

ECONOMIC POLICY NETWORK

Policy Paper 7

PROSPECTS AND APPROACHES TO PUBLIC PRIVATE PARTNERSHIP IN TRANSPORT INFRASTRUCTURE

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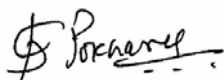
Inputs from various stakeholders during interactions at the FCAN, Advisory Committee meeting, and the workshop organized by the EPN Focal Unit have been incorporated in the report.

Foreword

Economic Policy Network (EPN) is an undertaking of His Majesty's Government of Nepal (HMG/N) since August 2004 with an Asian Development Bank (ADB) technical assistance (TA) to develop and institutionalize an open, responsive and result oriented economic policy formulation process based on sound economic analysis and dialogues with the partnership of public and private sector, academia, and independent professionals, to support and consolidate the Government's economic policy reforms on poverty reduction strategy. The initial focus has been in the areas of macroeconomic management, trade, investment, employment, infrastructure, tourism, agriculture, and regional development through four thematic advisory committees chaired by the secretaries of the respective implementing ministries, and guided by a high-level steering committee. The present study is an outcome of the initiative under the Advisory Committee for Economic Policy on Infrastructure Development chaired by the Secretary of the Ministry of Physical Planning and Works.

Infrastructure development, particularly transport infrastructure, is a precursor for national economic development. However, due to the Government's weak resource base, public financing of infrastructure has not been possible as desired. This shortfall has been effectively covered through private financing in South Asia in recent years. This study analyzes the policies, acts, and regulations pertaining to private sector financing of infrastructure projects in Nepal and recommends appropriate policy interventions to enhance PPP in transport infrastructure in the nation. The recommendations are the outcome of consensus reached among major stakeholders through various consultations and the EPN workshop. I hope the findings and recommendations will be helpful for policy makers for future reforms.

I would like to thank the Federation of Contractors' Associations of Nepal (FCAN) for leading the study, and Mr. Birendra Bahadur Deoja and his team for carrying out the study on their behalf. I also thank all those who have provided inputs for the report during the interactions at FCAN, the advisory committee meetings, and the EPN workshop. The work of the Advisory Committee for Economic Policy on Infrastructure Development is to be commended for selecting the issue and for following through with the study. I would also like to appreciate the entire EPN team for their hard work. I also thank the former Steering Committee chairperson (the then Chief Secretary of HMG/N) Dr. Bimal Prasad Koirala, for his guidance during his tenure. Last but not least, I would like to thank the ADB for supporting this initiative.



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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
CC	Coordination Committee
CA	Concession Agreement
CIDC	Construction Industry Development Council
CIDF	Construction Industry Development Fund
DOLIDAR	Department of Local Infrastructure Development and Agricultural Roads
DOR	Department of Roads
DOTM	Department of Transport Management
FAR	Financial Administration Rules
FCAN	Federation of Contractors' Associations of Nepal
HMGN	His Majesty's Government of Nepal
LIDP	Local Infrastructure Development Policy
LRN	Local Road Network
LSGA	Local Self-Governance Act
MOF	Ministry of Finance
MOLD	Ministry of Local Development
MPPW	Ministry of Physical Planning and Works
NTP	National Transport Policy
PCA	Pre-Concession Agreement
PPP	Public Private Partnership
RBN	Roads Board Nepal
RRMF	Rural Road Maintenance Fund
SCAEF	Society of Consulting Architectural and Engineering Firms
SRN	Strategic Road Network
WB	World Bank

The Nepali year is based on the Bikram Sambat calendar and is approximately 57 years ahead of the Gregorian calendar (2062/1/1 = 2005/4/14)

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EXECUTIVE SUMMARY

Background

Public Private Partnership (PPP) in infrastructures can take place in various forms namely, Build Operate Transfer (BOT), Service Contract (SC), Management Contract (MC), and Annuity Contract (AC), Special Project Vehicle (SPV) Contract, User Community or User Group or NGO based contract.

Private sector participation in public infrastructures started in Nepal with the hydropower projects after the enactment of the Hydropower Act 1992 and Electricity Act 1992 HMGN first approved BOT Policy on Roads Sector in 1999. This was followed by a comprehensive umbrella policy called "Public Infrastructure Build Operate and Transfer Policy 2057 and "Private Investment in Infrastructure Build and Operate Ordinance 2060. A common framework for infrastructure development under BOT system was thus established in Nepal. However, not a single BOT project on transport infrastructure has so far been signed under these policies and Act. Nevertheless, a number of community based projects such as green road and other programs for rural roads and trail bridges at the local level has been accomplished in Nepal in the past decades though not under a clear cut PPP concept of the recent times. Though all BOTs are PPP but not all PPPs are BOTs, this paper focuses on BOT and uses the terms BOT and PPP synonymously.

The objective of BOT or PPP project of the developed countries and that of developing countries is different in the sense that the PPP project in the developed countries are normally justified when it is ensured that the PPP based project would cost less and provide higher level of service than if the project was done by the public sector, whereas the investment of private capital is the main concern in case of developing countries. The Government of India has been carrying out PPP projects by three approaches namely BOT, Annuity, and Special Vehicle Project. It has facilitated the PPP through attractive provisions such as right of way (ROW) available to concessionaires free from all encumbrances, capital grant up to 40 % of project cost, 100% tax exemption for 5 years and 30% relief for next 5 years, duty free import of specified modern high capacity equipment, and arbitration and Conciliation Act 1996 based on UNICITRAL provisions. As a result, several PPP/BOT projects have been completed in India since 1995. Several more are ongoing and in the pipeline. The promulgation of National Highway Act 1988 and the Central Road Fund Act 2000 along with the policy initiatives for attracting private investment in highway improvements have contributed to the increasing trends in PPP in road development in India.

Major BOT projects are quite complicated in the sense that more than a dozen agencies and companies including government agency, consultant, contractor, supplier, experts, investors, operation and management company, and toll company are involved in a BOT project. Commercial banks, multilateral banks, export credit agencies, institutional investors, and special investors are the sources of finance for a PPP project. The loan repayment period varies depending on the type of financing and agency. Commercial banks provide loan for shorter periods, say 5 to 7 years, whereas multilateral banks and institutional investors allow 15 to 20 years for repayment.

BOT projects involving greater participation of the government / host country through equity participation, financial guarantee, partial funding /subsidy/grants of the government were more successful in other countries.

Existing and Potential PPP/BOT Project in the Transport Sector in Nepal

A 45 year contract by Kathmandu Municipality awarded in the year 2000 for the development and operation of a bus park and a lease operate and transfer (LOT) and DOT combined type of contract awarded for the overhead bridges in Kathmandu Municipality for a 20 years period are the only public private partnership type contracts so far awarded in Nepal. All of these contracts are based on the "Contract Act 2023".

A 3 km long Mankamana Cable Car from Prithvi Rajmarg to Mankamana Temple has been built owned and operated by Mankamana Cable Car Company.

Based on various studies so far in Nepal, the following are potential for BOT/PPP arrangements relating to transport infrastructure in Nepal:

- Katmandu – Terai Fast Track road and Railway
- Kanti Rajpath – 60 km
- Birgunj-Jitpur – 19 km
- Kathmandu, Outer Ring Road – 72 km
- Janakpur-Jayanagar – 25 km
- Sitapaila-Dharke – 25 km
- Other roads of short length and high traffic
- Maintenance of the high traffic sections of several roads in the Strategic Road Network on Develop Maintain Manage and Transfer or Develop Operate and Transfer basis.
- Overhead bridges, bypass, traffic intersections, and bus parks in urban roads
- Cableway/ropeway/waterway of short length connecting a popular pilgrimage/touristic site from a well accessed road head
- Cargo Complex at TIA
- New International Airport
- Domestic Airports Development and Operation
- User Community/ Group / NGO based rural roads and trail and trail bridges.

Policy Constraints

HMGN has made adequate policy commitments through National Transport Policy 2058, BOT Policy 2057, and Local Body PPP Policy 2060 on involvement of the private sector in the development of infrastructure but the implementation aspects of the policy has been very weak. The National Transport Policy provides for tax holiday and duty rebate whereas the BOT Policy has no such provision. The Local Body PPP policy is too generic and there are no supporting regulations or directives or standard concession agreement to guide the public agencies to plan and procure PPP projects effectively and efficiently.

The existing policies have no provisions to encourage greater roles of local contractors and consultant in the ICB contracts within and outside the country. The lack of continuity of minimum workload has made the use of contractors and consultants' equipment less than optimum and the trend of unhealthy competition is affecting the quality. Since the contractors and consultants are the main potential players of PPP/BOT projects in the public transport infrastructures, promotion of PPP requires facilitating them in a number of ways.

In order to encourage the private sector to use their ingenuity and capital in the public infrastructure provision and service delivery, whether central level or local level, or mega or small, rural or urban, it is necessary to develop a comprehensive policy framework covering all types of PPP projects and covering specificities of each type in terms of regulatory, financial, institutional, technological and procurement aspects indicating clearly the commitment of the government and the facilities to be extended to the private sector.

Legal Constraints

The current BOT/PPP policy and the ordinance in Nepal do not include provisions for PPPs such as Annuity Contracts, Special Project Vehicle Contract, Service Contracts and Management Contracts, and User Community/Group/NGO based contracts.

The BOT Ordinance 2061, though is basically built upon the principle of transparency and competition, may result in non-transparent procurements due to the provisions for BOT awards based on direct negotiation for project costing more than two billion rupees.

Unless specific commitment is made on income tax holidays and customs duty exemptions in the BOT Act, the provisions in other Acts such as Industrial Enterprises Act 1992 are unlikely to attract investors to invest on major transport infrastructure.

The Private Investment in Infrastructure Build and Operate Ordinance 2005 is intended for central level works and it does not mention specifically about the Local Bodies. Local Self Governance Act (LSGA) 1999 has provisions on encouraging the participation of private sector and non-governmental organizations in the service delivery. That is why PPP contracts signed by local bodies are based on Contract Act 2056, which is technically inappropriate to embody the principle of PPP/BOT contracts for infrastructure development

As per Article 265 of LSGA, Local Bodies can formulate the bylaws but not the rules. Since LBFAR generally follows HMGN FAR, and is to be prepared at the central level by MOLD/HMGN, it is better that local body PPP/BOT is included, through separate chapters, in the HMGN BOT/PPP Ordinance and Regulations.

Institutional Constraints

The BOT Policy and BOT Ordinance has made provisions for a 9-member Coordination Committee (CC) comprising of Vice Chairman of NPC, Member of NPC, Chief Secretary of HMGN, Secretaries of several ministries viz. Finance, Law and Justice, Physical Planning and Works, Prime Minister's Office, Related Ministry, and NPC with the Secretariat at NPC and the Secretary of NPC as the member secretary of the coordination committee. Such a committee is believed to be very useful in securing prompt decisions on project issues relating to multi sectors. However, since it is practically very difficult to organize frequent meetings of such high level authorities and there is no dedicated and well- resourced secretariat of the committee, the efficiency and effectiveness of such committee has not been obvious.

Since the focus of the development of Strategic Road Network (SRN) in Nepal shall be on maintenance, rehabilitations, improvement and upgrading of the existing roads, there is a significant scope for BOT/PPP projects in this area. The related implementation agencies such as Department of Roads and Department of Local Infrastructure Development and Agriculture Roads are not oriented towards functioning in a flexible, autonomous and commercial environment.

The case of Local Road Network (LRN) is different since most of these roads are low volume in traffic and social in their nature of service. Small scale PPP based on user community and involving capital grants could be considered for such roads. The facilities, the award process, the related institution for such PPPs should be clearly identified.

Article 12 of the BOT ordinance provides that the government may cancel the MOU/ or the Preliminary Concession Agreement (PCA) without any compensation to the Concessionaire/Project Proposer in case the reports are not submitted on time or if it is found that it is not possible or proper to implement the project. The second part of the article is not fair and shall discourage the investor.

