

The logo for the Asian Development Bank (ADB), consisting of the letters 'ADB' in a white serif font inside a black square.

ADB

Concept Paper

Project Number: 40080
November 2013

VIE: Proposed Ha Noi Metro Rail Extension Project
(Line No.3: Ha Noi Railway Station – Hoang Mai
Section)

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 27 November 2013)

Currency unit	–	dong (D)
D1.00	=	\$0.0000474046
\$1.00	=	D21,095.00

ABBREVIATIONS

ADB	–	Asian Development Bank
DMF	–	design and monitoring framework
EA	–	executing agency
HPC	–	Ha Noi People's Committee
HUTMP	–	Ha Noi Urban Transport Master Plan
IA	–	implementing agency
ICB	–	international competitive bidding
Km	–	Kilometer
MRB	–	Metropolitan Railway Project Board
OCR	–	Ordinary capital resources
O&M	–	Operation and Maintenance
PMU	–	Project Management Unit
RP	–	Resettlement Plan

NOTE

In this report, "\$" refers to US dollars unless otherwise stated.

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I. THE PROJECT

A. Rationale

1. The Project will plan, design and construct an extension to Metro Line 3 of the Ha Noi metro system. Metro Line 3 is one of four priority lines under development and ADB is supporting development of the Nhon to Ha Noi station section under phase 1.¹ The phase 2 extension of Metro Line 3 will increase metro coverage to the south eastern part of the city, to meet long term Ha Noi transport master plan objectives to provide a core metro network with city-wide coverage. The extension of Metro Line 3 commences at the Ha Noi main railway station in Hoan Kiem district and extends to Hoang Mai, south of the city center. The extension line is approximately 8.5km, for which the alignment will be underground for the first 3km and then become elevated for the remaining 5.5km.

2. The Government of Viet Nam recognizes that inadequate transport infrastructure is a significant barrier to continued economic growth, especially in the primary urban centers of Ha Noi and Ho Chi Minh City. Without investment in urban public transport to support a major modal shift from private transport, economic growth in cities will be constrained and degradation of the urban environment will accelerate. The Viet Nam Socio-Economic Development Plan for 2011-2015 supports investment in public transport as a means to promote economic growth and protect the environment through a low carbon growth path. ADB's 2012–2015 Viet Nam country partnership and strategy² supports the government's investment program to improve urban transport infrastructure and reduce transportation costs

3. Urban transport in Ha Noi is rapidly evolving, having shifted from bicycles to motorcycles in the last 10 years, and now increasingly to cars. Private vehicles dominate urban transportation, with motorcycles accounting for about an 80% share, directly contributed to worsening congestion and poor road safety. Traffic planning and management is weak, resulting in ineffective traffic control. If the number of private vehicles in Ha Noi continues to increase at a rate of 9% per year, and motorbike owners continue to convert to cars, more frequent traffic gridlock will occur and increase in the project area.

4. Ha Noi's public transport system consists of an inefficient bus network that cannot compete with private transport modes, especially motorcycles. However, new policy, institutional and regulatory measures are being implemented to encourage greater use of public transport and the public transport system is expected to be improved within the next 5 years. City authorities have recognized that investment in metro infrastructure combined with major reforms are essential for an integrated public transport system.

5. Ha Noi's Urban Transport Master Plan (HUTMP) proposes an extensive six line metro network, with phase 1 of four lines under implementation and expected to be operational by the end of 2020. Phase 1 is expected to support an increase in public transport ridership to 15% from a current level of less than 5%. The extension of Line 3 under the Project will directly increase ridership on Metro Line 3, plus ridership on other connected lines and increase public transport usage along the corridor by over 10%. The city will establish an operations and maintenance (O&M) company for all metro line operations by 2015. Additionally a public transport authority will be established by 2016 and be responsible for regulating, integrating and planning the future development of all modes of public transport, including metro lines, buses

¹ ADB. 2011. *Socialist Republic of Viet Nam: Ha Noi Metro Rail System Project (Line 3: Nhon-Ha Noi Station Section)* (L2741-VIE). Manila.

² ADB.2012. *Country Strategy and Program: Viet Nam, 2012-2015* Manila.

and taxis. ADB will support public transport integration, accessibility and coordination improvements, including implementation of necessary policy, regulatory and institutional measures to encourage transport users to shift from private transport modes, including measures to ensure the necessary shift of motorcycle users to public transport.³

6. Lessons learned from the ADB financed metro projects have been incorporated, through; (i) detailed design will be complete before loan approval to ensure cost estimates are more accurate to minimize cost increases, (ii) project management support will commence during the detailed design phase and capacity building provided to all government agencies during project preparation to minimize implementation delays, and (iii) integration of the metro stations with other public transport modes will be an integral part of the project design.

7. It is expected that the Project will be financed with a project loan. The Project feasibility study, to be completed in March 2016, will clearly define all project components and design will be effectively completed prior to loan fact finding. The ADB loan will be submitted for Board consideration in August 2017. The project is expected to be completed and operational in 2023.

B. Impact, Outcome, and Outputs

8. The Project area covers the urban core and suburban areas south east of Ha Noi. The extension to Metro Line 3 follows a major arterial road with medium to high development. The impact of the Project will be an integrated and sustainable public transport system in four districts of Ha Noi. The outcome will be efficient metro rail services along the project corridor that are integrated with other modes of public transport. The Project outputs will be an operational metro line and improved implementation and operational capacity of the implementing agency.

