism, and Civil Aviation
NAC	–	Nepal Airlines Corporation
PPTA	–	project preparatory technical assistance
TA	–	technical assistance
TIA	–	Tribhuvan International Airport

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	–	General intervention
Sector	–	Transport and communications
Subsector	–	Civil aviation
Theme	–	Sustainable economic growth
Subtheme	–	Fostering physical infrastructure development

NOTES

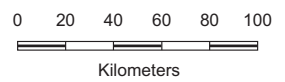
- (i) The fiscal year (FY) of the Government and its agencies ends on 15 July. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2007 ends on 15 July 2007.
- (ii) In this report, "\$" refers to US dollars.

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NEPAL CIVIL AVIATION AIRPORT PROJECT



PEOPLE'S REPUBLIC OF CHINA



- National Capital
 - District Capital
 - City/District
 - International Airport
 - Priority 1 Domestic Airport
 - Priority 2 Domestic Airport
 - National Highway
 - National Road
 - District Boundary
 - Zonal Boundary
 - International Boundary
- Boundaries are not necessarily authoritative.

I. INTRODUCTION

1. The Government of Nepal (the Government) has requested the Asian Development Bank (ADB) for project preparatory technical assistance (TA) to prepare the Civil Aviation Airport Project. The TA is programmed for ADB's 2007 TA program for Nepal.¹ The TA Fact-Finding Mission visited Nepal from 11 to 19 September 2007 and reached agreement with the Government on TA impact, outcome, scope, implementation arrangements, costs and financing plan, and outline terms of reference for consulting services. The TA design and monitoring framework is in Appendix 1.

II. ISSUES

2. The country's economic performance during the first half of fiscal year (FY) 2007 was characterized by slow growth, rising inflation, and weak exports. The Government has therefore revised downward its gross domestic product growth forecast for FY2007 from 5% to 3.8%. Economic performance continues to be hampered by weak agricultural growth and slow industrial recovery. Private sector confidence has yet to be restored, and investment remains subdued. On the positive side, tourism is rebounding, and worker remittances continue to underpin consumer demand. Transport, communications, and storage are expected to grow by 6% in FY2007. Further, tourist arrivals rose by 4% in the first 7 months of FY2007 compared to the same period of FY2006, and four new international airlines have started operations to Nepal. This bodes well for future tourist arrivals.

3. Nepal is a landlocked country with rugged and mountainous terrain that renders the development and maintenance of surface transport facilities difficult and costly. The high cost of road construction and maintenance, and the limited availability of financial resources have slowed the development of the surface transport system. Areas of the country remain largely inaccessible except via porter and mule tracks and, in some areas, light aircraft landing strips. Air transport has played a significant role in the administrative, economic, and social development of the country, and in the absence of adequate surface transport it has provided essential links between Kathmandu, the capital city, and the various administrative and commercial centers of the country, as well as with the outside world. For many mountainous and remote rural districts of the country, air transport may also provide the only means of mechanized transport to connect them to other points of destination. Further, civil aviation is of critical importance to the country because most tourists arrive by air. The sector provides vital support to the development of tourism as well as to trade, manufacturing, and commerce.

4. Tribhuvan International Airport (TIA) is currently Nepal's only international airport and its largest domestic one. Eighty percent of foreign tourists enter Nepal by air through TIA.² TIA and more than 30 other operational domestic airports and airstrips function as the Nepal air transport network and crucially contribute to the socioeconomic development of the entire country. Inaugurated in 1955 as a grassy runway, Tribhuvan Airport was renamed Tribhuvan International Airport in 1964. It now provides civil aviation facilities and passenger services to about 16 international operators and 13 active domestic operators, including the flag carriers Nepal Airlines Corporation (NAC) and Air Nepal. In 1998 the Civil Aviation Authority of Nepal (CAAN) was established under the CAAN Act as an independent organization reporting to the

¹ The TA first appeared in *ADB Business Opportunities* in 4 October 2007.

² In 2006, nearly 1.4 million international passengers arrived at TIA, against 1.2 million in 2005. In 1991, 0.2 million domestic passengers moved in and out of TIA. The number rose to nearly 0.7 million in 1998, and it reached 1.1 million in 2005. International passenger traffic at TIA is expected to grow gradually at an annual rate of 1.24–2.31%, and domestic passenger traffic at an annual rate of 2.59–4.84%.