Administrative Constraints

Lack of annual planning and budgeting of BOT Project under MPPW is the first constraint in initiating BOT projects. Lack of detailed regulations, guidelines and standard tender document (EOI, RFP) on BOT Project is the second constraint in evaluating and awarding BOT project. Lack of a monitoring mechanism is the third constraint in review of progress of BOT projects.

Even though a framework legal instrument (BOT Ordinance) has been in place since last two years, there are still many confidence-building measures to be accomplished before successful award of BOT contracts can take place in the transport sector in Nepal.

In case of PPP project for rural road or trails or trail bridges carried out under the project management by the central level sectoral agency or donor agency, the continuity of user committees after the completion of the project has often been questionable. The involvement of local body and their capacity enhancement must be properly addressed.

Recommendations

The study recommends the following measures to promote PPP projects in the transport sector in particular and infrastructure in general:

1. Prevailing PPP/BOT policies and Act may be transformed into a comprehensive PPP policy and PPP Act, which shall include separate provisions for Central level and local level PPP, and specific provision for each type of PPP in terms of facilities, regulations, institutions and procurement including provision of financial incentives such as grants, low interest rate loans, revenue short fall loan, least present value of return (LPVR), guarantees, and development of ancillary infrastructure in and around the project site.
2. Feasibility / pre-detailed design study of candidate BOT/PPP projects should be done well in advance by the BOT Committee of the Ministry, for which separate budget allocation should be made annually.
3. High power and full time BOT Committee with adequate budget and authority should be set up in MPPW and a separate BOT Project Office should be established for each BOT project.
4. Article 12 of the BOT ordinance enabling the government to cancel the MOU/ or the Preliminary Concession Agreement (PCA) without any compensation to the Concessionaire/Project Proposer should be amended suitably to be fair to the private investor. Similarly Article 9 of the BOT Ordinance should be amended to include unsolicited proposals of any amount in a fair and transparent manner for the project for which feasibility survey has not been carried out and accepted by the government.
5. The BOT awards/MOU/Concession Agreement should not be issued such that the private parties hold the licenses for several years without any progress.

6. PPP/BOT regulations under umbrella PPP Policy and Act should be formulated separately for each sector. LB FAR should include provisions in accordance with the PPP Act. HMGN FAR should include provision on PPP/BOT by referencing to the respective sectoral PPP regulations.
7. Income tax holiday and rebates and customs exemptions should be included in BOT Act.
8. Guidelines on procurement process, standard bidding documents such as invitation for expression of interest (short listing) and request for proposal (RFP), model concession agreement, EOI and RFP evaluation criteria, and guidelines on detail project report and negotiations for concession agreement for different types of PPP for central level and local level works should be prepared.
9. Significant institutional reforms are needed to improve coordination, efficiency and transparency, public acceptance of increasing direct and indirect highway charges and implementation capacity for maintenance and development of the road agencies (particularly DOR, RBN, DOTM dealing with Strategic Road Network).
10. There is a need for a separate regulatory agency responsible for all types of surface transport infrastructure such as roads, ropeway/cable car, waterway, and railway. It may be in the form of National Transportation Board or National Transport Regulatory Commission or Department of Surface Transport Development.
11. For Local Roads Network (LRN), a separate road development fund involving much lower level of fuel levy and tolls and other grants and subsidies should be devised to help Local Bodies to build new roads and to improve and maintain the existing roads, eighty percent of which are earthen.
12. Regular training should be organized by MPPW to train the officials of the MPPW, MOLD, MOCTCA, MOF, and NPC on BOT system. MOLD in coordination with the MPPW should organize PPP / BOT training to the selected Municipalities, DDCs and VDCs.
13. Overall Policy measures by HMGN in order to promote PPP should address the concerns of the consulting and contracting industry in order to ensure continuity of minimum workload and to provide them more opportunities to participate in the domestic and international contracts and professional meetings or activities within and outside the country. A separate PPP/ Infrastructure facilitation centre should be established.
14. The effectiveness of CIDC, MPPW and FCAN in collecting 0.1 percent of contract price for the Construction Industry Development Fund (CIDF) should be increased.
15. Single Borrower Limit imposed by Nepal Rastra Bank needs to be relaxed on a case-to-case basis to facilitate domestic financing of PPP projects.
16. Policy measures should encourage use of remittance from Nepali workers outside Nepal in the financing of PPP projects of shorter durations (five to ten years).

Policy Improvement Matrix

A number of policy, legal, institutional, and administrative improvements have been suggested in the policy improvement matrix (Table 2).

I. REVIEW OF PRESENT STATUS

A. Background

1. "A Public Private Partnership (PPP) is defined as any arrangement between a government and the private sector in which partially or traditionally public activities are performed by the private sector" – (E.S. Savas 2002). Public Private Partnership (PPP) in infrastructures can take place in various forms namely, Build Operate Transfer (BOT), Service Contract, Management Contract, Annuity, Special Project Vehicle (SPV), and Community or User Group based contracts. There are several variants of BOT, such as Build and Transfer (BT), Build Own Operate and Transfer (BOOT), Build Transfer and Operate (BTO), Lease Operate and Transfer (LOT), Lease Build and Operate (LBO), and Develop Operate and Transfer (DOT). The discussion here focuses more on BOT due to a need to attract private investment in major infrastructures.
2. The paucity of funds and the importance of equity and social considerations in developing economies make it difficult for the government to invest large amount in infrastructures despite their potential to contribute to significant economic growth. Joint efforts through capital inflow and technological and managerial innovativeness from the private sector and socio economic and implementation facilitations through regulatory and enforcement mechanism from the public sector has been a trend in many countries, in the last two decades, in provisioning of infrastructures and delivering of services. BOT projects were prominent in Thailand and Malaysia in early 1990s and in India in the mid 1990s.
3. In Nepal, private sector participation in hydropower projects was triggered by the Hydropower Act 1992 and Electricity Act 1992 even though the term BOT was not spelled out anywhere. BOT ideas started rolling in Nepal since 1994. HMGN cabinet first approved BOT Policy on Roads Sector in 1999. This was followed by a comprehensive umbrella policy, covering all kinds of public infrastructures, called "Public Infrastructure Build Operate and Transfer Policy 2057"(hereinafter called BOT Policy), which was approved by HMGN in 2001. BOT ordinance named "Private Investment in Infrastructure Build and Operate 2060"(which shall be hereafter termed as BOT Act) was first promulgated on August 22, 2003 and was updated in February 14, 2004. Thus a common framework for infrastructures development under BOT system was established in Nepal. The Ministry of Local Development issued "Public-Private Partnership Policy 2060" for Local Bodies in 2004. So far not a single BOT project on transport infrastructure has been signed under these policies and Act.
4. There is no example of completed PPP/BOT in case of transport infrastructure such as roads, airports, railways, waterways and ropeways in Nepal, except for the overhead bridges, bus-park implemented by Kathmandu Municipality and the Manakamana Cable Car. Linear infrastructures such as roads involve high uncertainties due to high investments, scattered sites and long time frame for implementation.
5. In case of PPP involving community or user groups or NGOs, there are several examples in Nepal on rural water supply, irrigation, tracks, trail bridges, rural roads and other community infrastructures works. The modalities are different depending on the donor agency, location and type of project. The users comprising of local community are involved in constructions and operation/maintenance of rural infrastructures partly funded by government or donor agency funds. Long term sustainability of such infrastructures is mostly dependant on continuity of government support in terms of institution and funding because the community institution often disappears after construction and the accountability can hardly be traced to any individual or member of the community as in the case of contracts with private parties registered as commercial entities.

B. BOT Policy, Acts and Rules

6. The objective of the "Public Infrastructure Build Operate and Transfer Policy 2057" as stated in its preamble is to attract the domestic and international investors in the development and expansion of the infrastructure to achieve high and sustainable economic growth. The "Private Investment in Infrastructure Build and Operate Ordinance 2060" underlines the objective as to provide reliable, economical, and affordable services to the people through involvement of the private sector in the build, operate and transfer of infrastructure in accordance with the liberal economic policy adopted by the country.
7. The Public Infrastructure Build Operate and Transfer Policy 2057 and the "Private Investment in Infrastructure Build and Operate Ordinance 2061 do not cover the PPP program such as service contract, management contract, and user community/group or NGO based contracts.
8. In order to encourage the private sector to use their ingenuity and capital in the public infrastructure provision and service delivery, whether central level or local level, or mega or small, rural or urban, it is necessary to develop a comprehensive policy framework covering all types of PPP projects and covering specificities of each type in terms of regulatory, financial, institutional, technological and procurement aspects indicating clearly the commitment of the government and the facilities to be extended to the private sector.
9. Figures 1 and 2 show the difference between the provisions of the prevailing BOT Policy and the BOT Ordinance. The main differences between the policy and the ordinance are: i) policy requires invitation for preliminary concept proposal (PCP) from all those submitting expression of interest, whereas ordinance requires evaluation of EOI and inviting short listed firms only for submitting the request for proposal (RFP); and ii) policy requires negotiation and signing of concession agreement (CA) based on detailed studies to be carried out by the proposer after acceptance of the PCP, whereas the ordinance requires signing of MoU or pre-concession agreement (PCA) after the selection of RFP, carrying out detailed studies by the proposer, negotiating and signing of concession agreement. The provisions of the ordinance are therefore more refined than that of the policy. However, the Ordinance does not include important facilities such as tax rebate, one percent customs duty, and establishment of Infrastructure Finance Corporation provisioned in the BOT Policy.

C. Past Efforts on Transport Infrastructure Related BOT in Nepal

10. HMGN had initiated, in 1994, efforts on carrying out feasibility study by the private sectors at their own expense for Kathmandu- Hetauda Fast Track Road and an International Airport at Simra. There was no policy or regulation existing at that time on build operate and transfer (BOT) or public private partnership (PPP). The MOUs expired without any progress.
11. The next attempt on BOT in the transport sector was initiated by invitation of expression interest (EOI) for Kathmandu-Hetauda Fast Track on June 1997. A preliminary concept proposal was requested from the only one firm who submitted EOI. In the absence of neither a policy nor regulation on the BOT or PPP, the proposal could not proceed further until a Public Roads BOT Policy 2055 was issued by HMGN on February 8, 1999 and HMGN decided to proceed with the proposer in accordance with the provisions of the policy. This effort also could not succeed even to the point of signing a concession agreement mainly because of the lack of feasibility study, detailed project report and a sound basis for negotiation. In the mean time HMGN approved a new umbrella policy on public infrastructure build operate and transfer in 2001. This umbrella policy covering BOT for all types of public infrastructure was followed by an Ordinance called Public Infrastructure Build Operate and Transfer 2003, which has been updated in 2004.