C. Investment and Financing Plans

9. The tentative project investment cost is estimated at \$1,150 million, including taxes and duties of \$84 million. The total cost includes physical and price contingencies, interest and other charges during implementation. The ADB ordinary capital resources loan is estimated at \$450 million, excluding taxes and duties, and will cover civil works and consulting services. Cofinancing of \$550 million is required to cover civil works, electrical and mechanical systems, rolling stock and consulting services.⁴ The government, through Ha Noi People's Committee (HPC), will provide \$150 million in financing for resettlement, incremental administration and taxes and duties.

Table 1: Tentative Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank (OCR loan)	450.00	39.00
Cofinancing	550.00	48.00
Government	150.00	13.00
Total	1,150.00	100.00

Source: Asian Development Bank staff estimates

³ Under the proposed Strengthening Sustainable Urban Transport for Hanoi Metro Line 3 project, financed by the Clean Technology Fund and ADB, expected to be approved in 2014.

⁴ Agence Française de Développement, Direction Générale du Trésor and European Investment Bank (financiers for the Metro Line 3 phase 1 project) have shown strong interest in cofinancing this project.

D. Indicative Implementation Arrangements

10. The executing agency will be the HPC and the implementing agency will be the Ha Noi Metropolitan Railway Management Board (MRB). The MRB was established in 2003 with responsibility to oversee the planning, design, implementation and operation of metro Lines 2, 2A and 3 in Ha Noi. For day to day management and coordination of implementation of the project, the MRB technical assistance division will be responsible for the Project Preparatory Technical Assistance (PPTA) and it is expected Project Management Unit (PMU) No.1⁵ will be assigned for project supervision, each under the responsibility of an MRB Vice Director. The capacity of MRB has been strengthened with ongoing consultant support and capacity building program. MRB capacity building needs will be continually assessed, and additional strengthening will be provided as needed. A steering committee for all metro development will be responsible for project oversight and coordination. All civil works, equipment and system contracts will be procured by international competitive bidding. Consulting services will be provided for project management, detailed design, construction supervision and safeguards monitoring. Detailed design is expected to be completed by March 2017, and advance action for civil works and consulting services will be sought in due course.⁶

II. DUE DILIGENCE REQUIRED

11. The following due diligence will be carried out under the PPTA:

- (i) **Technical.** Planning of proposed alignment and station locations, technical viability of technology, O&M institutional capacity and public transport integration measures.
- (ii) **Economic and financial.** Economic and financial viability assessments, including assessment of indirect benefits.
- (iii) **Governance.** Review of financial management capacity, procurement procedures, anticorruption measures, policy and regulatory reforms.
- (iv) **Poverty and social.** Analysis of poverty reduction, social impacts and gender issues for project components. Other social impacts will be addressed if found relevant during project development.
- (v) **Safeguards.** Involuntary resettlement will occur at station locations and some elevated sections, requiring a full resettlement plan. An Environmental Impact Assessment will be prepared, including an assessment of greenhouse gas mitigation potential. Indigenous peoples are not expected to be impacted.
- (vi) **Private Sector Participation.** Several of the project components that could benefit from private sector participation and opportunities will be further explored.

12. Achievement of the project impact and outcome requires a significant shift from private to public modes transport. Necessary preconditions for this modal shift are integrated public transport systems supported by policies and regulations that favor and facilitate public transport. HPC has shown strong commitment by endorsing the HUTMP as a priority and investing in four metro lines under phase 1. Timely enactment of important public transport policy and regulatory measures is expected prior to operation of the first metro line in 2015. The potential delays due to the inherent complexity of the Project will be mitigated through technical and project management support to MRB. Resettlement and environmental impacts will be monitored closely and mitigated for compliance with ADB policies.

⁵ Project Management Unit No. 1 is responsible for implementation of Metro line 3 phase 1.

⁶ Detail design is expected to be financed under the grant cofinancing or the Viet Nam Project Preparation and Start-up Support Facility. Board consideration of the ADB Loan will be after detailed design is completed.

III. PROCESSING PLAN

A. Risk Categorization

13. The Project is categorized as complex as (i) the total investment cost is over \$200 million; and (ii) safeguard categorization is expected to be A for both environment and involuntary resettlement.

B. Resource Requirements

14. Estimated internal resource requirements for further processing are Mission Leader/Transport Specialist; 6.0 months, Transport Economist; 3.0 months, Resettlement/Social Development Specialist; 4.0 months, Environmental Specialist; 3.0 months, Financial Analyst, 3.0 months, Project Counsel (OGC); 4.0 months, Project Officer (VRM); 4.0 months; and Operations Officer; 4.0 months. A PPTA will be required, which is estimated to cost \$3.5 million, and will be financed for \$1.5 million by TASF and \$2.0 million by the government.