Ministry of Culture, Tourism, and Civil Aviation (MOCTCA), which sets policy. As a regulator and airport operator, CAAN is responsible for ensuring the safe, regular, standard, and effective operation of flights, and air communication, navigation, and transportation services for domestic and international services. However, over the years the roles and functions of CAAN and MOCTCA have become blurred as responsibilities overlapped in such areas as airline licensing, tariff setting, airport planning, and, to a lesser extent, airport operations.

5. The civil aviation sector in Nepal is relatively well managed and compliant with international requirements. However it is not appropriately equipped or structured for sustainable long-term development. There is acute airside under-capacity at TIA, which rising demand from new international carriers for services into TIA will exacerbate. Further, increasing international and especially domestic air passenger and cargo loads put pressure on the capacity of TIA and other domestic airports.

6. Under current rules and regulations, CAAN and TIA do not operate independently of the Government, and TIA's performance is limited by lack of autonomy and the overlap of responsibilities among MOCTCA, CAAN, and TIA. If properly managed as a commercial entity, TIA has potential to be a leading regional airport. Meanwhile, CAAN's capacity as the country's civil aviation regulator should be improved in view of growth trends in international and domestic passengers and cargo. Initial steps have been taken by the Government to separate CAAN, as a regulatory body, and TIA, to be run commercially as a revenue-generating entity. To be explored are ways to attract private sector involvement in running TIA or taking over a portion of TIA's operations.

7. Regarding institutional management, CAAN's capacity to effectively manage airports is constrained by redundant legislation, a lack of adequate autonomy, and inappropriate organization structures. Its management information system is inadequate, harming organizational effectiveness and decision making at TIA and other airports. Another problem is CAAN's weakness in general operational and financial management for lack of systems, procedures, and qualified people to properly manage business operations. There are concerns about the commercial productivity of TIA and, to a lesser extent, the regional airports.³

8. **Government Strategy.** An approach paper for the interim plan covering the 3-year period of FY2008–FY2010 has been finalized by the Government and was endorsed by the National Development Council in July 2007.⁴ To support inclusive economic development and growth, physical infrastructure development is being prioritized. The sustained development of the tourism sector has been identified as an important way to support balanced economic growth. For the country's civil aviation sector, the main goal is now to achieve enhanced capacity at TIA and other civil airports and improved quality of air transport services. To enable the sector to effectively provide support to national development efforts, the national air transport system and services are to be further enhanced and improved by increasing operational capacity, effectiveness, and efficiency. In the long term, the Government is considering constructing a second international airport. This policy decision was taken in view of the expectation that international passenger numbers will reach 2 million annually by 2015. On the recent development of domestic airports, the Government of the People's Republic of China has expressed interest in supporting Nepal's improvement of the new Pokhara Airport to

³ Two major airport business assets, ground handling and air cargo, do not generate any revenue, and other commercial activities, such as rents and retail, etc., are not optimized. The national air navigation and communications system urgently needs rehabilitation and poses a threat to air safety. CAAN has submitted a request to the Japanese Government for assistance, which is being considered.

⁴ The interim plan was approved by the Government of Nepal on 5 December 2007.

international standard. Similar discussions with the Government of the Republic of Korea are being held about improving the Buddha Gautama/Lumbini airport to international standard.

9. ADB has been involved in the civil aviation sector in Nepal since 1969 through five loans and four TA projects. The Tribhuvan International Airport Improvement Project, the most recent ADB intervention, comprised an airport improvement component that included expanding the international terminal, constructing a cargo-handling facility, and improving safety-related roads and other facilities, as well as capacity building that included advisory consulting services to CAAN during its initial operation and consulting services for management assistance to domestic contactors. Given the important role of civil aviation in the country, the Nepal Country Strategy and Program (CSP) endorsed by the Board in September 2004⁵, includes further assistance for the civil aviation sector focusing on (i) improving TIA and strategic domestic airports, (ii) restructuring and reforming CAAN and NAC, and (iii) the regulatory framework for private sector participation in the sector. With ADB's involvement and other donors' assistance, the capacity of the sector, physical as well as institutional, has improved considerably to accommodate the rapid growth of air traffic that has occurred since the 1990s. This was further confirmed by ADB's country operations business plan 2008–2010, approved in July 2007.⁶ ADB's reengagement in the sector will be based on a careful assessment of progress in policy and regulation, and will take conflict-related considerations into account.