Figure 1: BOT Policy 2057

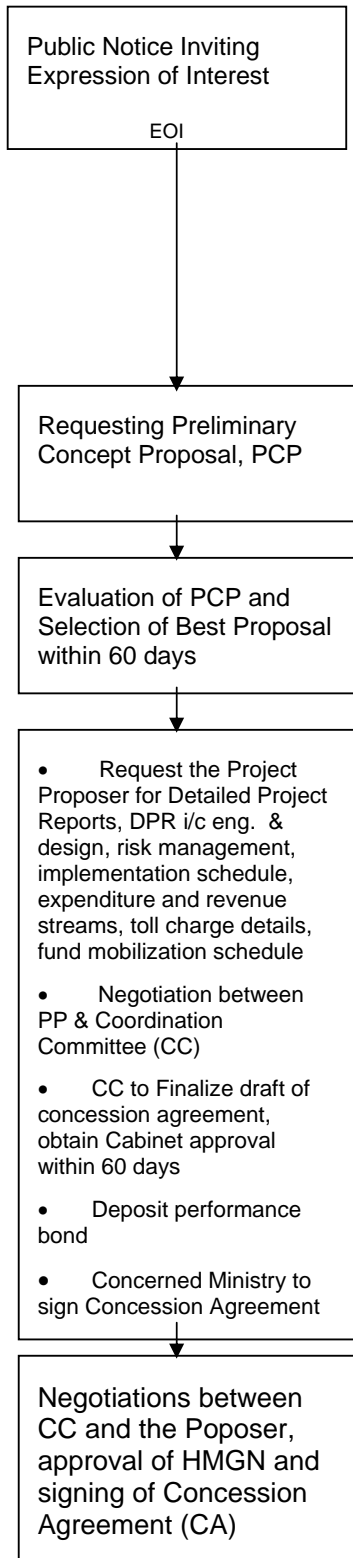
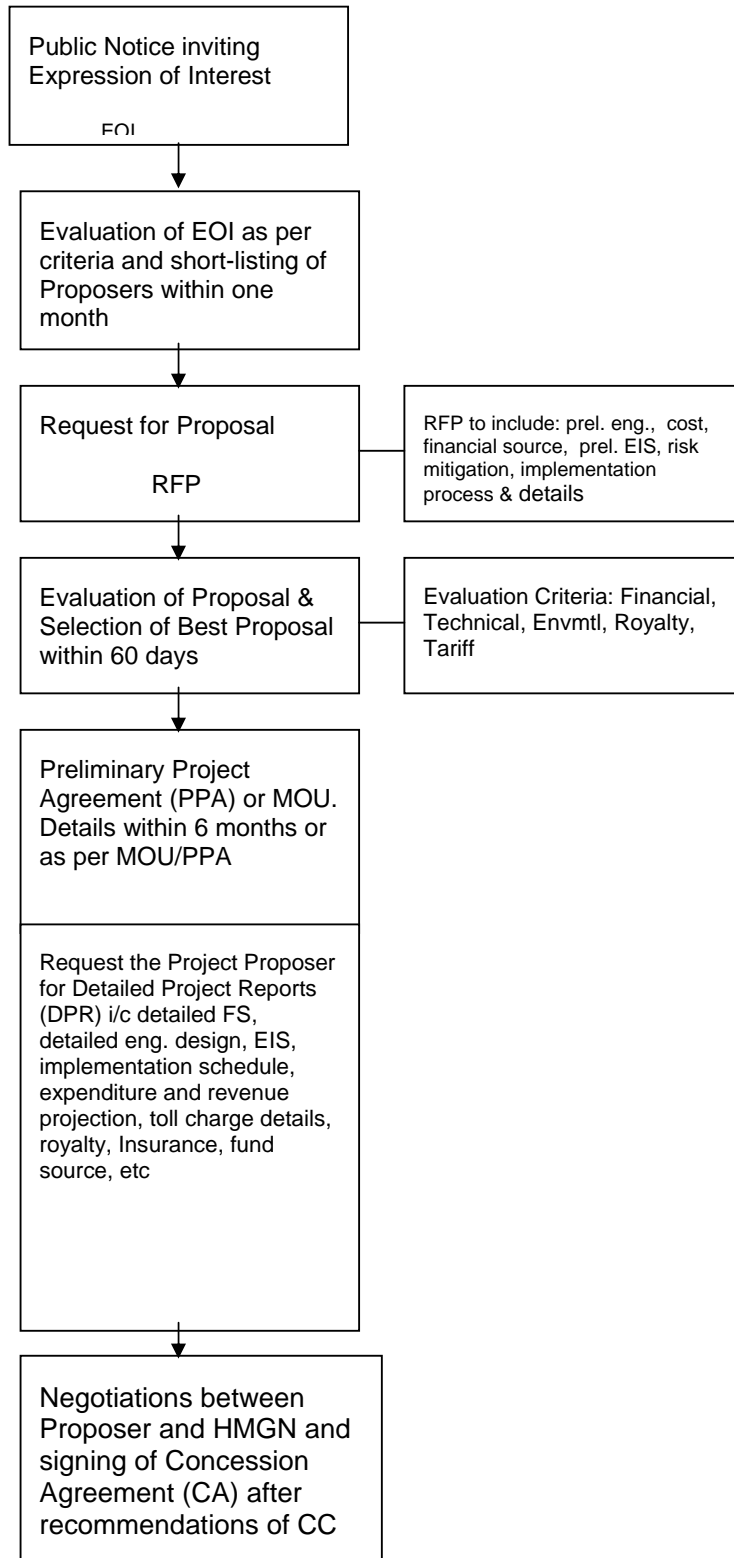


Figure 2: Private Investment in Infrastructure Build & Operate Ordinance 2061"



12. There were several unsuccessful attempts by the Ministry of Culture Tourism and Civil Aviation to award the development of Lumbini International Airport on BOT basis.
13. A cargo complex at TIA was completed at a cost of about 65 million rupees in 1998 but the Civil Aviation Authority of Nepal (CAAN) has not been able to award the operation of the cargo complex to a private party even in six years after completion. Lack of clear- cut rules on BOT or PPP under the CAAN regulations is probably the main reason for such a situation.
14. A 3 km long Mankamana Cable Car from Prithvi Rajmarg to Mankamana Temple, is a very successful private sector venture relating to transport infrastructure. This has been built and operated entirely by the private sector. It is not clear whether it falls in the category of public transport infrastructure and within the jurisdiction of BOT Ordinance since it appears that the Mankamana Cable Car has been licensed under the Industrial Enterprises Act 1992 and no concession agreement or franchising is involved in it. Under the Industrial Enterprises Act 1992, cable car complex falls under tourism industry, public transportation falls under service industry and ropeway falls under construction industry. Road, bridge, railway, trolley bus terminal, tunnel, and flying bridge are other transport related infrastructure classified under the construction industry for the purpose of the Industrial Enterprises Act 1992.
15. Kathmandu Municipality has awarded a 45 year contract in the year 2000 for the development and operation of a bus park, constructed under a foreign grant, to a private party on the basis of a develop, operate and transfer (DOT) system. In the same year, another lease operate and transfer (LOT) and DOT combined type of contract was awarded for the overhead bridges in Kathmandu Municipality for a period of 20 years. These contracts were based on the 33year old "Contract Act 2023". Criteria for recovering the costs of construction of projects built under grant funds is an issue not covered so far by any of the policies or regulations.

D. PPP in India

16. In India, the promulgation of National Highway Act 1988 and the Central Road Fund Act 2000 along with the policy initiatives for attracting private investment in highway improvements have contributed to the increasing trends in PPP in road development. 197 km of National Highway (NH) has been completed under 5 different BOT contracts and 287 km of NH is under construction under BOT; 475 km of NH is in progress under Annuity basis; and 129 km of NH has been completed and 264 km of NH is in progress under SPV basis. Several States in India have also taken up BOT initiatives. Mumbai-Pune Expressway (109 kms) is a successful project carried out by Government through a 30 year BOT agreement with Maharashtra State Road Development Corporation (MSRDC).
17. The following are the policy initiatives for attracting private sector investments in India:
 - Government will carry out all preparatory work including land acquisition and utility removal. Right of way (ROW) to be made available to concessionaires free from all encumbrances.
 - National Highway Authority of India (NHAI) / Government of India (GOI) to provide capital grant up to 40% of project cost to enhance viability on a case to case basis
 - 100% tax exemption for 5 years and 30% relief for next 5 years, which may be availed of in 20 years.
 - In Mumbai – Pune Expressway the government has agreed to give 1000 hectare of land for commercial exploitation to make the project financially viable.
 - Government provided exemption from royalty on minor minerals, sales tax etc

- Concession period allowed up to 30 years
- Arbitration and Conciliation Act 1996 based on UNICITRAL provisions.
- In BOT projects entrepreneur are allowed to collect and retain tolls.
- Duty free import of specified modern high capacity equipment for highway construction.

E. PPP in Australia

18. The important features of the Australian PPP Policy are:

- Policy applies to public infrastructure projects where the expected capital value will exceed 30 million Australian Dollar or the Net Present Value of the strategic priority will exceed 50 million Australian Dollar during the term of the contractual relationship.
- Policy vigorously pursued where it is likely that a better outcome (value for money) can be achieved when measured against the traditional infrastructure or service delivery methods.
- Risk allocation will be allocated to whichever party is best able to manage that risk.
- Encourage innovation in the provision of infrastructure and related service delivery.
- Maximize social and economic returns.
- Clearly articulate accountabilities for outcomes.
- Focus on output specification rather than the input specification.
- Adequate arrangements to ensure that the disadvantaged groups can effectively use the infrastructure.
- Establishment of a Government Project Team within the responsible agency for the delivery of the feasibility and procurement of the project. Delegation of sufficient powers through the Chief Executive Officer to ensure the Project director is suitably empowered, with appropriate reporting accountability, to deliver the project to cost, quality and time and to manage the Government Team.

F. BOT Practices and Experience from Other Countries

19. BOT projects are quite complicated in the sense that more than a dozen agencies and companies including government agency, consultant, contractor, supplier, experts, investors, operation and management company, and toll company are involved in a BOT project. Commercial banks, multilateral banks, export credit agencies, institutional investors, and special investors are the sources of finance for a PPP project. The loan repayment period varies depending on the type of financing and agency. Commercial banks provide loan for shorter periods, say 5 to 7 years, whereas multilateral banks and institutional investors allow 15 to 20 years for repayment.
20. BOT projects involving greater participation of the government / host country through equity participation, financial guarantee and incentives, partial funding /subsidy of the government were more successful in other countries. Different activities of a BOT project may justify different sources of finance.
21. It is not only the private company or the concessionaire who is subject to risk, but the government agency is also exposed to risks, from the concessionaire or private parties, such as over costing, under spending, undue claims, overcharging the users, and sub standard quality of infrastructure and the service delivery. Proper risk sharing and management responsibility needs to be clearly stated in the concession agreement. Normally the risks covered by the government are foreign exchange non-availability risks, traffic interruption by national emergencies / security problems, and fuel supply risks due to governments

restrictions on import of fuel by private agency. The risks that could be managed by the contractor are time and cost over-run risks from inefficiency or failures of design and management and fund mobilization risks. Highway projects are not as attractive as power projects due to the fact that the power purchase agreements (PPA) guarantee the price and purchase through take or pay arrangement. It is difficult to guarantee the traffic level in case of roads. However, it is possible to adjust the concession period based upon the variation in actual traffic from the base traffic and the consequent impact on the revenue streams. Toll charges may be subject to adjustments on the basis of traffic levels and the price index as per formula and mechanism agreed in the concession agreement. It is neither possible nor desirable to fix the toll rates for the entire period of the concession agreement. However, other methods of PPP, applied in India and other countries, such as Special Project Vehicle (SPV), Annuity, Shadow Toll, Least Present Value of Return (LPVR) should be explored for a suitable management of risks depending on the specificities of the project and the country.

22. Annex 1 presents a figure of typical organizational arrangement for a major BOT project. Annex 2 presents a table showing sources of foreign debt financing for BOT projects. Annex 3 shows a table of probable sources of finance for various activities of a BOT project. Annex 4 presents a table indicating risk management framework. Annex 5 presents a table showing brief description of road projects carried out on BOT basis in some countries.

II. PROSPECTS OF BOT PROJECT IN THE TRANSPORT SECTOR IN NEPAL

G. The Potential BOT Road Projects

23. A road project is less attractive for PPP in Nepal because it is difficult to guarantee the traffic level and the minimum revenue. Land acquisition and maintenance of right of way free from encroachment in a linear infrastructure such as a road is more complicated as the site is scattered and ribbon development along the road is difficult to control. The BOT Policy and the BOT Ordinance does not provide tax holiday. The Electricity Act 1992 provided a corporate income tax holiday of 15 years until the Income Tax Act 2002 repealed these provisions. The off-take agreement for power purchase guarantees the investor whereas it is difficult to guarantee traffic in case of road project. The Industrial Enterprises Act 1992 also had provisions for income tax rebate such as a fifty percent tax rebate for ten years and a maximum income tax of 20 percent until 2002, when these provisions were repealed by the Income Tax Act.
24. A study carried out by Ministry of Physical Planning and Works in 2001 has identified possible BOT projects in the roads sector. Seventeen projects were long listed and were prioritized on the basis of weighting criteria for short listing. Annexure 6 and 7 present an example of long-listing and short -listing of potential BOT projects in the roads sector.
25. Preliminary financial analysis carried out by MPPW for the top five short listed projects in 2001 indicate attractive results for BOT schemes for these roads (Table 1). Toll charge is the main source of revenue. It has been calculated on the basis of savings in vehicle operating cost (VOC) due to saving in length and saving in time, and saving from better quality road. Toll charge is fixed as 20 percent to 50 percent of the user saving depending upon the costs of the road. Toll charge for motorcycle is fixed as 10 to 20% of light vehicle. Traffic increase at 6% per year and toll charge increase at 5% per year has been considered. Revenue from supplemental economic activities is also considered at 2 to 3% of annual toll revenue.