C. Processing Schedule

15. The proposed processing schedule is detailed in Table 2 below.

Table 2: Proposed Processing Schedule

Milestones	Expected Completion Date
Concept Paper Approval	November 2013
Consultant Recruitment	March 2014
Draft Final Report	December 2015
Loan Fact Finding Mission	October 2016
Management Review Meeting	January 2017
Board Consideration	August 2017
Loan Effectiveness	February 2018

Source: Asian Development Bank staff

IV. KEY ISSUES

16. **Evolving public transport policy and regulatory environment:** The Project will support the HPC's aim to increase public transport to 40% of transport demand by 2030, and reduce the use of private vehicles by developing an efficient public transport network for Ha Noi. Progress on key policy and regulatory measures, such as transport pricing to ensure private vehicles pay full costs and not subsidized prices, a comprehensive parking plan, restrictions on private transport usage, prioritization of public transport and enforcement of regulations, is being made through ongoing initiatives and planned support to HPC agencies. However, many competing interests and resistance to the use of public transport, especially private transport users, are the key challenges to overcome. High level political commitment is needed to ensure metro investments are accompanied by necessary urban transport sector reforms, and building the necessary institutional capacity of all relevant agencies to implement them.

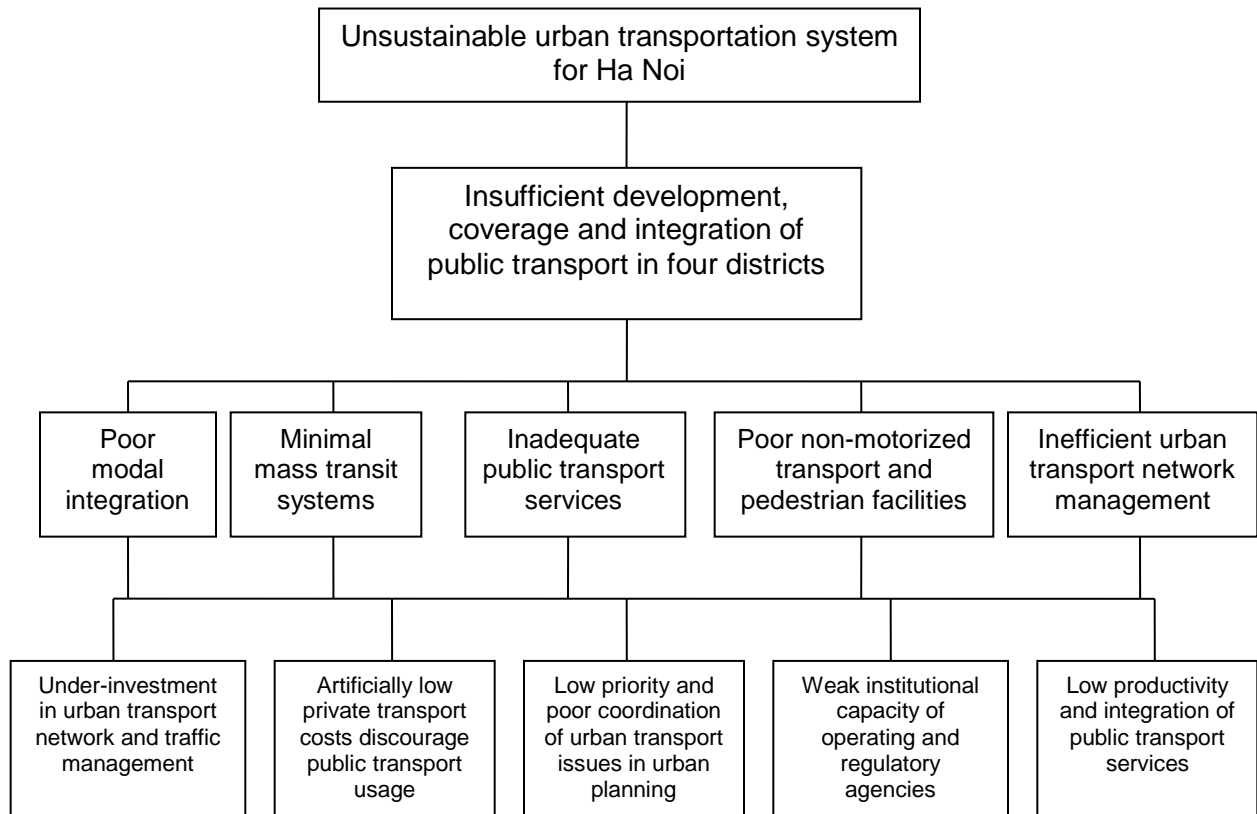
17. **Potential risk associated with environment and involuntary resettlement impacts:** The construction of a metro in a densely populated city such as Ha Noi will have environmental and involuntary resettlement impacts, many highly visible during construction phase. Negative impacts are expected to be either avoided or significantly mitigated through Project design. There is a need to proactively anticipate these problems, and the Project will develop a comprehensive public awareness and information program.

BASIC PROJECT INFORMATION

Aspects	Arrangements
Modality	Project loan
Financing	OCR, cofinancing (source to be determined)
COBP/ RCOBP	ADB. 2013 Country Operations Business Plan: Vietnam. Manila
Classification	Sector (subsectors): Transport, and Information and Communication Technology (urban transport) Themes (subthemes): Economic Growth, Environmental Sustainability <i>Climate change: mitigation</i> Targeting classification: general intervention Gender mainstreaming category: effective gender mainstreaming Location impact: urban (high) Safeguards: Environment – A, Involuntary resettlement – A, Indigenous Peoples – C
Risk categorization	Complex
Partnership(s)	To be determined during project preparation technical assistance stage
Use of a PBA	No
Parallel PIU	No
Department and division	Southeast Asia Department, Transport and Communications Division
Mission leader and members	R. Valkovic, Principal Transport Specialist, SERD C. Clark, Safeguards Specialist, SERD S. Kawazu, Senior Counsel, OGC J. Leather, Principal Transport Specialist, SERD K. Leung, Financial Specialist, SERD T. Mella, Operations Officer, SERD A. Veron-Okamoto, Transport Specialist, SERD L. D. Thang, Senior Project Officer (Transport), VRM A. Velasquez, Safeguards Specialist (Environment), SERD

ADB = Asian Development Bank, COBP = country operations business plan, OCR = ordinary capital resources, PBA = programmatic based approach, PIU = project implementation unit, RCOBP = regional cooperation operations business plan, SERD = Southeast Asia Department, VRM = Vietnam resident mission.