10. In 2006, nearly a decade after the last civil aviation loan was approved, ADB helped the Government to update its master plan for developing TIA and fine tuned alignment of its strategic objectives with the Government's priority areas for civil aviation sector development. In view of this, ADB helped the Government prepare a civil aviation sector strategy⁷ to update the master plan for developing TIA and prepare a civil aviation sector development strategy to meet demand for developing airport infrastructure and capacity. The reports, the Civil Aviation Sector Strategy Volumes I and II, have been submitted to the Government and are still under review by the CAAN Board before being submitted for Government's endorsement. They contain a sector strategy, sector management plan, and infrastructure development plan for TIA and selected domestic airports. The civil aviation sector development strategy proposed a phased sector development plan calling for the (i) immediate improvement of airport infrastructure of TIA, (ii) improvement of the air space navigation system, (iii) improvement of key regional airports, and (iv) construction of the second international airport. A sector management plan aims to achieve (i) an effective and efficient civil aviation administration; (ii) appropriate responsibilities for management, pricing, and service delivery; (iii) compliance and alignment with statutes and policies; (iv) institutional accountability and transparency; (v) effective technical regulation and airport management; (vi) a redirected and motivated workforce; (vii) simplified personnel and financial management; (viii) strong and clearly defined regulatory control; (ix) capacity to self-fund current and future investment; (x) reduced barriers to entry into the aviation market; (xi) strong and balanced domestic airline operations; (xii) an increase in non-aeronautical revenue; and (xiii) a competitive and balanced aviation market. This TA will study the feasibility of the recommended investments for further ADB intervention.

⁵ ADB. 2004. *Country Strategy and Program (2005–2009): Nepal*. Manila (para 96, Table A1.10 and Table A1.11)

⁶ Country Operations and Business Plan July 2007: the loan for the Civil Aviation Sector Development Project is standby for 2009 and firm for 2010.

⁷ ADB. 2006. *Technical Assistance to Nepal for Preparation of Civil Aviation Sector Strategy*. Manila (TA 4772-NEP, approved on 20 March).

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

11. The impact of the TA will be the improved quality of Nepal air transport services, as well as enhancement of the manner in which they are administered and managed. The outcome of the TA will be an agreed feasibility design suitable for ADB financing to improve airport(s) in the country.

12. The TA will contain reassessments and surveys of air traffic and transport network updates to be used as the bases to design a viable and feasible project that will address the deficiencies of airport operation in terms of management, capacity, viable operation, safety, and feasibility. The TA will reassess TA 4772 recommendations for the improvement of TIA and determine whether or not they are feasible and viable, and if other activities are to be included. The TA will propose a plan for meeting future air navigation equipment requirements in a 10-year timeframe, which will prescribe and document the navigation, communications, surveillance, and other equipment, both terrestrial and satellite based, required to support future national air transport operations. Further, the TA will reassess CAAN institutional capacity and prepare an action plan for capacity and institutional development programs to be implemented under the project, together with the provision of short term assistance to CAAN in key areas as CAAN aligns itself with the proposed sector strategy. Further, the TA will explore potential areas of, and assess conditions for, private sector involvement in the possible financing, ownership, operation, rehabilitation, maintenance, and management of airports.

B. Methodology and Key Activities

13. **Institutional and Capacity Development.** The TA will review and update existing institutional assessments of sector institutions, especially CAAN, and prepare a time-bound capacity-development action plan and its constituent capacity development programs.

14. **TIA Infrastructure, Capacity, and Demand Analysis.** The TA will review and update the findings of TA 4772 in terms of (i) current airport capacity, (ii) demand for the next 20 years, and (iii) recommended improvements to meet the future demand. The infrastructure to be assessed will include airside, the terminal area, and air traffic control.

15. **Engineering.** The TA will prepare an outline design including cost estimates and implementation arrangements for civil works.

16. **Economic Analysis.** The TA will carry out an economic analysis of the proposed projects in accordance with ADB's *Guidelines for the Economic Analysis of Projects* (1997), taking into account flows of international and domestic passengers and goods in domestic and foreign trade. The net benefit to the poor in the rural areas through increased employment and business opportunities will be studied.

17. **Financial Analysis.** The TA will carry out a financial analysis of the proposed project in accordance with ADB's *Guidelines for the Financial Governance and Management of Investment Projects* (2002), including calculating the financial internal rate of return and the weighted average cost of capital, taking into account financial costs and benefits. Sensitivity analysis will be carried out in the project's risk assessment.