Table 1: Summary of Financial Analysis of Short Listed BOT Road Projects

S.No.	Road	Length km	Analysis Period years	Construction Cost, mil. Rs	FIRR %	B:C
1	Kanti Rajpath*	60	25	1137	29	5.54
2	Birgunj-Jitpur	19	25	270	26	4.87
3	Kathmandu, Outer RR	72	25	5680	25.8	4.71
4	Janakpur-Jayanagar	25	25	355	20.3	3.06
5	Sitapaila-Dharke	25	25	605	26.7	4.8

*Tikabhairav-Makawanpurgadhi section

Source: "Identification of Candidate Projects under Public-Private-Partnership Program in the Road Sector", A study conducted for MoPPW by NEPECON in June 2001.

H. Other Potential BOT/PPP Projects

26. Due to terrain, volume of traffic, and the existing socio economic level, the viability of BOT projects in the other modes of transportation such as ropeway, railway and waterway is very low. However, learning from the 3 km long Mankamana cableway, cableway / ropeway/ waterway of short length connecting a popular pilgrimage / touristic sites from a well-accessed road head are worth considering for BOT /BOO projects. The BOO system is not covered by the prevailing BOT Ordinance. The Trolley bus service in Kathmandu should have been commercially viable but it is not so at present due to several choices available to the user from the competing three-wheeler, microbus and regular bus services.
27. Rehabilitation, upgrading, improvement, and periodic maintenance of the existing SRN are the most viable candidates for Develop Operate and Transfer (DOT) projects. The Road Board Nepal has a mandate for collecting toll charges, the DOR has the mandate for maintenance and development of roads, and Department of Transport Management (DOTM) has the mandate for transport management. The DOT Package can be a four party concession agreement conceding to franchise the concessionaire to collect toll, carry out maintenance and ensure a smooth traffic flow. The concerned local bodies could be additional parties to the contract to ensure uninterrupted implementation of the BOT agreement.
28. In case of Local Road Network (LRN), Local Bodies may apply BOT approaches in some of the high traffic sections or bypass or traffic intersections of the urban roads within the municipality.
29. Even in low traffic LRN public private partnership based on annuity or BOT with central or local government grants or financial incentives could be applied with some improvements in the prevailing community or user group type participation. Domestic investors should be considered for most of the small scale PPP projects to avoid the foreign currency repatriation problems. Whether it is a foreign investment or domestic investment, PPP would be popular and meaningful once confidence is gained through some demonstration PPP projects.

I. Mega Projects

30. Due to the importance of Kathmandu and the importance of a full fledged international hub airport with precision landing facility for the long term tourism needs of Nepal, Kathmandu-Terai link by a high speed surface transportation system and a new international airport (NIA) at Nijgadh are the most promising projects where PPP could be applied. The size of these projects and the complexities involved in their planning, building and operating demands serious commitments from the government. A pre-detailed level design and cost estimate and a well-prepared bid document are essential to obtain proper offers and to

evaluate them without probity issues. Attractive conditions such as Government grants, tax exemptions, duty free imports, and UNICITRAL arbitration shall be very helpful for smooth implementation of these projects. Such projects have tremendous room for creativity, ingenuity and technology applications and transfer and therefore should involve foreign investment.

31. A high-speed transportation between Kathmandu and Terai could be achieved by one of the following infrastructures:

- Kathmandu – Hetauda Expressway with tunnels
or
- Kathmandu – Hetauda Railway
or
- Kathmandu – Terai Expressway (without tunnels) along Bagmati
or
- Kathmandu – Hetauda Railway and Kathmandu – Terai Expressway (without tunnels) along Bagmati River.

32. Option 4 that is Kathmandu – Hetauda Railway and Kathmandu – Terai Expressway (without tunnels) along Bagmati River would be the best option even though it will reduce the financial return due to two different modes of transportation sharing the same traffic. The technical advantages in this option are that:

- The Chandragiri and Chisapni geology is more favourable for tunnelling.
- Railway tunnel construction and operation is not very complicated as compared to highway tunnel. The 50 km long railway project would cost about 20 billion rupees (300million dollar).
- The construction and operation of railway tunnel is much simpler and safer than the highway tunnel.
- The highway following Bagmati River throughout from Kathmandu to the Mahendra Rajmarga in the Terai would not involve tunnel operation problems. The flatter terrain along the Bagmati basin would present much lesser engineering-geological hazards and allow development of satellite towns and help reduce congestion in Kathmandu. The cost of this option for a four-lane expressway would be about 10 billion rupees (150million dollar).
- The two different modes of transport would serve as back up arrangements in case of disruptions due to abnormal rainfall and the resulting landslides and slope failures.
- These links would ensure reliable and the most efficient transportation between Kathmandu and the potential new international airport (NIA) at Nijgadh.
- The international airport project may be developed in several phases. It would cost about 1.5 billion dollar, excluding the cost of 2200 hectares of land, for the first phase, which may include single runway, taxiway, apron, terminal building and other facilities to start airport operation.

III. POLICY, LEGAL, INSTITUTIONAL, AND ADMINISTRATIVE CONSTRAINTS

J. Policy

33. The existing "Public Infrastructure Build Operate and Transfer Policy 2057" is a comprehensive BOT policy of HMG. It is supposed to be an umbrella policy but the hydro power BOT projects are still treated differently in the sense that the Electricity Act 1992 provides for a 15 year income tax holiday and income tax rebate of 15 % of the applicable corporate income tax whereas neither the umbrella BOT policy nor the BOT Ordinance has such a provision.

34. HMGN has made adequate policy commitments on involvement of the private sector in the development of transport infrastructure but the implementation aspects of the policy has been very weak. The following provisions of National Transport Policy (NTP) 2058 are some examples:
- Policy Clause 5.13 provides for the utmost involvement of private sector in the development of transport infrastructure and expansion of the transport services.
 - Working Policy Clause 6.1 provides for encouragement to private sector in the construction of the environment friendly and tourism related wire road, cable car, and, green roads of short lengths.
 - Working Policy Clause 6 provides for the encouragement of domestic and international private investors through BOT schemes, foreign exchange facilities, tax and customs rebates for a fixed period and advance acquisition of land for the development of transport infrastructures such as roads, airports, railway, waterway and ropeway.
35. Policy Clause 7.3, 7.4, 7.5 and 7.6 provide for the encouragement to the private sector for the development of waterway, railway, cable car and ropeway.
36. Maintain-Transfer (MT) system or Develop Operate and Transfer (DOT) system could be applied for maintenance of small to medium scale roads through BOT system involving domestic contractors. The DOT system would be better because operation of traffic or traffic management would also be involved in a long-term maintenance contract. This would require the involvement of DOTM also in the PPP package. The experience of performance based maintenance contract (PBMC) system under DOR would provide a base for MT or MOT or DOT approach.
37. International firms are needed for large-scale infrastructures such as Kathmandu–Terai Expressway, New international Airport and major road rehabilitations or improvement projects but it is not possible to attract them without tax holiday, duty exemptions, etc. These facilities are needed to minimize the bureaucratic hassles during the implementations. Environment of smooth and uninterrupted progress is one of the main concerns of the reputed foreign investors/ builders.
38. Domestic contractors and consultants need certain amount of moral and material boost to improve their overall capability, competence and confidence. The prevailing rules do not encourage the domestic contractors and consultants to participate in the ICB contracts within Nepal because the experience, turn over requirements, and joint venture requirements set out in the Public Works Directives (PWD) are high. Facilities are required to encourage the contractors and consultants to participate in the international conference, meetings and construction and consulting jobs.
39. It may be noted that the capability of Nepalese contractors in owning and operating equipment significantly improved as a result of the Swiss, ADB and WB efforts in the last decade helping the contractors with foreign currency and interest free advance for procurement of equipment in the contracts in the road projects funded by them. By now, 17 of the 176 class A contractors own 608 pieces of equipment of about 8 to 10 years average age compared to DOR corresponding equipment fleet of 535 numbers of about more than 15 years age. There are 7 Asphalt Plants, 4 Asphalt Pavers, 43 bitumen distributors, 10 bitumen heaters, 13 Cranes, 19 Dozers, 43 Excavators, 49 Graders, 20 Wheel Loaders and 10 Back hoes, 22 Rollers, and 49 Vibrating Rollers besides other equipment with the 17 private contractors in Nepal. Unfortunately, most of the equipment is idle due to insufficient workload.

40. On the consulting industry, there are about 500 registered firms in Nepal but only about 62 firms are registered with Society of Consulting Architectural and Engineering Firms (SCAEF). The issues in the consulting services are:

- Absence of a separate legal instrument to facilitate and deal with the consultancy service sector.
- Slow impacts on policy and regulatory reforms relating to consultancy services on public works due to lack of a designated focal ministry / agency or a consultancy industry promotion centre.
- Inadequate representation of consultancy firms in the national forums.
- Use of expatriate consultant even for services within the competence of local consultants.
- Lack of harmonization of standards and procurement practices despite the issue of Public Works Directives.
- Unhealthy competition among private consultants due to lack of quality based selection system (QCBS) even for the complicated nature of works.
- Very low ceiling (Rs100, 000) for direct award and level playing field for government owned consultancy firms.

41. Several other provisions and amendments are needed in the existing "Public Infrastructure Build Operate and Transfer Policy 2057" to make it more attractive to private sectors including communities and NGOs and more practical for HMGN to enforce it. The Policy and the Act should be harmonized.

42. Ministry of Local Development has issued a policy called "Public Private Partnership 2060" about two years back. This policy is very generic and does not address many practical problems such as maximum period of concession agreement, procurement process, amendment or variations in the agreement, responsible institutions, financing mechanisms, and the facilities and protections from the government. The revision in the "Public Infrastructure Build Operate and Transfer Policy 2057" should include a separate section for Local Body PPP.

K. Legal Instruments

43. With the promulgation of the ordinance on private sector investment in infrastructure build and operate in August 2003 for the first time and its continuation through promulgation of the ordinance again in February 2004, the long felt need for a legal instrument for BOT system has been fulfilled. Nevertheless, the ordinance, due to its very nature, needs to be renewed after every six months. The legal instrument, though is basically built upon the principle of transparency and competition, may result in non-transparent procurements due to the provisions for BOT awards based on direct negotiation for project costing more than two billion rupees.

44. The ordinance has provided for the minimization of risks to the investor through provisions on government assistance on acquisition of land, grant of foreign exchange facility for repatriation of the loan and interest money, and protection against nationalization.

45. Tax holiday or tax rebate provisions are not made in the BOT Ordinance probably due to the repealing of such provisions from other Acts also by the Income Tax Act 2002. Experience from other countries indicate that unless specific commitment is made in the BOT Act for income tax holiday/ rebate, customs exemption, and other financial incentives, private investors are unlikely to be attracted to invest on transport infrastructure.

46. Since not a single BOT project on roads sector has been awarded so far, the feedbacks from practical experiences in Nepal is not available.