PROBLEM TREE



DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks ^a
<p>Impact An integrated sustainable public transport system in four districts of Ha Noi</p>	<p>Public transport percentage share in four districts increases by 10% from 2015 level by December 2028</p>	<p>Government statistical publications by district</p> <p>Post-evaluation reports</p>	<p>Assumptions Continued strong growth in Viet Nam and Ha Noi city economies</p> <p>Risks Implementation of other planned metro lines delayed</p>
<p>Outcome Competitive metro rail services along the project corridor</p>	<p>Forecast peak loading passenger-km and passengers per direction on line 3 achieved by December 2023</p>	<p>Government and public transport operator statistics</p> <p>Benefit monitoring reports</p>	<p>Assumptions Government resources are available for metro line 3 O&M.</p> <p>Sustainable transport initiatives implemented; public transport modes accepted.</p> <p>Risks Policy and regulatory reforms to support modal shift not enacted in a timely manner.</p> <p>Public transport services are not financially sustainable.</p>
<p>Outputs 1. Metro line 3 is operational</p>	<p>Completion of 8.5 km tunneled and elevated track works, 8 stations and electrical and mechanical systems operational, including gender-sensitive facilities at stations by the end of 2023</p>	<p>Progress reports</p> <p>Project review mission reports</p> <p>Project completion reports</p>	<p>Assumptions Government demonstrates leadership to coordinate various public transport stakeholders.</p> <p>Risks Government underestimates major infrastructure and implementation needs for Ha Noi.</p> <p>Problems arising from (i) implementing a large complex internationally supported project and (ii) integrating urban transport modes.</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks ^a
			Delays in land acquisition and resettlement for main line station works.
2. Improved metro development, implementation and operations capacity	<p>IA staff meet minimum skills criteria of their positions by 2022</p> <p>O&M company staffing expanded to needed level by 2023, including 20% women employees.</p>	<p>Staff evaluation surveys</p> <p>Operations reports</p>	<p>Assumptions</p> <p>Adequate number of suitable candidates available for O&M positions</p>

Activities with Milestones	Inputs										
<p>1. Metro line 3 implementation</p> <p>1.1 Detailed design completed by July and approved by November 2017</p> <p>1.2 Project management and supervision consultants mobilized by July 2018</p> <p>1.3 All contracts awarded by June 2019</p> <p>1.4 Completion of works and commissioning of system by December 2023</p> <p>2. Improved implementation capacity</p> <p>2.1 Consultant training and mentoring program implemented and completed by December 2021</p> <p>2.2 O&M company staffing expanded and new staff trained by June 2023</p>	<p>ADB: \$450 million</p>										
	<table border="1"> <thead> <tr> <th>Item</th> <th>Amount (\$ million)</th> </tr> </thead> <tbody> <tr> <td>Civil works</td> <td>432.0</td> </tr> <tr> <td>Consulting services</td> <td>18.0</td> </tr> </tbody> </table>	Item	Amount (\$ million)	Civil works	432.0	Consulting services	18.0				
	Item	Amount (\$ million)									
	Civil works	432.0									
	Consulting services	18.0									
	<p>Government: \$150 million</p>										
	<table border="1"> <thead> <tr> <th>Item</th> <th>Amount (\$ million)</th> </tr> </thead> <tbody> <tr> <td>Land Acquisition</td> <td>49.0</td> </tr> <tr> <td>Incremental administration</td> <td>27.0</td> </tr> <tr> <td>Taxes and duties</td> <td>74.0</td> </tr> </tbody> </table>	Item	Amount (\$ million)	Land Acquisition	49.0	Incremental administration	27.0	Taxes and duties	74.0		
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	Land Acquisition	49.0									
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	<table border="1"> <thead> <tr> <th>Item</th> <th>Amount (\$ million)</th> </tr> </thead> <tbody> <tr> <td>Civil Works</td> <td>161.0</td> </tr> <tr> <td>E&M Systems</td> <td>240.0</td> </tr> <tr> <td>Rolling Stock</td> <td>84.0</td> </tr> <tr> <td>Consulting services</td> <td>65.0</td> </tr> </tbody> </table>	Item	Amount (\$ million)	Civil Works	161.0	E&M Systems	240.0	Rolling Stock	84.0	Consulting services	65.0
	Item	Amount (\$ million)									
Civil Works	161.0										
E&M Systems	240.0										
Rolling Stock	84.0										
Consulting services	65.0										

ADB = Asian Development Bank, E&M = electrical and mechanical, O&M = operation and maintenance
Source: Asian Development Bank staff

PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Justification

1. The project preparatory technical assistance (PPTA) is needed to undertake overall project planning to define key details for the extension of Metro Line 3 and complete the feasibility study. Metro Line 3 corridor has been defined as part of the Ha Noi urban transport masterplan, but the proposed alignment needs to be reviewed to ensure the most optimal route is chosen, station locations are identified and integrated urban transport measures. The feasibility study for the extension is expected to largely rely on Metro Line 3 phase 1 solutions.¹

B. Major Outputs and Activities

2. The PPTA will consist of two sequential phases. Phase A: Undertake an assessment of the proposed Metro Line 3 alignment, including survey and data collection; to determine suitable options for the horizontal and vertical alignment, location and layout of stations, definition of technologies and standards to be adopted for Phase B. Identify key social, environmental, involuntary resettlement, economic, financial, climate change and other factors, including identification of sustainable public transport integration measures. The output will lead to recommendations of prioritized options for project design, and become the basis of government planning approval. Phase B: Undertake the feasibility study for the approved solution including preparation of documents to comply with ADB and government requirements. The feasibility study tasks will be split into two components; “B1” for the technical design, including the cost, scheduling and contractual requirements, to meet government regulations and agreed international standards, and “B2” for the economic, financial, resettlement, environment and social aspects.

3. The PPTA will be completed over a 24 month period. At the conclusion of Phase A, three months is provided for review and planning approval of the proposed solutions by relevant government stakeholders. At conclusion of Phase B, the feasibility study is expected to be approved by the government of Viet Nam, to allow the detailed design phase to commence.

Table A4.1: Summary of Major Outputs and Activities

Major Activities	Expected Completion Date ¹	Major Outputs	Expected Completion Date ¹
Route alignment, station locations and technology	Month 8	Solutions Report	Month 6 (draft) Month 9 (final)
Social and safeguards assessment	Month 16	Final Report	Month 19 (draft) Month 22 (final)
Feasibility and basic design	Month 19	Feasibility Study	Month 19 (draft)
Feasibility study approval	Month 24	Report	Month 22 (final)

1- from date of award of contract

Source: Asian Development Bank staff.

C. Cost Estimate and Proposed Financing Arrangement

4. The TA is estimated to cost \$3.50 million equivalent, of which \$1.5 million equivalent will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V). The government, through the Ha Noi People's Committee (HPC), will provide \$1.9 million in financing for component B1, and \$100,000 “in-kind” counterpart support.

¹ ADB. 2011. *VIE: Loan 2741 – Ha Noi Metro Rail System Project*, Manila.

Table A4.2: Cost Estimates and Financing Plan
(\$'000)

Item	Total Cost
A. Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (33 person-months)	764.0
ii. National consultants (138 person-months)	263.9
b. International and local travel	52.5
c. Office, reports and communications	67.7
2. Equipment (computer, printer, etc.)	10.0
3. Workshops, training, seminars, and conferences	7.5
4. Vehicle	22.4
5. Surveys	199.5
6. Representative for contract negotiations	5.0
7. Contingencies	107.5
Subtotal (A)	1,500.0
B. Government Financing for Component B1	
1. Component B1	1,900.0
2. Office accommodation, meetings and transport	40.0
3. Remuneration and per diem of counterpart staff	60.0
Subtotal (B)	2,000.0
Total (A + B)	3,500.0

^a Funded by TASF-V

Source(s): Asian Development Bank and government staff

D. Consulting Services

5. The PPTA will engage 33 person months of international and 138 person months of domestic consultants by firm selection method², covering services under Phase A and Phase B2. Consultant selection will be done in accordance with ADB's *Guidelines on the Use of Consultants by Asian Development Bank and Its Borrowers* (2010, as amended from time to time), using quality- cost based selection on an 80:20 basis, with full technical proposal.

Table A4.3: Summary of Consulting Services Requirement

International Name of Positions	Person- months	National Name of Positions	Person- Months
Urban Transport Planner/Team Leader	7.0	Urban Transport Planner	11.0
Urban Railway Specialist	3.0	Urban Railway Specialist	6.0
Transport Modeler/Analyst	4.0	Transport Analyst	5.0
Metro specialists (railway, tunnel)	1.5	Technical Specialists (engineering, tunnel, geotechnical, cost/schedule)	10.0
Structural Specialist	0.5	Architect and Structural Specialists	4.0
Economic and financial specialists	4.0	Economic and financial specialists	8.0
Environmental, Air/noise/vibration and hydrological specialists	6.5	Environmental and hydrological specialists	8.0
Resettlement and Social/Gender Specialists	6.5	Resettlement/Social/Gender Experts	16.0
		Technical/office support	70.0

Source: Asian Development Bank staff

² Government financing will cover 24 international and 157 local person months for Phase B1.

6. The outline terms of reference for the project preparatory TA consultants are described in paras. 7 to 15 and detailed tasks are defined in the detailed terms of reference.³ The ADB funded consultant is expected to work closely with the government financed component B1 team during Phase B, to develop consistent common output for the feasibility study. The consulting services will be closely coordinated with proposed government funded services for component B1, including the need for ADB funded outputs to be in a suitable format as inputs and provide sufficient details needed to meet government regulatory approval requirements. The PPTA will be supported through separate consultant services to address relevant issues, include climate change adaptation, climate financing, non-motorized transport and accessibility.⁴

7. **Urban Transport Planner/Urban Planner** (international and national, 18.0 person-months) and **Transport Modeler/Analyst** (international and national, 9.0 person-months). Minimum of bachelor degree in relevant urban planning discipline and 15 years experience (for international), with responsibility for project management of the services and key tasks include; (i) assess alignment for optimization and efficiency, (ii) undertake demand assessment (iii) finalize station location and layout, identifying private sector development opportunities, (iv) prepare necessary submissions for approval by relevant government agencies and (v) determine necessary additional public transport measures to improve metro integration.