18. **Environmental Assessment and Social Impact and Resettlement Analysis.** A consultant will conduct an initial environmental examination and environmental impact assessment as required in accordance with ADB's *Environment Policy* (2002), *the Operations Manual F1/BP and F1/OP* (2003), *Environmental Guidelines for Selected Infrastructure Projects* (1993), and *Environmental Assessment Guidelines* (2003), and the Government's Guidelines and procedures. Social analysis will be carried out according to ADB's *Handbook on Poverty and Social Analysis* (2001). If necessary, the project will prepare a resettlement and/or indigenous people framework or plans consistent with ADB's *Policy on Involuntary Resettlement Policy* (1995) and *Indigenous Peoples Policy* (1998). A summary initial poverty and social analysis is in Appendix 2.

C. Cost and Financing

19. The total cost of the TA is estimated at \$940,000 equivalent. ADB will finance \$750,000 equivalent in foreign exchange cost. The details of the cost estimates are in Appendix 3. The TA will be financed on a grant basis by the Japan Special Fund, funded by the Government of Japan. The Government will finance \$190,000 equivalent by providing office accommodation, support facilities, counterpart staff, maps, reports, and other logistical support. The Government has been informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

20. MOCTCA will be the Executing Agency for the TA, and CAAN the Implementing Agency. CAAN will appoint a project director to be responsible for day-to-day supervision of the TA. The Government has assured that all required counterpart staff, office space, furniture, equipment, support facilities for surveys, maps, reports, and other support services will be made available to the consultants in a timely manner. All equipment for the TA will be procured according to ADB's *Procurement Guidelines* (2007, as amended from time to time) and turned over to MOCTCA upon TA completion.

21. An international consulting firm, in association with a national consulting firm or proposing individual national consultants, will be recruited to provide 18 person-months of international consultancy, and 14 person-months of national consultancy, with expertise in the areas of civil aviation engineering, civil aviation management, institution development, air transport economy, and financial analysis. In addition, ADB will directly recruit two individual national consultants to carry out (i) a social analysis, poverty impact, and resettlement analysis (3 person-months) and (ii) an environmental assessment of the proposed project (3 person-months). All consultants will be engaged by ADB in accordance with its *Guidelines on the Use of Consultants* (2007, as amended from time to time). The consulting firm will be selected according to quality- and cost-based selection (QCBS 90:10) procedures and a simplified technical proposal. The estimated starting date is April 2008, and the estimated closing date is February 2009. The outline terms of reference for consultants are in Appendix 4. Seminars and workshops will be held to disseminate the output of the TA.

IV. THE PRESIDENT'S DECISION

22. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$750,000 on a grant basis to the Government of Nepal for preparing the Civil Aviation Airport Project, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact</p> <p>Enhanced capacity and improved quality of Nepal air transport services</p>	<p>TIA capacity to service international and domestic passengers increased by minimum by 10% by 2015, and cargo capacity increased by 5% by 2015^a</p>	<p>Civil aviation statistics</p> <p>Surveys</p> <p>Progress reports</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Project will be implemented on time. • Measures to improve efficiency and commercial orientation will be implemented. <p>Risks</p> <ul style="list-style-type: none"> • Suboptimal implementation of efficiency improvement measures • Economic growth falters and/or social or political instability emerges, resulting in lower tourist arrivals and traffic volumes.
<p>Outcome</p> <p>Agreed feasibility design suitable for ADB financing</p>	<p>Agreement between ADB and Government by late 2008</p>	<p>Project performance monitoring and evaluation reports</p> <p>Project progress reports</p> <p>ADB review missions</p> <p>Tripartite meetings</p> <p>Final reports</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Consultants' performance is satisfactory. • Government's strong commitment • Improved security situation and sound macroeconomic and development policies
<p>Outputs</p> <p>1. Feasibility studies on technical, economic, and financial viability of ensuing loan</p> <p>2. Institutional capacity development assessment and programs</p> <p>3. Potential areas for, and ways to attract and facilitate, private sector involvement in possible financing, operation, maintenance, and management of airports</p> <p>4. Environmental assessment and formulation of resettlement plan and framework</p>	<p>Report to be submitted within 4 months of commencement</p> <p>Submission of acceptable technical, economic, and financial analyses</p> <p>Preparation of environmental assessment, environmental mitigation plan, social analysis, resettlement plan, and resettlement framework</p> <p>CAAN capacity development assessment and programs</p> <p>Airport operation analyses with identified areas of operation for possible private</p>	<p>ADB missions</p> <p>Tripartite meetings</p> <p>Progress reports</p> <p>Final reports</p>	<p>Assumption</p> <ul style="list-style-type: none"> • Consultants' performance is satisfactory <p>Risk</p> <ul style="list-style-type: none"> • Political instability