47. The Private Investment in Infrastructure Build and Operate Ordinance 2005 is intended for central level works and it does not mention specifically about the Local Bodies. Local Self Governance Act (LSGA) 1999 does have certain provisions, Articles 3(cha), 51, 96(3), 121(1), 127(2) and 209, on encouraging the participation of private sector in the service delivery functions and the involvement of non governmental organizations and the user committees in the planning and implementation of development works. Article 116(5) clearly mentions that the projects involving financing by the nongovernmental organizations (NGO) shall be implemented as per agreement between the municipality and the NGO. But the Local Body Financial Rules 2056 (LBFAR) does not have any provision regarding the contract or agreement with the private sector or NGO regarding PPP projects. As per Article 265 of LSGA, Local Bodies can formulate the bylaws but not the rules. The definition and mandate of the user committee is not very clear in the sense that LBFAR and the sectoral rules or donor-funded projects have different approaches to the functioning of user committees. The PPP Policy 2060 prepared by MOLD for Local Bodies has stated service contract, management contract and BOT as the various forms of PPP. The LB PPP Policy 2060 has provisions such as establishment of a BOT Committee, formulation of necessary Act and Rules by HMGN, and preparation of necessary Directives and Implementation Procedures within the provision of the prevailing Acts or Regulations by MOLD. However, these have not been accomplished so far.
48. The BOT agreement signed by some of the municipalities are based on the Contract Act 2023" and hardly conform to the normal BOT process or principle. Moreover the Contract Act has been repealed and a new contract Act 2056 has been enacted. The Contract Act 2056, however, is not adequate to cover the specificities of a public infrastructure. Regulations, guidelines and standard documents have not yet been developed under the BOT Act. This has resulted in an overall lack of confidence and a general tendency among civil servants to avoid BOT procurement.
49. The PPP/BOT Act should have a separate chapter for local bodies. Local bodies may be empowered to develop their own regulations within the framework of the BOT Act.
50. Regular training to the officials of the MPPW, MOLD, MOCTCA, MOF, and NPC on BOT system and legal provisions should be organized by MPPW. MOLD in coordination with the MPPW should organize BOT training to the selected Municipalities, DDCs and VDCs.

L. Institutional Constraints

51. The BOT Policy and BOT Ordinance has made provisions for a 9-member Coordination Committee (CC) comprising of Vice Chairman of NPC, Member NPC, Chief Secretary of HMGN, Secretaries of several ministries viz. Finance, Law and Justice, Physical Planning and Works, Prime Minister's Office, Related Ministry, and NPC with the Secretariat at NPC and the Secretary of NPC as the member secretary of the coordination committee. The ordinance has a provision for a Technical Committee headed by the secretary of the concerned ministry. These arrangements do not provide adequate emphasis on the BOT projects since the members and the member secretary of the committee are all full timers for works other than BOT project and have very little expertise and technical background needed for such works. Such a committee is important for effective coordination of the multiple sectors involved but is not appropriate to carry out the bulk of the regular work focused at BOT projects. Therefore, there is a need for a full time BOT Committee at each Ministry a dedicated BOT Project Office for each BOT/PPP project.
52. The BOT Committee at MPPW should prepare annual plans for Transport sector BOT projects. It should initially be manned by domestic and international experts, and equipped with sufficient logistics and budget. The CC should meet for major decisions only at the request of MPPW.

53. The Ordinance has limited the role of the CC to coordination, project identification and prioritization, and monitoring whereas the BOT Policy involves the CC in evaluation of proposals, negotiation with the bidder, supervision and monitoring of the BOT project. The provision of the BOT Ordinance is more practical in the sense that the NPC cannot assume the executive agency and implementing agency roles generally played by the line ministry. A rigorous and effective coordination shall be required among various government agencies and the CC during the entire cycle of the BOT project. The BOT Project office needs to be sufficiently empowered to organize the meetings and expedite implementations of the decisions.
54. The focus of the development of Strategic Road Network (SRN) in Nepal shall be on rehabilitations, improvement and upgrading. The traditional SRN agency, Department of Roads (DOR), cannot cope up with the need for a commercial accounting and a business oriented approach to be introduced in highway agencies. Significant institutional reforms are needed to improve coordination, efficiency and transparency, public acceptance of increasing direct and indirect highway charges and implementation capacity for maintenance and development of existing SRN. Traditionally, roads are treated as public goods financed from general revenue with little connection between the costs of road provision and the taxes or charges paid by road users. There is no attempt at direct road pricing. With a commercial approach, roads are increasingly treated as capital asset, commercial accounting is applied and users are charged, either directly or indirectly, for road use. Road transport remains a source of general revenue, but taxes are designed to minimize distortions to transport patterns and choices. Road finance is increasingly separated from general government expenditures and road users are increasingly involved in decision-making.
55. Adjustment of the toll charges or the concession period as per actual conditions of traffic, project costs and force majeure, regulating the tariff of the transportation services, and addressing a number of complicated issues that may arise during the PPP/BOT project could be crucial for smooth implementation of the BOT projects. There is also a need for an effective agency for the development of surface transport infrastructure such as roads, ropeway/cable car, waterway, and railway. Therefore a regulatory agency called Transportation Regulatory Commission or a National Transportation Board or a Department of Surface Transport Development may be established. The board members or commissioners or directors may comprise of highly qualified and experienced professionals well paid and serving full time for a non-extendable fixed period. Such agency/authority may be established only after a few BOT projects are awarded.
56. Nevertheless, the case of Local Road Network (LRN) is different since most of these roads are low volume in traffic and social in their nature of service. A separate road development fund involving much lower level of fuel levy and tolls and other grants, subsidies or financial incentives need to be devised to help Local Bodies to build new roads and to improve and maintain the existing roads, eighty percent of which are earthen.
57. The commitment of the government should be clear and the policies should also be clearly defined and the procurement process must be well established and transparent.

M. Administrative Constraints

58. Lack of annual planning and budgeting of BOT Project under MPPW is the first constraint in initiating BOT projects. Lack of detailed regulations, guidelines and standard tender document (EOI, RFP) on BOT Project is the second constraint in evaluating and awarding BOT project. Lack of a monitoring mechanism is the third constraint in review of progress of BOT projects.
59. Even though a framework legal instrument (BOT Ordinance) has been in place since last two years, there are still many confidence-building measures to be accomplished before

successful award of BOT contracts can take place in the transport sector in Nepal. The following are particularly important:

- Clear the objective of the government along with the scope of work
- Identification of potential BOT projects.
- Dissemination of information on potential BOT projects
- Awareness building of domestic and foreign financial institutions and construction industry entrepreneur on the special attractions of BOT system in Nepal.
- Establishment of a dedicated, full time and adequately authorized BOT Committee/Project in the MPPW and other Ministries.
- Preparation of standardized procurement document (model concession agreement, model RFP, evaluation criteria, and guidelines on evaluation and negotiation) for different types of PPP for central level works and local level works.
- Confidence building through two to three small road and airport BOT projects at the central level and two to three PPP projects at the local level.

60. It should be remembered that the main advantage of BOT projects should be greater cost-effectiveness compared to the operational and maintenance costs under the traditional departments. In other words, it is assumed that lower total life cycle costs and higher level of reliability and standard of service would result from the involvement of the private sector due to their ingenuity, creativity and flexibility. A commercially oriented road agency, therefore, becomes necessary to ensure efficiency demanded by the PPP and the overall sustainability criteria.

IV. CONSIDERATIONS FOR BOT PROCESS IN NEPAL

N. BOT Process Flow Chart

61. The PPP/BOT project initiation and award process shall involve:

- Preparation of a long list of candidate PPP projects based upon agreed criteria.
- Preparation of a short list of candidate PPP projects based upon agreed criteria
- Budget provision for MPPW for feasibility study, survey and design of the short-listed projects.
- Feasibility study and pre-detailed survey design and cost estimate of the short-listed project.
- Decision on type of PPP (BOT with government grant or without government grant or SPV or Annuity or Community or User Group Contract in case of rural works under Local Bodies, the urban works under LBs may be treated same as other central level BOT projects).
- Procurement Planning for the selected projects
- Bidding and award (EOI, RFP, evaluation/selection, MoU/PCA, study by private party, negotiation and signing of concession agreement).

62. Figure 3 presents a flow chart for a BOT process within the framework of prevailing BOT Ordinance in Nepal.

63. The preparation for tendering by government is a very important phase. The preliminary feasibility survey or preferably pre-construction site survey and design of various options should be ready for complicated projects even though considerable investment may be required for such work. This will ensure confidence of both the government and the private party.

64. The short listing should limit the competition to 5 to 7 most competent firms. The bidder should provide sufficient detail of the sponsors and important members of the consortium who would form a joint venture or special project vehicle for the implementation of the project.
65. The request for proposal (RFP) should be prepared very carefully. It should include instructions to bidders including evaluation criteria, details terms of reference and scope of works, technical specifications and standardized agreement (including general conditions of contract) and specific conditions of contract.
66. The next very important phase is the detailed studies and preparations for negotiation of concession agreement by the concessionaire. This phase involves a considerable amount of investment by the private party for detail engineering and environmental studies. The concessionaire should interact rigorously with the government in the study of traffic flows, development of design and standards, finalization of land requirement, design of environmental mitigations and planning of resettlement during this stage. Since these factors are crucial to determination of toll charges, and estimation of cost and revenue streams, the negotiation for the concession agreement could be time consuming and quite demanding on the part of the government.
67. It is clear from Figure 3 that the entire BOT process till signing of concession agreement may take up to four and half years. This would reduce to about one and half year once the feasibility and pre-detailed designs are done and learning from some BOT projects is complete.
68. The project identification, pre-feasibility study and detailed feasibility study including site survey and pre-construction design takes about two and half years, the bidding including bid evaluation and signing of MOU takes about 1 year, and the selected bidder's detailed study reports, negotiation and signing of concession agreement takes about one year.
69. The time period could be reduced to one and half year to two year in case of direct negotiation process, which may start from direct signing of pre concession agreement (PCA) based on the RFP document.
70. In case of Local Body PPP, the procurement process shall be slightly different depending on whether it is a service contract of management contractor Annuity contract or User Committee/Group BOT or regular BOT. In case of User Committee BOT approach, the procurement process may start with direct negotiation with the user community.

O. Criteria for Long-listing and Short-listing of Candidate BOT projects

71. The following criteria may be adopted for long listing of Possible BOT road projects of SRN category:
 - Revenue source or roads with high level of traffic.
 - Short road length.
 - Land acquisition problems.
 - Possibility of financial return at prevailing rates, within 15 to 20 years or less.
 - Problems of forest clearance.
 - Problems of social action plans.
 - Economic activities within the influence area.
 - Interference by local body regulations.
 - Number of entry and exits.
 - Problems of collection of user charges/ tolls.
 - Possibility of financial incentives from the Government.

72. Short listing may be done by ranking of the long listed roads on the basis of weighting of the following factors:

- Importance.
- Pre-feasibility study result
- Clarity of designs and standards
- Cost
- Government grant/financial incentives
- Land Acquisition
- Other problems