8. **Urban Railway Specialist** (international and national,⁵ 9 person-months). Minimum of Bachelor degree in relevant engineering discipline and 15 years experience (for international). Key tasks include; (i) determine public transport integration measures, (ii) directly support as needed specific metro planning and technical issues, (iii) undertake quality assurance of recommended technical solutions, including ensuring adequate consultation with relevant stakeholders and (iv) recommend measures to optimize project cost and schedule.

9. **Metro Technical Specialists – railway engineering, tunnel, geotechnical, cost/schedule** (international and national, 11.5 person-months). Minimum of bachelor degree in relevant engineering discipline and 10 years experience (for international), with key tasks include; (i) review the ongoing phase 1 project documents and recommend adoption of suitable technical standards and solutions, (ii) assessment of alternative solutions to reduce impact around station areas of measures, (iii) preparation of all relevant project documents, and (iv) preparation of cost estimates, and assist the government for advance procurement actions.

10. **Architectural and Structural Specialists** (international and national, 4.5 person-months). Minimum of Bachelor degree in relevant architectural or structural discipline and 15 years experience (for international), with key tasks include; (i) station planning and integration, (ii) preliminary station architectural features, and (iii) preparation of conceptual layout, including inclusion of universal access and non motorized transport features.

11. **Economic and Financial Specialists** (international and national, 12.0 person-months). Minimum of Bachelor degree in economic or financial discipline and 15 years experience (for international), with key tasks include; (i) assess economic, passenger and traffic conditions, (ii) evaluate direct and indirect cost and benefits to determine project EIRR, (iii) complete a

³ Draft detailed Terms of Reference have been prepared by ADB and government staff.

⁴ Funding through other ADB funds established for these issues or existing RSDD technical assistance programs.

⁵ For positions listed as international and national, the national specialist primary task will be to support the international experts complete their tasks, or other assigned sub-task work as necessary.

financial analysis, including cash flow projections to determine financial sustainability, and (iv) undertake financial management assessment of relevant agencies.

12. **Environmental and Hydrogeological Specialists** (international and national, 14.5 person-months). Minimum of Bachelor degree in relevant area and 10 years experience for international consultant. Tasks will include: (i) assessment of environmental issues for all agreed measures, including completion of necessary documentation for compliance with ADB's Safeguard Policy Statement (2009), (ii) assist with development of consultation and participation process, and (iii) determination of capacity building requirements.

13. **Resettlement Specialists** (international and national, 11.5 person-months). Minimum of bachelor degree in a relevant degree and 10 years experience for international consultant. Tasks will include; (i) assessment of involuntary resettlement impacts for all proposed measures, (ii) completion of necessary documentation for compliance with ADB's Safeguard Policy Statement (2009), (iii) development, preparation and conducting the consultation and participation process, and (iv) determine capacity building requirements.

14. **Social and Gender Specialists** (international and national, 11.0 person-months). Minimum of bachelor degree in a relevant specialist area and 10 years experience for international consultant. Tasks will include; (i) assessment of social development and gender issues, (ii) completion of necessary documentation in accordance with ADB's poverty reduction, gender and social development guidelines, (ii) development, preparation and conducting the consultation and participation process, (iii) review and assess social development impacts of the proposed measures, and (iv) assessment and development of gender sensitive features.

15. **Technical, office support** (national, 70.0 person-months). Provision of suitably qualified CADD and technical staff to support specialists, translators and office staff.

E. Implementation Arrangements

16. The executing agency will be the HPC and the implementing agency will be the Ha Noi Metropolitan Railway Board (MRB). In addition to PPTA financing and HPC financed consulting services, the government will provide in-kind contributions with counterpart staff, facilities and office space for use by consultants, logistic support for project and consultations meetings, and provision of relevant documentation. The TA is expected to be approved in December 2013 and the TA closed on 30 September 2016.

Table A4.4: Technical Assistance Processing and Implementation Schedule

Major Milestones	Expected Completion Date
Approval of PPTA	December 2013
Consultant Recruitment (ADB funded)	April 2014
1 st Tripartite meeting	November 2014
2 nd Tripartite meeting	December 2015
Final reports	February 2016
Completion of services	June 2016
Financial Closure	September 2016

Source: Asian Development Bank staff

INITIAL POVERTY AND SOCIAL ANALYSIS

Country:	Viet Nam	Project Title:	Ha Noi Metropolitan Railway Line No.3 (section Ha Noi Railway station – Hoang Mai)
Lending/Financing Modality:	Project loan	Department/ Division:	Southeast Asia Regional Department/ Transport and Communications Division