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
5. Social and poverty impact assessment	sector involvement		
Activities with Milestones <ol style="list-style-type: none"> 1. Report on technical, economic, and financial viability (4 months from start date) <ol style="list-style-type: none"> 1.1 Cost estimates, procurement plan, and project management recommendations 1.2 EIRR and FIRR estimates 1.3 Project management and financial management analyses of Executing Agency and Implementing Agency 2. Capacity development programs (4 months from start date) <ol style="list-style-type: none"> 2.1 Capacity development assessment 2.2. Recommend and prepare capacity development programs to address the issues and constraints 3. Environmental assessment (2 months from start date) <ol style="list-style-type: none"> 3.1 Review of previous studies 3.2 Identification and preparation of remaining requirements to comply with ADB policy 4. Resettlement, social, and poverty impact assessment report (2 months from start date) <ol style="list-style-type: none"> 4.1. Identification and preparation of requirements to comply with ADB policy 5. Develop project components, plans, activities, costs, and implementation schedules and design mechanisms for risk mitigation and effective monitoring evaluation. 			Inputs <ul style="list-style-type: none"> • ADB: Approximately 18 person-months of international consulting services, and 20 person-months of national, costing not more than \$750,000 • Government: Services in kind on transport, office accommodation, and local counterpart support • All relevant reports, information, and data as needed.

ADB = Asian Development Bank, CAAN = Civil Aviation Authority of Nepal, EA = executing agency, EIRR = economic internal rate of return, FIRR = financial internal rate of return, PPTA = project preparatory technical assistance, TA = technical assistance, TIA = Tribhuvan International Airport.

^a These percentages are still being checked by CAAN based on several forecasts available.

INITIAL POVERTY AND SOCIAL ANALYSIS

Country/Project Title:	Nepal/Preparing the Civil Aviation Airport Project		
Lending/Financing Modality: ADF	Project loan	Department/ Division:	South Asia Department/ Transport and Communications Division

I. POVERTY ISSUES

A. Linkages to the National Poverty Reduction Strategy and Country Partnership Strategy

1. The project will support economic growth by improving transport connectivity to remote rural areas, as well as by providing better quality services to domestic and international air transport users, including the 80% of tourists who arrive in Nepal at Tribhuvan International Airport (TIA).

B. Targeting Classification

1. Select the targeting classification of the project:
 - General Intervention Individual or Household (TI-H); Geographic (TI-G); Non-Income MDGs (TI-M1, M2, etc.)
2. Explain the basis for the targeting classification:

C. Poverty Analysis

1. Project preparatory technical assistance (PPTA) allocates 3 person-months consultancy to assess the social and resettlement impact of the investment components.
2. One of the components of the expansion of TIA is to improve the domestic terminal at TIA serving air transport to and from remote rural areas. This and eventual improvement of rural airports in isolated districts without road connections to the rest of the country will play a critical role in providing access for business development, emergency response, and medical evacuation services. Improvements may also play a vital role by providing efficient postal services, thereby linking migrant workers abroad with their families in their home communities.

II. SOCIAL DEVELOPMENT ISSUES

A. Initial Social Analysis

Based on existing information:

1. Who are the potential primary beneficiaries of the project? How do the poor and the socially excluded benefit from the project? See C.2. above.
2. What are the potential needs of beneficiaries in relation to the proposed project? The improvement of TIA, especially if this becomes revenue-generating entity, will benefit the improvement of domestic rural airports. This will increase accessibility to those areas, especially ones not accessible by road, and also address the special needs of the country as a landlocked country. More developed rural areas with good connectivity with business and market centers will support political stability.
3. What are the potential constraints in accessing the proposed benefits and services, and how will the project address them? Political instability and worsening of security situation in the rural areas could hamper improvement of air transport to those areas.

B. Consultation and Participation

1. The potential initial stakeholders are the government agencies concerned, flight operators and their association, travel agency associations, concerned civil society, and possibly private sector corporations potentially interested in some service operations at TIA, etc.
2. What type of consultation and participation (C&P) is required during the PPTA or project processing (e.g., workshops, community mobilization, involvement of nongovernment organizations and community-based organizations, etc.)? During the feasibility study, several workshops, seminars, and consultations will be conducted with stakeholders. The TA will follow a participatory approach, the key to building consensus in strategy development.
3. What level of participation is envisaged for project design?
 - Information sharing Consultation Collaborative decision making Empowerment⁷
4. Will a C&P plan be prepared? Yes No Please explain.