P. Criteria for Long-listing and Short-listing of PPP Projects for Local Level Transport Infrastructure

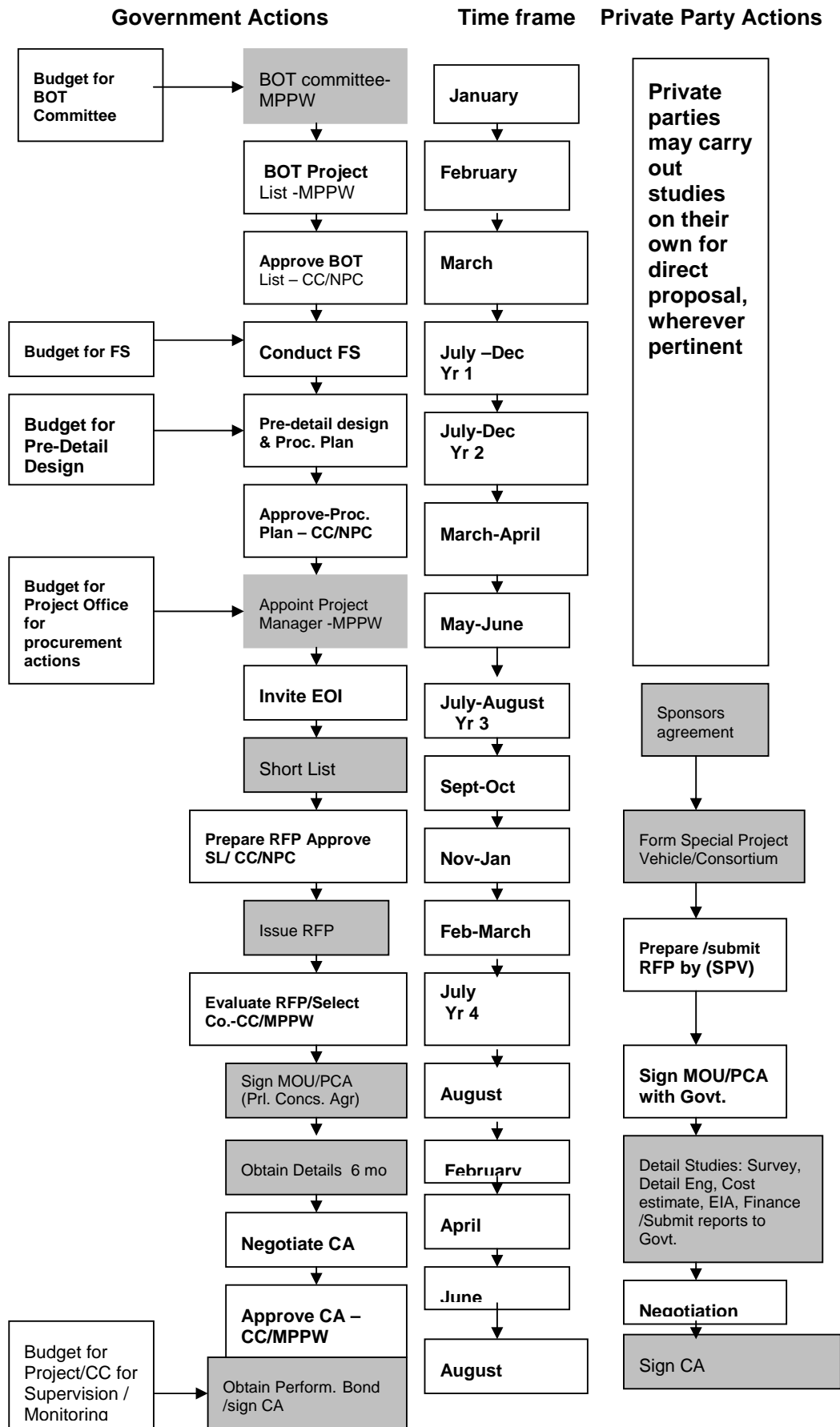
The following criteria may be adopted for long listing of local level projects:

- Length (Higher weight for shorter length, should normally be less than 30 km)
- Traffic (Should be more than 50 AADT)
- Willingness of the people to pay toll charge or user fees
- Possibility of user community or user group to take the responsibility for 15 to 30 years under clear-cut accountability framework.
- Possibility of built-in operation and maintenance sustainability mechanism in the construction contract.
- Possibility of grants to cover the partial costs for construction, maintenance and operation.
- Availability of land
- Contribution to social inclusion and poverty alleviation of the local area.

The following criteria may be adopted for short listing of local level projects:

- Possibility of government grant or annuity to improve the financial viability of the project.
- Commitment of concerned local bodies or availability of reliable contractors for a long-term (more than 10 years) construction, maintenance and operation.
- Proven or committed user committees/ groups for direct award or fair and transparent bidding procedure for competitive bidding.
- Availability of local level infrastructure financing institution.
- Clearly identified supporting economic activities within the influence area.
- Clarity of optimum designs and standards for the life cycle
- Availability of land

Figure 3: BOT Process



V. RECOMMENDATIONS

73. The study recommends the following measures to promote PPP projects in the transport sector in particular and infrastructure in general for central level and local level works:

- 1) Take up demonstration projects in the public transport infrastructure, at least two number BOT projects in the central level and three to five PPPs at the local level.
- 2) Prepare a long-list of candidate PPP projects at the central level and local level.
- 3) Prepare and publicize literature on PPPs at the central level and local level.
- 4) The existing BOT Policy and the Ordinance should be renamed/amended to include all kinds of PPP and all types of infrastructure. The umbrella PPP Policy and Act should include public private partnership under the local body (LB PPP) under a separate section. The regulations specific to the sector such as hydropower, irrigation, trail and trail bridges, roads and bridges, etc may be prepared by the related sectoral ministry under the umbrella PPP/BOT Policy and Act and within the respective sectoral policy.
- 5) Public transport infrastructures should be defined in the PPP Policy and Act.
- 6) Feasibility / pre-detailed design study of candidate BOT/PPP projects should be done well in advance by the BOT Committee of the Ministry, for which separate budget allocation should be made annually.
- 7) Articles 9 and 12 of the BOT Ordinance 2061 should be suitably amended to encourage the private sector and provide room for unsolicited proposal of any amount in a fair and transparent manner
- 8) The BOT awards/MOU/Concession Agreement should not be issued such that the private parties hold the licenses for several years without any progress.
- 9) BOT/PPP regulations should be formulated.
- 10) BOT/PPP provisions should be made in LBFAR (reference to the LB Section of HMGN BOT/PPP Act or Regulations would be sufficient).
- 11) Income tax holiday and rebates and customs exemptions should be included in BOT Act.
- 12) Guidelines on procurement process; standard bidding documents such as invitation for expression of interest (short listing) and request for proposal (RFP); model concession agreements for the various types such as BOT, BOO, BTO, LO, SPV, Annuity, Shadow Toll, LPVR, Community type of PPP; EOI and RFP evaluation criteria; and guidelines on detail project report and negotiations for concession agreement for different types of PPP for central level and local level works should be prepared.
- 13) The model concession agreement should have provisions such as full compensation for full costs incurred, excluding revenues accrued, to the concessionaire in the event of the government terminating the agreement for any reason; formula for toll rate revision based upon, CPI, traffic, and actual costs every three year; permission to the investors to commercially develop and exploit the adjacent/nearby site; assurance of attractive financial return to the investors (Rate of return at market rate or 16 % RoR;

15 – 25 years pay back period); UNICITRAL dispute resolution for international investors; and provision of independent engineer.

- 14) High power and full time BOT Committee with adequate budget and authority should be set up in MPPW/MOLD and a separate BOT Project Office should be established for each BOT project.
- 15) Significant institutional reforms are needed to improve coordination, efficiency and transparency, public acceptance of increasing direct and indirect highway charges and implementation capacity for maintenance and development of existing Strategic Road Network (SRN). The existing road agencies should be institutionally strengthened so that they can i) identify needs for maintenance and revenues from operation, ii) appraise BOT/PPP projects, identify type of PPP and funding mechanisms and need for grants, iii) produce business plans and balance sheets, and iv) contribute to sustainability of transport infrastructure, especially roads, road maintenance and development.
- 16) There is a need for a separate regulatory agency responsible for all types of surface transport infrastructure such as roads, ropeway/cable car, waterway, and railway. It may be in the form of National Transportation Board or National Transport Regulatory Commission or Department of Surface Transport Development.
- 17) For Local Roads Network (LRN), a separate road development fund involving lower level of fuel levy and tolls and other grants and subsidies should be devised to help Local Bodies to build new roads and to improve and maintain the existing roads, eighty percent of which are earthen.
- 18) Regular training should be organized by MPPW to train the officials of the MPPW, MOLD, MOCTCA, MOF, and NPC on BOT system. MOLD in coordination with the MPPW should organize PPP / BOT training to the selected Municipalities, DDCs and VDCs.
- 19) Overall Policy measures by HMGN in order to promote PPP should address the concerns of the consulting and contracting industry. Some of the concerns are: continuity of assured minimum workload; provisions in the donor agency procurement guidelines to encourage greater participation by domestic contractors and consultants in the ICBs; facilities to encourage participation by domestic consultants and contractors in international jobs outside Nepal, improving the effectiveness of CIDC, MPPW and FCAN in collecting 0.1 percent of contract price for the Construction Industry Development Fund (CIDF), use of CIDF for research and development relating to standards, norms, quality control and technology transfer; provision for quality based selection system (QBS) for complex projects; provision for sole sourcing and direct award up to Rs 2 million for consultancy and up to 20 million for contracts for special cases for both the public sector and private sector companies; creation of a consultancy industry promotion or PPP facilitation centre; PWD management and harmonization of tandards.
- 20) Single Borrower Limit imposed by Nepal Rastra Bank needs to be relaxed on a case-to-case basis to facilitate domestic financing of PPP projects.
- 21) Policy measures should encourage use of remittance from Nepali workers outside Nepal in the financing of PPP projects of shorter durations (five to 10 years).

VI. POLICY ACTION MATRIX

Table 2: Policy Action Matrix - Transport Infrastructure

S.N.	Constraints	Recommended Improvement/Action	Activities	Indicators of Achievements	Responsible Agencies	Time Frame
Policy						
1	Lack of a comprehensive PPP Policy	Revise the existing BOT Policy to formulate a comprehensive PPP Policy which shall include: <ul style="list-style-type: none"> ▪ Central Level PPP ▪ Local Level PPP ▪ Definition of various type of PPP, BOT and public infrastructure ▪ Specific procurement process for each type of PPP/BOT Project including provision for Government grants and financial incentives to private party. 	Ammend existing Public infrastructure BOT Policy-2057	Policy amendment	NPC, MPPW, MOWR, MOLD MOCTCA, MOLJ NPC-Coordinating Agency	Immediate
2	Tendency of private sector to obtain license and hold it for a long time without progress	Provide for automatic cancellation of MOU/PCA, etc if no progress as per milestones	Policy amendment	Policy amendment	NPC, MPPW, MOWR, MOLD MOCTCA, MOLJ NPC-Coordinating Agency	Immediate
3	Lack of clarity in the designs and standards due to lack of detailed feasibility study and pre-detailed design and cost estimate	Carry out pre-feasibility of various alternatives, feasibility study and predetailed survey and design of selected alternatives and bid document of the best alternative before inviting EOI for the PPP/BOT	Add in the policy	Policy amendment	NPC, MPPW, MOWR, MOLD MOCTCA, MOLJ NPC-Coordinating Agency	Immediate

S.N.	Constraints	Recommended Improvement/Action	Activities	Indicators of Achievements	Responsible Agencies	Time Frame
4	Lack of incentives to attract private capital, creativity and technology	Provide income tax holiday for at least 10 year, and customs exemption for the concession period based on nature and size of project period.	Add in the policy	Policy amendment	NPC, MPPW, MOWR, MOLD MOCTCA, MOLJ NPC-Coordinating Agency	Immediate
5	Lack of provision to contribute to local area development and secure local body support for the PPP project	Provide 5 to 10 % of toll revenue based on nature & size of project to respective local body prorata the length in each LB and no royalties / taxes to concessionaire by LB.	Add in the policy	Policy amendment	NPC, MPPW, MOWR, MOLD MOCTCA, MOLJ NPC-Coordinating Agency	Immediate
6	Lack of provision to provide government support/ grants to increase the viability of PPP Projects	Wherever possible, government shall provide grants to increase the financial viability of the PPP /BOT Project, especially for LRN.	Add in the polic	Policy amendment	NPC, MPPW, MOWR, OLD MOCTCA, MOLJ NPC-Coordinating Agency	Immediate
7	Lack of dedicated PPP Facilitation Agency	Establish a Private Sector or PPP facilitation agency incorporating private and public sector representatives.	Add in the policy	Policy amendment	NPC, MPPW, MOWR, MOLD MOCTCA, MOLJ NPC-Coordinating Agency	Immediate
Institution						
8	Lack of proper authority and commercial orientation of existing transport sector agencies to meet the private sector requirements of effectiveness and efficiency.	Establish a road maintenance improvement & transport .management authority. Increase the mandate of RBN	HMGN decision to implement the provision of Ntl. Transport Policy	Organization and budget approved	MPPW MOLT DOR, DOTM	Intermediate