I. POVERTY IMPACT AND SOCIAL DIMENSIONS
<p>A. Links to the National Poverty Reduction Strategy and Country Partnership Strategy</p> <p>The Government of Viet Nam is aware of the impact of inadequate infrastructure on growth and poverty reduction. As part of the Government’s Socio-Economic Development Plan (SEDP), the transport sector is expected to promote economic growth, poverty reduction, safety enhancement, environmental protection, and human resource development. The Government’s strategy for Ha Noi is to develop public transport and infrastructure to alleviate congestion and provide better access to services and employment opportunities to all groups. A sustainable urban public transport system will help address growing pressures on transport demand and the environment in high-density areas, to improve the quality of life, the working environment, the ability to attract investment in the project area and access to services and will therefore help to reduce poverty in Ha Noi. ADB’s country strategy and program addresses these issues through support to the Government’s program to improve urban transport infrastructure.</p>
<p>B. Targeting Classification</p> <p><input checked="" type="checkbox"/>General Intervention <input type="checkbox"/>Individual or Household (TI-H) <input type="checkbox"/>Geographic (TI-G) <input type="checkbox"/>Non-Income MDGs (TI-M1, M2, etc.)</p> <p>The project will develop public urban infrastructure that will improve access to affordable services in Ha Noi to generally improve the lives of those who live along Metro Line 3 to enable growth and social development, by providing increased economic opportunities, better access to education and health facilities, and government services. Additionally the Project will improve the urban environment by mitigating the negative impacts usually associated with very heavy road traffic.</p>
<p>C. Poverty and Social Analysis</p> <p>1. Key issues and potential beneficiaries.</p> <p>Hanoi has one of the highest population densities in the country with an average of 1,979 people per km2 (2009 national census). Ongoing migration from other provinces (mostly from other rural areas in the north of Vietnam) is placing increased pressure on services and land resources as well as exacerbating traffic congestion. Direct beneficiaries are communities along the metro corridor and the general public transport users in Ha Noi. The Project alignment (Line 3) will traverse city areas of highest population density (including Tu Liem and Dong Da which are the city’s two most dense districts). The poor also benefit from improved access, lower transportation costs, and better access to government services and public facilities. The Project systems design will be designed to be accessible and inclusive to all vulnerable transport user groups, including those with mobility impairments. There are no indigenous communities in the project area.</p> <p>2. Impact channels and expected systemic changes.</p> <p>Improved affordable public transport system will improve mobility, including access to public services and employment. Accessibility aspects of the Project include provision of cross subsidization of fares through a public obligation approach under the Metro operational plan as well as technical design features to enhance accessibility for women as well as people with mobility impairments. Project systems design focused on accessibility and affordability will enhance mobility of women, poor and those with mobility impairments. Line 3 will contribute significantly to the overall development of public transport systems in Hanoi and support alleviation of traffic congestion. This in turn will reduce travel time (contributing to economic growth) as well as improvement of air quality.</p> <p>3. Focus of (and resources allocated in) the PPTA or due diligence.</p> <p>The PPTA analyses/due diligence will cover the following areas with associated consultant resources: Involuntary Resettlement (11.5 months); Gender analysis and social assessment (11 person months) to assess issues related to gender, disability, poverty and general issues related to enhancing access; as well as financial analysis (6 months) to assess appropriate fare regimes. Assessments will be conducted for employment and small-scale economic development package programs for the poor. Resources for surveys and consultations for the respective are also included for the respective studies.</p> <p>4. Specific analysis for policy-based lending. Not applicable</p>

II. GENDER AND DEVELOPMENT	
1. What are the key gender issues in the sector/subsector that are likely to be relevant to this project or program?	<p>The social benefit and usability of transport infrastructure is enhanced when the design is based on appropriate consultation and social preparation including gender analysis. While women are key transport user stakeholders, the design and operation of transport infrastructure is commonly undertaken in a gender-blind approach and without adequate consultation with the end users and those hosting the infrastructure to determine their specific needs. Aspects such as accessibility, safety for women, linkages with integrated public transport, as well as design of ancillary facilities need to be taken in to account as part of the consultation and design process. Under the ensuing Project, women are more vulnerable to hardship due to the loss of their economic and social base as a result of land acquisition and relocation. Women will also face other social risks such as the potential for marginalization in the design and operation of the project if their needs are not adequately assessed and purposively incorporated.</p>
2. Does the proposed project or program have the potential to make a contribution to the promotion of gender equity and/or empowerment of women by providing women's access to and use of opportunities, services, resources, assets, and participation in decision making?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Please explain. Poor women and children will benefit from easier urban transport services, time savings and improved access to medical facilities and other social services, and from a general improvement in their quality of life. Women will also benefit from better public transport to access jobs, and increased opportunities for selling and buying goods at markets. A gender action plan will be developed that will assist to enhance these general benefits as well as targeted for public transport measures under the project.</p>
3. Could the proposed project have an adverse impact on women and/or girls or widen gender inequality?	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please explain.</p> <p>Under the ensuing project it is expected that there will be direct benefits to women in terms of improved access to opportunities and social services. The PPTA will conduct a gender analysis as part of the social impact assessment and determine potential benefits and opportunities and a Gender Action Plan and social action plan will be prepared to ensure that such benefits and opportunities will be maximized under the ensuing project, including design, operation and mitigation of risks and negative impacts.</p>
4. Indicate the intended gender mainstreaming category:	<p><input type="checkbox"/> GEN (gender equity theme) <input checked="" type="checkbox"/> EGM (effective gender mainstreaming) <input type="checkbox"/> SGE (some gender elements) <input type="checkbox"/> NGE (no gender elements)</p>