C. Gender and Development

1. What are the key gender issues in the sector/subsector that are likely to be relevant to this project/program?
 The TA will explore mainstreaming gender in the sector and how to create maximum access to sources of employment, credit, technology, and educational and health facilities. Several issues such as the followings maybe assessed: (i) incorporating gender perspectives in all programs and projects, (ii) sensitizing implementation mechanisms to gender concerns, (iii) ensuring that measures initiated to improve gender equity in project benefits are adequate, and (iv) developing indicators and mechanisms to monitor and evaluate project impact on women not only in terms of their participation but of their empowerment as well. Social mobilization, group formation, informal education, and credit can reach rural women effectively and for their empowerment with the improvement of rural connectivity.
2. Does the proposed project/program have the potential to promote gender equality and/or women's empowerment by improving women's access to and use of opportunities, services, resources, assets, and participation in decision making? Yes No Please explain. {If yes, a gender action plan should be prepared during PPTA/due diligence.}
 Not specifically, but some issues can be covered in the TA.
3. Could the proposed project have an adverse impact on women and/or girls or to widen gender inequality? Yes No Please explain {If yes, actions/measures should be prepared during PPTA/due diligence.}

III. SOCIAL SAFEGUARD ISSUES AND OTHER SOCIAL RISKS

Issue	Nature of Social Issue	Significant/Limited/ No Impact/Not Known	Plan or Other Action Required
Involuntary Resettlement	TA will assess potential land acquisition and eventual proposed resettlement framework and plan.	Not known yet.	<input type="checkbox"/> Full Plan <input type="checkbox"/> Short Plan <input type="checkbox"/> Resettlement Framework <input type="checkbox"/> No Action <input checked="" type="checkbox"/> Uncertain
Indigenous Peoples	TA will gather additional information to identify issues, if any, and propose solutions.	Not known yet.	<input type="checkbox"/> Plan <input type="checkbox"/> Other Action <input type="checkbox"/> Indigenous Peoples Framework <input type="checkbox"/> No Action <input checked="" type="checkbox"/> Uncertain
Labor <input checked="" type="checkbox"/> Employment Opportunities <input type="checkbox"/> Labor Retrenchment <input type="checkbox"/> Core Labor Standards			<input type="checkbox"/> Plan <input type="checkbox"/> Other Action <input type="checkbox"/> No Action <input type="checkbox"/> Uncertain
Affordability			<input type="checkbox"/> Action <input type="checkbox"/> No Action <input type="checkbox"/> Uncertain
Other Risks and/or Vulnerabilities <input type="checkbox"/> HIV/AIDS <input type="checkbox"/> Human Trafficking <input type="checkbox"/> Others (conflict, political instability, etc.), please specify			<input type="checkbox"/> Plan <input type="checkbox"/> Other Action <input type="checkbox"/> No Action <input type="checkbox"/> Uncertain

IV. PPTA/DUE DILIGENCE RESOURCE REQUIREMENT

1. Do the TOR for the PPTA (or other due diligence) include poverty, social and gender analysis and the relevant specialist/s? Yes No If no, please explain why.
2. Are resources (consultants, survey budget, and workshop) allocated for conducting poverty, social and/or gender analysis, and C&P during the PPTA/due diligence? Yes No If no, please explain why.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Total Cost
A. Asian Development Bank Financing^a	
1. Consultants	
a. Remuneration and Per Diem	
i. International Consultants	469.0
ii. National Consultants	100.0
b. International and Local Travel	56.0
c. Reports and Communications	10.0
2. Equipment	10.0
3. Training, Seminars, and Conferences	10.0
4. Surveys	15.0
5. Miscellaneous Administration and Support Costs	10.0
6. Representative for Contract Negotiations	5.0
7. Contingencies	65.0
Subtotal (A)	750.0
B. Government Financing	
1. Office Accommodation and Transport	90.0
2. Remuneration and Per Diem of Counterpart Staff	60.0
3. Others	40.0
Subtotal (B)	190.0
Total	940.0

^a Financed by the Japan Special Fund, funded by the Government of Japan.
Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Background

1. The main outcomes of the technical assistance (TA) by the Asian Development Bank (ADB) will be (i) a viable and feasible project that will address the deficiencies of airport operation in terms of management, capacity, viable operation, safety, and feasibility;¹ (ii) a proposed list of navigation equipment requirements over a 10-year timeframe that will prescribe and document the navigation, communications, surveillance, and other equipment, both terrestrial and satellite based, required to support future national air transport operations; (iii) a reassessment of the institutional capacity of Civil Aviation Authority of Nepal (CAAN) and the preparation of an action plan for capacity and institutional development programs to be implemented under the project, together with the provision of short-term assistance to CAAN in key areas as CAAN aligns itself with the proposed sector strategy; and (iv) an assessment of potential areas of private sector involvement in the possible financing, ownership, operation, rehabilitation, maintenance, and management of airports.²