S.N.	Constraints	Recommended Improvement/Action	Activities	Indicators of Achievements	Responsible Agencies	Time Frame
9	Lack of linkage between transport management and infrastructure improvement	Vehicle registration to be done by the new road authority, and regulation of tariff, etc to be done by the Transport Regulation Commission or a National Transportation Board	HMGN decision	Organization and budget approved	MPPW	Intermediate
10	Lack of capacity to plan, design, and implement PPP projects.	Training on PPP/BOT/commercial principles to MPPW, DOR. RBN and MOLD, DOLIDAR staff	HMGN decision	Organization and budget approved	MPPW, MOLD	Immediate
11	Lack of LL-PPP financing institution	Create a LL-PPP financing Institution	HMGN decision	Organization and budget approved	MPPW	Intermediate
12	Lack of a high power Transport Regulation Commission	See 11	See 11	See 11	MPPW	Intermediate
13	Lack of dedicated PPP Facilitation Agency	Establish a Private Sector or PPP facilitation agency incorporating private sector and government representatives.	HMGN decision	Agency established	MPPW/MOF/MOGANPC - CA	Intermediate
Legal Framework						
14	Absence of relevant provisions as identified in items 1 to 7 of Policy constraints	Make similar provisions in the PPP/BOT Act	Amend BOT Act	Amended of BOT Act	MPPW, MOLD, MOLJ NPC - CA	Intermediate

S.N.	Constraints	Recommended Improvement/Action	Activities	Indicators of Achievements	Responsible Agencies	Time Frame
15	Lack of financing institution specific to financing private sector for PPP projects	Establish infrastructure finance centre (IFC). Relax single borrower limit of NRB on case to case basis depending on size and nature of projects. Consider use of remittance in PPP/BOT projects.	Add new provision	Ammended of BOT Act	MPPW, MOLJ MOF NPC - CA	Intermediate
16	Lack of detailed legal provisions to clarify a number of issues under the BOT Act	Formulate PPP/BOT rules to clarify criteria concession period, PPP/BOT processes, responsibility and authority to prepare model agreement, standard documents and procurement process. LB FAR should be based on LB PPP in the PPP/BOT Act	Formulate PPP/BOT Rules	PPP/ BOT rules formulated	MPPW, MOLD, MOLJ, MOF and related agencies NPC - CA	Immediate
17	Article 12 of BOT Ordinance discourages private sector	Make suitable changes in this provision of BOT Ordinance 2061	Amnedment of BOT Ordinance 2061	Ammend BOT Act	MPPW, MOLD, MOLJ, MOF NPC - CA	Immediate
18	Article 9 (b) to (f) of BOT ordinance is difficult to apply due to transparency issues.	Make suitable changes in this provision to include unsolicited proposal in a fair and transparent manner.	Amnedment of BOT Ordinance 2061	Ammend BOT Act	MPPW, MOLJ	Intermediate

S.N.	Constraints	Recommended Improvement/Action	Activities	Indicators of Achievements	Responsible Agencies	Time Frame
19	Institutional constraints of road transport agencies	Restructuring of DOR, RBN, and DOTM requires changes in the existing Acts such as Vehicle and Transport Mngmt. Act, Road Board Act, and Public Roads Act, and formulation of new Act , say, Integrated Transportation Act, Refer items 10, 11	Amnedment BOT Ordinance 2061, RB Act 2058, VTM 2049 Act Public roads Act 2031	Ammend of Acts Enactment of new Act	MPPW, MOLT, MOLJ	Intermediate
20	Lack of separate Local Road Network Development Fund	PPP and other grants for new roads and maintenance of existing road for LRN should be arranged through LRN Development Fund	New Act	Act promulgated	MPPW MOLG	Intermediate
Administration and Others						
21	Lack of dedicated full time PPP/BOT Committee/ Project	Establish PPP/ BOT Project Committee	Arrange Annual plan and budget	BOT Committee Established in the Ministry with TA & intl expert initially	MPPW, NPC	Immediate
22	Inefficiency in collection of CIDF	MOPPW to expedite strict enforcement of rule for collection of CIDF funds	Expedite collection of funds	Collection of funds	MPPW	Immediate

Note: Immediate term = 1 year; Intermediate term = 3 years; Long term = 5 years

ANNEX 1: WORKSHOP RECOMMENDATIONS

Group III of the EPN Workshop on Policy Papers on August 8, 2005 in Kathmandu made the following recommendations on the paper on "Prospects and Approaches to Public Private Partnership in Transport Infrastructure:

1. (Responsible agency) Add: MOF; MOCTCA; MOLJ and coordinating agency NPC
2. Deleted
3. Take this to legal provision. (Responsible agency) Add: MOF; MOCTCA; MOLJ and coordinating agency NPC; (Recommended improvement/action) Establish infrastructure finance center (IFC) review single borrower limit of NRB on case to case basis depending upon nature and size of the project.
4. (Responsible agency) Add: MOF; MOCTCA; MOLJ and coordinating agency NPC; (Time frame) Intermediate
5. (Responsible agency) Add: MOF; MOCTCA; MOLJ and coordinating agency NPC
6. (Recommended improvement/action) Provide income tax holiday for at least 10 years and customs exemption for the concession period based on the nature and size of the project.
7. (Recommended Improvement/Action) Provide 5 -10 % of toll revenue to respective local body on prorata basis on the length in each LB and no royalties/taxes to concessionaire by LB.
8. OK, 11.OK, 13. OK, 14.OK, 17.OK
9. (Recommended Improvement/Action) Establish a Private Sector or PPP facilitation agency incorporating private and government sector.
10. (Recommended Improvement/Action) Merge DOR and DOTM and) Establish road maintenance improvement and transport management authority. Increase the mandate of RBN.
12. (Constraints) Lack of capacity of Local Bodies to plan, design and implement PPP and LL PPP projects.
15. (Recommended Improvement/Action) Establish a Private Sector or PPP facilitation agency incorporating private and government sector.
16. (Constraints) Absence of relevant provisions as identified in items 1,3,4,5,6,7,8,9
18. (Recommended Improvement/Action) Repel this provision from the BOT ordinance 2061 should be suitably amended.
19. (Recommended Improvement/Action) (Repel these sub articles.) Amend the clause to make provision for suitable unsolicited proposal.
20. OK;
21. Delete
22. OK

23. OK

24. Delete

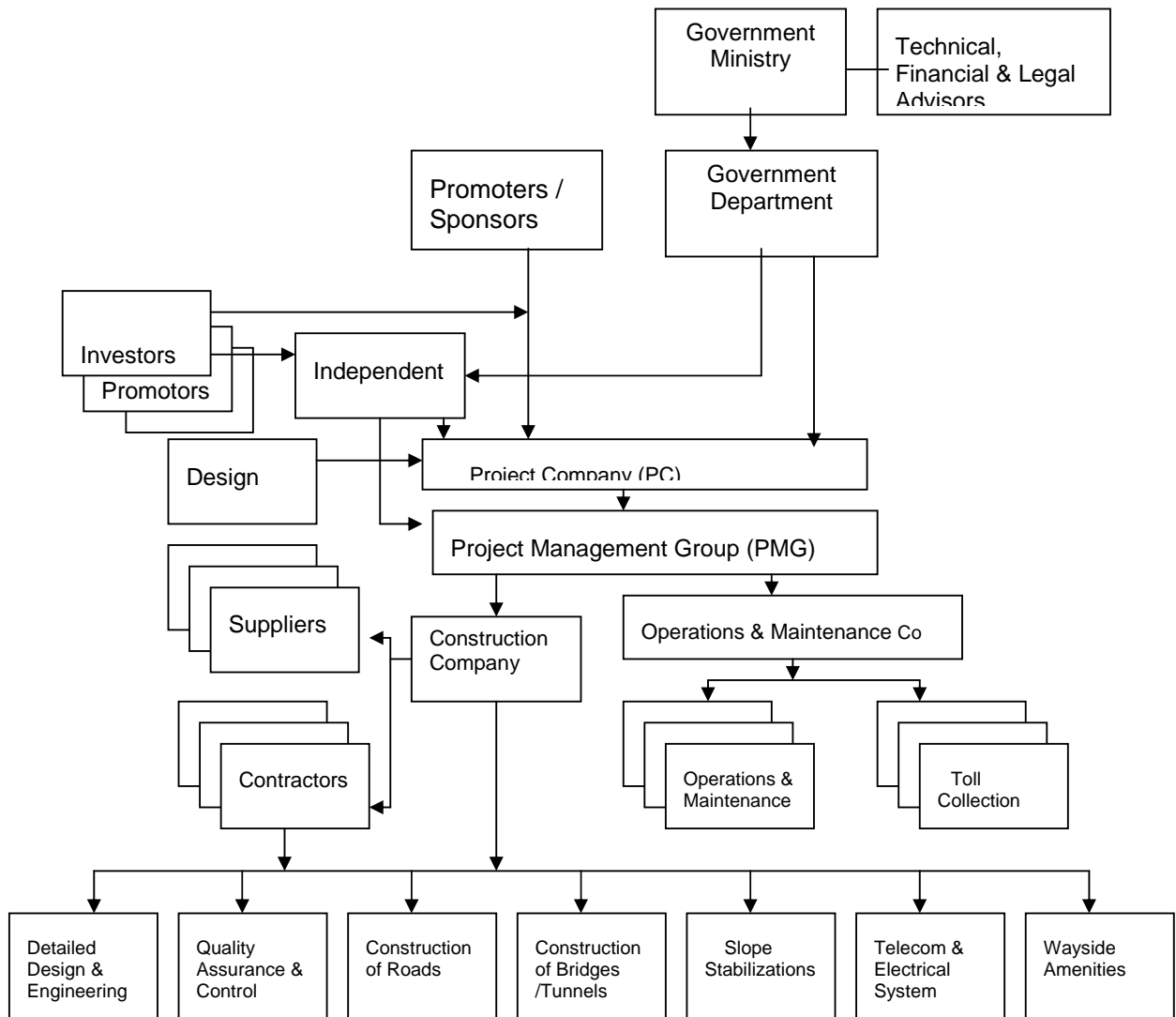
25. OK

26. Delete

27. OK

- (Constraints) Lack of PPP projects negotiation skill. (Recommended improvement/action) Identify team at each hierarchy level and develop skill. (Activities) Identify and organize suitable training workshop etc. (Indicators of Achievements) Training/workshops conducted (Responsible agency) MPPW (Time frame) Immediate.

Annex 2: Figure of Special Purpose Company



Annex 3: Table of Foreign Debt Financing Sources for BOT Projects

Sources	Terms	Features
Commercial Banks	5-7 years Prime of LIBOR	Requires political risk insurance, OPIC, MIGA, ECGD. Security interest in revenue stream (escrow accounts)
Export Credit Agencies	12 years LIBOR + Low margin amortization period	For US Exim, finance for 85 % of US exports, plus 15 % to cover local costs. Sponsors provide full completion risks.
Multilateral Banks	10 – 20 years, approx 7 %	Sovereign guarantee required. Usually government borrower, ICB on equipment and construction.
Investment Banks / US Capital Markets	10 – 12 years variable rates	Repayment schedule can match project cash flow, Relatively easy documentation, Exposed to market volatility.
Institutional Investor Public Bonds/ Equity Funds / Pension Fund	15 – 20 years	Demands well developed local capital markets. Demands investment-grade project credit rating. Requires underwriting capability. Needs local liquidity.
Special Funds (Equity fund)	7 – 10 years Prime	Needs major sponsor and operator. Usually require political risk insurance. Requires revenue guarantees.

Annex 4: Table of Type and Source of BOT Financing for Various Activities

Activity	Type and Source of Financing
Pre-investment and development costs	Risk capital from project sponsors
Bidding and Procurement	Risk capital from project sponsors
Financial structuring and development of security package	Equity capital from project sponsors
Agreement with institutional and other investors	Equity capital from institutional and other investors.
Agreement with equipment suppliers	Long-term loan from export credit agencies for equipment purchase.
Agreement with prime contractors and sub-contractors on cost of construction.	Short-term loan from commercial banks to finance construction.
Financial Closing and start of construction	Draw down of equity and loan funds.
Financing restructuring near construction completion.	Long-term loan from non-bank financial institution and specialist investment fund.
Operation	Working capital from project company and short-term loans from commercial banks.