III. PARTICIPATION AND EMPOWERMENT	
1. Who are the main stakeholders of the project, including beneficiaries and negatively affected people? Identify how they will participate in the project design.	<p>National, city, and commune government officials, development partners, Steering Committee for poverty reduction, small business owners, affected community representatives, and relevant mass organizations (CSOs) such as Vietnam Women's Union and Youth Union. City Authorities and metro implementation authority will be closely involved in the project design preparation. During implementation of the resettlement plan, individual and group consultations will be undertaken with affected people across a range of sites in urban areas. A participatory approach will be used to determine the location and design of some project features, such as station entrance location, underpasses and footbridges for local communities</p>
2. How can the project contribute (in a systemic way) to engaging and empowering stakeholders and beneficiaries, particularly, the poor, vulnerable and excluded groups? What issues in the project design require participation of the poor and excluded?	<p>The ensuing project will empower poor people through provision of affordable transport service. For those with mobility impairments, the project design features will provide them with enhanced mobility compared to other forms of transport. The project design during the PPTA stage will incorporate the results of consultations with transport users from a variety of profiles, including poor and other marginalized groups, especially on issues of station and ancillary infrastructure design and fare regimes.</p>
3. What are the key, active, and relevant civil society organizations in the project area? What is the level of civil society organization participation in the project design?	<p>The key relevant CSOs are mass organizations, including the Women's Union, Youth Union and Fatherland Front.</p> <p><input type="checkbox"/> [H] Information generation and sharing <input type="checkbox"/> [H] Consultation <input type="checkbox"/> [M] Collaboration <input type="checkbox"/> [M] Partnership</p>
4. Are there issues during project design for which participation of the poor and excluded is important? What are they and how shall they be addressed?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>The technical design of the stations and ancillary facilities (access, toilets, lighting, waiting rooms, etc) as well as connectivity and fare structures require consultation with future users, including women, elderly, school children, poor</p>

and those with mobility impairment. Consultations with transport users will be undertaken through key informant interviews and focus group discussions and will specifically include such potentially marginalized groups. These consultations will be undertaken as part of the gender and social analyses for which consultant resources are included in the PPTA.

IV. SOCIAL SAFEGUARDS

A. Involuntary Resettlement Category A B C FI

1. Does the project have the potential to involve involuntary land acquisition resulting in physical and economic displacement? Yes No As the metro line will be underground and then elevated along a wide section of road with a canal, it is expected the land acquisition and resettlement impacts will be mainly around station locations. The exact station locations will be determined under the PPTA, so specific impacts could not be identified at this stage, but is expected to exceed 200 affected persons.

2. What action plan is required to address involuntary resettlement as part of the PPTA or due diligence process?

- Resettlement plan Resettlement framework Social impact matrix
 Environmental and social management system arrangement None

B. Indigenous Peoples Category A B C FI

1. Does the proposed project have the potential to directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples? Yes No

2. Does it affect the territories or natural and cultural resources indigenous peoples own, use, occupy, or claim, as their ancestral domain? Yes No Project within central area of Ha Noi city.

3. Will the project require broad community support of affected indigenous communities? Yes No Please explain. Ethnic minority people residing in Hanoi City proper are integrated in mainstream society. Hence there are no socio-cultural groups present that could be considered as indigenous peoples.

4. What action plan is required to address risks to indigenous peoples as part of the PPTA or due diligence process?

- Indigenous peoples plan Indigenous peoples planning framework Social Impact matrix
 Environmental and social management system arrangement None

V. OTHER SOCIAL ISSUES AND RISKS

1. What other social issues and risks should be considered in the project design?

- Creating decent jobs and employment Adhering to core labor standards Labor retrenchment
 Spread of communicable diseases, including HIV/AIDS Increase in human trafficking Affordability
 Increase in unplanned migration Increase in vulnerability to natural disasters Creating political instability
 Creating internal social conflicts Others, please specify Traffic safety_____

Indicate high (H), medium (M), low (L) for selected boxes

2. How are these additional social issues and risks going to be addressed in the project design?

For project-related employment during construction and maintenance, the IA will include a specific provision in bidding documents to ensure that civil works contractors: (a) comply with applicable core labor laws, (b) do not differentiate payment between men and women for work of equal value; (c) do not employ child labor in the construction and maintenance activities; and (d) maximize employment of local poor and disadvantaged persons. There is a potential risk of HIV and STIs transmission and human trafficking during and after the construction. There is increased safety risk for populations close to the construction areas. HIV/AIDS and Human Trafficking Prevention and Awareness Program and road safety awareness will be designed and implemented. The project will introduce measures to discourage private transport to increase public transport usage. Affordability will increase through improved economic opportunities and targeted lower public transport costs to passengers.

VI. PPTA OR DUE DILIGENCE RESOURCE REQUIREMENT

1. Do the terms of reference for the PPTA (or other due diligence) contain key information needed to be gathered during PPTA or due diligence process to better analyze (i) poverty and social impact; (ii) gender impact, (iii) participation dimensions; (iv) social safeguards; and (vi) other social risks. Are the relevant specialists identified?

- Yes No If no, please explain why.

3. What resources (e.g., consultants, survey budget, and workshop) are allocated for conducting poverty, social and/or gender analysis, and participation plan during the PPTA or due diligence?

A gender and social analysis will be undertaken by gender and social development consultants (5 person months). Funds for related surveys and consultations have been included (\$20,000). A consultation and participation plan will be prepared as part of the gender and social analysis.