B. Scope of Work

2. The feasibility study will prepare a civil aviation project. Physical investment will cover civil works to improve existing airports and equipment for navigation and communication systems. The consultants will do the following studies:

1. Airport Planning and Engineering

- (i) Review and update available traffic forecasts,³ and undertake traffic forecasting and assessment of the network (e.g., air traffic distribution), taking into account major development and potential airport development or upgrading, including the enhancement of slot management at Tribhuvan International Airport (TIA).
- (ii) Validate and update the recommendations of existing infrastructure development plans relating to the physical development of airports inclusive of terminals, runways, taxiways, aprons, air cargo, flight catering, aviation fuel, operational and airline facilities, airport road system, car parking, and commercial operations.
- (iii) Prepare a functional description of the new terminals at TIA detailing spatial requirements for passenger processing and holding, baggage handling, airline operations, catering, concessions, washrooms, air cargo handling, security, etc., to be the basis for the detailed design.
- (iv) Prepare cost estimates for each of proposed improvements (including air traffic control equipment and the capacity development programs), broken down into foreign exchange cost, local currency cost, and tax together with a list of materials, facilities, and equipment.

¹ To be decided later during the TA implementation, paving 1 or 2 small remote domestic airport(s) may be included in the feasibility analysis.

² The consultants are to review reports of ADB. 2006. *Technical Assistance to Nepal for Preparation of Civil Aviation Sector Strategy*. Manila (TA 4772-NEP, approved on 20 March), especially on financial management capacity of CAAN (Volume I, Chapter 4).

³ Especially data compiled under ADB. 2006. *Technical Assistance to Nepal for Preparation of Civil Aviation Sector Strategy*. Manila (TA 4772-NEP, approved on 20 March).

- (v) Formulate a detailed loan project budget to include civil engineering and system development and procurement costs, consulting fees, counterpart costs, transport, administrative support, reporting, travel, per diems, contingencies, etc.

2. Air Navigation Equipment Requirements

- (i) Prepare a 10-year time-lined, prioritized, and costed plan for Nepal's future air navigation equipment requirements, prescribing and documenting navigation, communications, surveillance, and other equipment, both terrestrial and satellite based, required to support future national air transport operations.
- (ii) Prepare an action plan for the accelerated the development of overflight routes through Nepalese airspace.
- (iii) Develop a 5-year manpower and training plan identifying the human resources and their development required to support future air traffic operations and engineering services.
- (iv) Prepare cost estimates and specifications inclusive of installation, training, and spares support for implementation by the design and supervision consultant.

3. Economic and Financial Assessment

3. To ensure the economic and financial viability of the investment components, the consultant will carry out the following tasks:

- (i) Develop economic analysis models for the proposed investment in line with ADB's *Guidelines for the Economic Analysis of Projects* (1997).
- (ii) Assess the economic life of the components and identify the economic benefits of each investment component comparing the with-project and without-project situation.
- (iii) Undertake a brief assessment of the fare structure of domestic flights in Nepal and establish the tariff level to ensure full cost recovery, but only cost recovery for investment components.
- (iv) Calculate the economic internal rate of return (EIRR) for each investment component and conduct sensitivity tests for the EIRR by varying benefits and investment costs.
- (v) Develop financial analysis models for the proposed investment in line with ADB's *Guidelines for the Financial Governance and Management of Investment Projects Financed by the ADB* (2002).
- (vi) Calculate the financial internal rate of return (FIRR) for each investment component, establish the financial viability of each investment component by comparing the FIRR with the cost of capital, and conduct sensitivity tests for the FIRR by varying tariff levels, financial revenues, and investment costs.

- (vii) Undertake financial analyses and projections of airport operations to assess the financial sustainability of the each airport operation and identify measures to ensure sustainable airport operations, including possible private sector involvement through public-private partnerships.