Annex 5: Table of Risk Management

Type of Risks	Degree	Who manages the risk	How is the risk mitigated
Risk to Concessionaire			
Design risk	H (high)	Concessionaire	By carrying out pre-construction survey, and design and costing to verify standards as per CA
Environmental risk	H	Concessionaire (assisted by the owner)	Design and construction techniques
Land acquisition risk	M (medium)	Owner assisted by concessionaire	Through regulations
Construction risk	M	Concessionaire	Provisions in construction contract
Fuel price hike risk	H	Owner (O)	Provision in CA. To be adjusted in concession period or through reimbursement for price increase due to Govt controlled corporation/agency
Price of materials and labour risks	M	Concessionaire & Owner	Construction and operation cost to be adjusted through provision in CA
Forest permit risk	M	O	Responsibility to be included in the CA
Funding risks	M	C	Depends on type of funding arrangement.
Local taxes, royalty, permits risks	M	O	Responsibility to be included in the CA
Local Government risks	M	O & C	To be considered during negotiations and concession agreement drafting
Sectoral services (electricity, telephone, water supply, vehicle equipment permits, etc risks	M	C & O	Responsibility to be included in the CA
Contractual risks	H	C & O	Political risks through dispute resolution in international jurisdiction
Traffic level risks	L (Low)	C & O	Base traffic, growth rates, formula for toll charges and financial return to be spelled out in the CA. Tariff Commission to settle.
Tunnel operation risk	H	C	Provisions in Contract document
Unauthorized entry risk	H	C	Create physical structure and design type
Toll collection risk	H	C & O	Prompt legal action and punishment to be provisioned in the CA

Foreign exchange, devaluation risk	M	O	Provision to be included in the CA to adjust the price and to assure repatriation.
Customs clearance risks	M	C & O	Exemptions and clearance facilitations to be stipulated in the CA
Risk to Government			
Route and Geometric Standards	H	Owner	By pre-detailed survey, and design and costing of several alternatives
Excessive concession period	H	Owner	Proper negotiation of revenue and cost streams based on realistic forecast of life cycle costs traffic and practicable level of toll charges
Excessive toll rate	H	Owner	Through toll charge formula and mechanism in the CA. Tariff Commission to be established
Land acquisition delay	M	C & O	Government land to be handed over and private land to be acquired by Concessionaire through government assistance
Resettlement / relocation risks	M	C & O	Adequate provision in the CA
Security crisis	M	O & C	Government to bear all costs for emergency and government directed closures. Other times, Concessionaire to bear the costs.
Claims from the concessionaire due to local taxes, delays in permits, license, etc	H	O	DR/Arbitration to be spelled out clearly in the CA. Independent Auditor for verification of accounts/records to be include in the CA
Force Majeure	H	O	To be spelled out clearly in the CA

Annex 6: Table of BOT Project Examples from Other Countries

Country	Level of Success	Indicators
Malayasia		
	Successful	Cross Subsidization Toll Roads, Built Up Roads – 700km
		50 % Capital Cost Subsidy
		Repeated revision in capital costs and tolls tariff
		Add Ons to existing toll roads
		Government guaranteed loans
		Revenues shortfall addressed by increase in toll rates and increase in concession period.
		Stand-by loans in case of traffic forecasts shortfall and adverse exchange rates and interest movements in external loans.
France		
	Successful	Initial 500 km done by public sector
		Cross subsidization through toll roads/built roads – 500 km
		Private sector invited after 15 years. Involved repeated revision of tolls. Risks of Force Majeure shared by Government
China		
	Successful	Unlimited use of roads for annual usage fee for vehicles registered in the Province and entry tolls for outside vehicles.
		Cash reserve account for revenue shortfall.
		Increase in toll for debt service coverage ratio.
		Standardized Agreements
Mexico		
	Low level of success	Insufficient preparation characterized by hasty traffic studies, faulty cost projections, and poor road designs.
		Unrealistic toll rates
		Parallel free road
		Cost overruns, un-retired foreign debts, and un-serviceability equity.
		Concession period extension for traffic below the level indicated in the CA, until 1993. After 1993, no such provision, rather, reducing the concession period or pay a portion of the earning to the government, after the specified return on investment have been produced, or traffic is more than the base traffic in the CA.
India		
	Successful	Mumbai-Pune Expressway (109 kms)– a successful project carried out by Govt. through a 30 year BOT agreement with Maharashtra State Road Development Corporation (MSRDC). The traffic in 1997 was 60,756 PCU. About 27 % funding from govt. support and rest from external financing with Government of Maharashtra unconditional and irrevocable guarantee till redemption of bonds. 197 km of National Highway has been completed under 5 different BOT contracts and 287 km of NH is under construction under BOT; 475 km of NH is in progress under Annuity basis; and 129 km of NH has been completed and 264 km of NH is in progress under SPV basis.

Thailand		
	Successful but contractual problems	Second Stage Expressway: A 1050 million US Dollar project completed during 1988-95, 30 years concession period, Tax holiday, Import duty free, free land by Govt. Problems of late delivery of land and the non-implementation of toll rates and revenue sharing mechanism as per agreement leading to court cases were experienced.
	-do-	The Don Muang Toll way: A 416 Million US Dollar Project was built during 1989-1994 under a 25 years concession. Competing project within 100 metres from the project, two years delay in removing the existing overpass, and increase in the foreign currency component of loan and equity were the problems encountered.
Norway	First contract signed in 2003	Receive annual unitary payment...varied against a number of predefined criteria including good accessibility, performance, traffic safety and traffic. Annual payment includes govt. funding and toll money. Concession period 20 – 25 years.
EU	High with some degree of difficulties	Tagus Bridge in Portugal, Ring road in Dublin, Power stations in Italy, Spata Airport in Greece, Great Belt Link in Denmark are some of the examples. Co financing of financial institution along with public and private sector (benefits: reinforces creditworthiness and credibility; improve the leverage achieved on public sector finance committed); grants; soft loans with maturity and grace period; several benchmarking tools such as Public Sector Comparator (PSC), Multi Criteria Analysis are used for concession type PPP.

Annex 7: Long-list of Candidate BOT Projects

(Reproduced from a study report prepared by NEPECON for MPPW on "Identification of Candidate Projects under Public Private Partnership (BOT) Program in the Roads Sector, June 2001).

S. No	Project Name	Project Size	Traffic (AADT)	Cost (Approx.) Million NRs.	Existing Alternative	Likely Problems
1	Sitapaila-Dharke	25 km	4000 (2010 A.D)	625	Thankot-Naubise	Medium
2	Kathmandu- Hetauda (Dakshinkali-Chhaimale-Kulekhani-Bhimphedi)	65 km	1900 (2000 AD)	1950	Tribhuvan Rajpath (TRP)	Low
3	Kanti Rajpath (Tikabhairav-Makawanpurgadhi)	60 km	960 (2002 AD)	577	TRP	Low
4	Janakpur-Jayanagar	29 km	510 (2002 AD)	355	Railway	V.L. (15 Bigah)
5	Birganj (Dry port)- Jitpur	19 km	875 (2002)	270	None	
7	Balaju Bypass (Okharpauwa Road)	18 km		168 (1995)	None	
8	Hetauda bypass	5 km			Old road	
9	Biratnagar bypass	18 km		236	Old road	
10	Biratnagar -Ringroad	41 km		113	Old road	
11	Gorkha-Mankamana				Cable car	
12	Biratnagar-Rangeli (Rehabilitation)	23 km	700 (2000 AD)	246	None	Very Low
13	Bhaktapur - Nagarkot	23 km	1000 (2001AD)		None	
14	Birganj-Hetauda Road Project (Rehabilitation)	45 km	1895 (2000 AD)		None	
15	Bhairhawa -Lumbini Road Project (Rehabilitation)	23 km	1500 (2001 AD)		None	No
16	Kathmandu- Outer Ring Road Project	72 km	7500 (2002 AD)	5681	Existing Ring Road 27 km	Land acqstn
17	Thankot-Naubise Road Project (Rehabilitation)	22 km			None	No

V.L. = Very Low

NFS= Needs Further Study and Data Collection, All costs, except stated otherwise, is of the year 2002.

Annex 8 : Short-list of Candidate BOT Projects

(Reproduced from a study report prepared by NEPECON for MPPW on "Identification of Candidate Projects under Public Private Partnership (BOT) Program in the Roads Sector, June 2001).

	Project Name	User Traffic	Size Length	Importance	Cost	Govt. equity share	Land Acquisition	Other Problems	Total Rating	Remark
	Relative Weight	(35)	(15)	(10)	(10)	(15)	(10)	(5)	Rating	Remark
1	Sitapaila- Dharke	100/35	100/15	100/10	90/9	70/10.5	70/7	70/3.5	90	2
2	Kathmandu- Hetauda (Via Dakshinkali- Kulekhani- Chisapani)	*100/35	80/12	100/10	80/8	100/15	70/7	70/3.5	90.5	1
3	Kantipath (Tikab.- Hetaunda)	50/17.5	80/12	80/8	90/9	50/7.5	70/7	70/3.5	64.5	8
4	Birganj (Dry port)- Jitpur	70/24.5	100/15	100/10	90/9	0/0	70/7	80/4	69.5	6
5	Balaju bypass (Okharpauwa)	50/17.5	100/15	70/7	90/9	0/0	60/6	70/3.5	58	14
6	Hetauda bypass	50/17.5	100/15	70/7	90/9	0/0	70/7	80/4	59.5	13
7	Biratnagar Bypass	50/17.5	100/15	70/7	90/9	0/0	70/7	80/4	59.5	12
8	Biratnagar- Ringroad	50/17.5	60/9	70/7	80/8	0/0	70/7	70/3.5	52	15
9	Janakpur- Jaynagar	50/17.5	70/10.5	100/10	100/10	0/0	90/9	80/4	61	11
10	Gorkha- Mankamana	70/24.5	100/15	100/10	100/10	0/0	70/7	80/4	70.5	5
11	Kathmandu Outer Ring Road	100/24.5	100/15	100/10	90/9	0/0	70/7	80/4	69.5	6
12	Biratnagar - Rangeli (Road improv & mnt.)	60/21	90/13.5	100/10	60/6	0/0	100/10	100/5	65.5	7
13	Birgunj - Hetauda road, Pavement improv. & road mnt.)	100/35	100/15	100/10	70/7	0/0	100/10	100/5	82	4
14	Bhairawa -Lumbini Road mnt.	60/21	80/12	0/8	60/6	0/0	100/10	100/5	62	10
15	Bhaktpur - Nagarkot (road improv. & mnt.)	70/24.5	80/12	80/8	70/4	0/0	85/8.5	80/4	64	9
16	Thankot-Naubise (Road pavement improv. & mnt.)	100/35	100/12	100/10	80/8	70/1.5	80/8	70/3.5	90	3

*** The figure in the numerator is the rating out of a total score of 100 for that particular factor and the figure in the denominator is the weighted score based on the relative weight for each factor as shown at the top of the column.**

Annex 9: Terms Of Reference:

Study Topic:

Prospects and Approach to Public-private Partnership in Transport Infrastructure Development

This assignment is equivalent to effective one man month. The consultant should establish adequate interactions with various stakeholders including the government agencies while conducting the study.

Task Details:

- Review of present status
- Identify prospects for public-private partnership in key areas
- Identify legal, institutional, administrative and policy constraints
- Suggest policy improvement
- Suggest policy-action matrix (a) constraints (legal, institutional, administrative, policy, and others if applicable); (b) recommended policy improvements; (c) activities; (d) indicators of achievement; (e) responsible agencies; and (f) timeframe (immediate, intermediate, and long-term)

The paper should include an executive summary not exceeding five pages. The consultant will have to submit a draft report to FCAN within 30 days from the date of assignment and present the draft at the workshop organized by the Advisory Committee and EPN Focal Unit. The final report should be submitted within 2 weeks of the workshop incorporating all feedbacks from the workshop. One hard and one electronic copy of the draft and final report should be submitted to FCAN.

Assignment given to: Federation of Contractor's Association of Nepal (FCAN)

Responsible ministry: MOPPW

Thematic area: Economic Policy on Infrastructure Development