4. Social and Resettlement Impact Assessment

4. To assess the social and resettlement impacts of the investment components, the consultant will carry out the following tasks:

- (i) Based on a review of data and reports, and on field investigations, prepare a poverty and social analysis for investment components in accordance with ADB's *Guidelines for the Incorporation of Social Dimensions in ADB Operations* (1997) and ADB's *Handbook on Poverty and Social Analysis* (2001).
- (ii) Prepare a study of the socioeconomic and poverty reduction impacts of the project as required, and prepare proposals for monitoring and evaluating the benefits and impacts before and after the project.
- (iii) Determine the presence of indigenous peoples and ethnic minorities in the Project areas.
- (iv) Prepare an indigenous peoples development plan or formulate specific actions for indigenous people, as required, in accordance with ADB's *Policy on Indigenous Peoples* (1998).
- (v) Conduct gender analysis and identify project design elements that have the potential to address gender equity if appropriate.
- (vi) Assess all investment components to identify potential land acquisition and involuntary resettlement impacts as defined in ADB's policy on *Involuntary Resettlement* (1995) and *Operations Manual Section F2 on Involuntary Resettlement* (2003).
- (vii) If required, prepare a resettlement plan in accordance with ADB's policy on *Involuntary Resettlement* (1995) and *Operations Manual Section F2* and in reference to ADB's *Handbook on Resettlement* (1998) as a guide, including institutional arrangements for implementing, supervising, and monitoring the resettlement activities.

5. Environmental Assessment

5. To assess the environmental impacts of the investment components, the consultant will carry out the following tasks:

- (i) Assess direct and indirect environmental impacts as well as accumulated impacts associated with the proposed investment components.
- (ii) Prepare the initial environment examination (IEE) or environmental impact assessment (EIA) as necessary, in accordance with (a) the ADB's *Environmental*

Assessment Guidelines (2003), (b) ADB's *Environment Policy* (2002), and (c) the Government's environmental acts and regulations.

- (iii) Prepare a summary IEE or EIA in ADB format.
- (iv) Prepare the environmental management and monitoring plans, including the costs to implement the plans as well as institutional arrangements and the potential involvement of nongovernment organizations.

6. Institutional Assessment

6. Review and update existing institutional assessments of sector institutions, including the Ministry of Culture, Tourism, and Civil Aviation for air safety policy and management and air service agreements; CAAN for business operational and regulatory management; and Nepal Airlines Corporation for commercial-oriented business management. Prepare a time-bound capacity-development action plan, setting out methodology, structure, content, delivery mechanisms, and cost estimates for a 3–4 year program of capacity development and business and management change. This will be based on the sector management plan agreed with the Government under ADB TA 4772-NEP: Preparation of Civil Aviation Sector Strategy. In assessing CAAN's financial management capacity, consultants are to use the guidelines provided in ADB's *Financial Management and Analysis of Projects* (2005). The consultants are to briefly assess if there is a need to provide support to the Government in preparing necessary legislation and/or regulations in this context. Further, attention is to be given to institutional arrangements for implementing, supervising, and monitoring social and environmental management plans and activities.

C. Time Schedule and Staff Requirements

7. The assignment is expected to commence 3 weeks after contract signing. Consulting service will be completed in the 10 months from April 2008 to February 2009.

8. The consultant team will include (i) 18 person-months of international input by the team leader and airport planner (6 person-months), a civil aviation management-cum-institution specialist (intermittent 4 person-months), air transport economist (3 person-months), financial analyst (3 person-months), and airport engineer (2 person-months), as well as (ii) 14 person-months of national input by the deputy team leader and airport engineer (6 person-months), traffic engineer (air transport, 4 person-months), and navigation and communication engineer (4 person-months). In addition, two individual national consultants, an environment specialist (3 person-months) and a social and resettlement specialist (3 person-months), will be recruited.

9. The consultants will be recruited in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time). They will have experience and qualifications in airport engineering and feasibility studies, as well as in institutional strengthening and capacity building in airport sector institutions.

D. Report Requirements

10. The following reports, all in the English language, will be submitted by the consultant to the Government (10 copies) and ADB (5 copies). The final report will also be submitted on CD ROM.

- (i) **Inception report.** This brief report should be submitted within 1 month of the start of the services. It should outline any changes in the approach, methodology, or work plan, as well as cost implications for the consultants' services (contained in the consultants' proposal) that are required to fulfill the terms of reference.
- (ii) **Interim report.** This report should be submitted within 4 months of the start of services and will summarize the progress of the TA.
- (iii) **Draft final report.** To be submitted at the end of 8 months.
- (iv) **Final report.** To be submitted within 1 month of receipt of comments from the Government.
- (v) **Progress reports.** To be submitted monthly.

E. Government Contribution

- 11. The Government will provide the consultant with the following:
 - (i) office space including furniture and utilities;
 - (ii) access to data, records, and other information required to perform the assigned tasks; and
 - (iii) counterpart staff and engineers to work with the consultant team.