



# Report and Recommendation of the President to the Board of Directors

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Project Number: 40080-025  
November 2015

## Proposed Loans for Additional Financing and Administration of Loan for Additional Financing Socialist Republic of Viet Nam: Ha Noi Metro Rail System Project (Line 3: Nhon–Ha Noi Station Section)

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Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 22 October 2015)

Currency unit	–	dong (D)
D1.00	=	\$0.000045
\$1.00	=	D22,285
€1.00	=	\$1.11

## ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
AFD	–	Agence Française de Développement
CTF	–	Clean Technology Fund
DGT	–	Direction Générale du Trésor (General Directorate of Treasury)
EIB	–	European Investment Bank
FMSAP	–	financial management and sustainability action plan
HPC	–	Ha Noi People's Committee
km	–	kilometer
LAR	–	land acquisition and resettlement
MRB	–	Ha Noi Metropolitan Railway Management Board
OCR	–	ordinary capital resources
PAM	–	project administration manual
PMS	–	project management support

## NOTES

- (i) The fiscal year (FY) of the Government of Viet Nam ends on 31 December.  
(ii) In this report, "\$" refers to US dollars.

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## PROJECT AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number: 40080-025</b>	
<b>Project Name</b>	Ha Noi Metro Rail System Project (Line 3: Nhon-Ha Noi Station Section) (Additional Financing)	<b>Department /Division</b>	SERD/SETC
<b>Country Borrower</b>	Viet Nam, Socialist Republic of Government of the Socialist Republic of Viet Nam	<b>Executing Agency</b>	Ha Noi People's Committee
<b>2. Sector</b>	<b>Subsector(s)</b>	<b>ADB Financing (\$ million)</b>	
✓ <b>Transport</b>	Urban public transport		64.80
		<b>Total</b>	<b>64.80</b>
<b>3. Strategic Agenda</b>	<b>Subcomponents</b>	<b>Climate Change Information</b>	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Low
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns Urban environmental improvement		
<b>4. Drivers of Change</b>	<b>Components</b>	<b>Gender Equity and Mainstreaming</b>	
Partnerships (PAR)	Official cofinancing Regional organizations	Effective gender mainstreaming (EGM)	✓
<b>5. Poverty Targeting</b>		<b>Location Impact</b>	
Project directly targets poverty	No	Urban	High
<b>6. Risk Categorization:</b>	Complex		
<b>7. Safeguard Categorization</b>	<b>Environment: C Involuntary Resettlement: C Indigenous Peoples: C</b>		
<b>8. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>64.80</b>	
Sovereign Project loan: Ordinary capital resources		59.00	
Sovereign Project loan: Asian Development Fund		5.80	
<b>Cofinancing</b>		<b>296.40</b>	
European Investment Bank		77.00	
Direction Générale du Trésor		93.50	
Agence Française de Développement		75.90	
Clean Technology Fund		50.00	
<b>Counterpart</b>		<b>24.00</b>	
Government		24.00	
<b>Total</b>		<b>385.20</b>	
<b>9. Effective Development Cooperation</b>			
Use of country procurement systems		No	
Use of country public financial management systems		No	





## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on (i) the proposed loans, and (ii) the proposed administration of a loan to be provided by the Clean Technology Fund (CTF), both to the Socialist Republic of Viet Nam for the additional financing of the Ha Noi Metro Rail System Project (Line 3: Nhon–Ha Noi Station Section). The design and monitoring framework is in Appendix 1.

2. The project will develop a 12.5 kilometer (km) dual-track rail line between the suburb of Nhon and the main railway station of Viet Nam's capital city, Ha Noi—3.5 km underground, 8.5 km elevated, and 0.5 km on a transition ramp. The project works include a depot with ancillary buildings at Nhon, elevated viaducts, a transition tunnel portal, bored tunnels, and 12 stations. The project will provide electrical and mechanical systems, including all railway systems required to operate a modern metro line. The project also includes support for detailed design, procurement, construction supervision, design verification, project management, and capacity development. The additional loans will finance an expected increase in the cost of the civil works contract, as well as consulting services for a second phase of project management support (PMS).

## II. THE PROJECT

### A. Rationale

3. Line 3 of the Ha Noi metro system is one of four priority rail lines planned under the government's urban transport master plan for Ha Noi that was approved by the Prime Minister in 2008.<sup>1</sup> The project will enhance access to transport in six districts of Ha Noi and form an integral part of a better public transport system that aims to improve connectivity and raise the share of public rail and bus transport to 40% of passenger demand. This will shift travelers from comparatively high-carbon urban travel modes such as private motorcycles and cars and reduce greenhouse gas emissions. The executing agency is the Ha Noi People's Committee (HPC), which is the city government. The implementing agency is the Ha Noi Metropolitan Railway Management Board (MRB), which was established in 2003 by HPC with responsibility to carry out implementation of those portions of the Ha Noi Metro Rapid Transit network not directly operated by Viet Nam Railways.

4. The Asian Development Bank (ADB) provided technical assistance in 2006 for an initial feasibility study of the metro line 3 project.<sup>2</sup> ADB approved a \$293 million loan from ordinary capital resources (OCR) for the current project on 29 March 2011, and it became effective on 13 March 2012. Nine civil works and equipment contracts and four consulting services contracts have been financed with cofinancing of €110 million from Agence Française de Développement (AFD), €250 million from Direction Générale du Trésor (DGT) of France, and €73 million from the European Investment Bank (EIB). ADB is financing the civil works contract for the tunnel section of line 3 and four underground stations through contract package 3.<sup>3</sup>

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<sup>1</sup> JICA. 2007. *The Comprehensive Urban Development Programme in Hanoi Capital City*. Ha Noi.

<sup>2</sup> ADB. 2006. *Technical Assistance to the Socialist Republic of Viet Nam for Preparing the Ha Noi Metro Rail System Project*. Manila (TA 4900-VIE). The feasibility study was subsequently updated and completed by DGT-funded consultants.

<sup>3</sup> ADB originally had two contracts to finance, one of them jointly with AFD. After restructuring, ADB is fully financing one contract.

5. The ADB-financed feasibility study in 2009 estimated the overall project cost at €895.4 million, then equivalent to \$990.5 million.<sup>4</sup> Detailed design and updated cost estimates were completed by the project implementation consultant in March 2012 with DGT financing. However, delays and cost increases caused by design changes, audits, contractual issues, the removal of existing utility lines, preparation and implementation of resettlement plans, and continued price escalation have raised the project cost in US dollars to the current estimate of \$1,375.7 million.<sup>5</sup> The Government of Viet Nam approved the revised project outlines on 5 and 23 December 2014 and authorized the needed increases in official development aid financing. This approval and the additional financing will ensure that the project will be completed in 2019 and help the government achieve economic development objectives laid out in the Ha Noi urban transport master plan (footnote 1).

6. Additional loans for the project were approved in December 2014 by AFD (€69.0 million) and DGT (€85.0 million). EIB expects to approve its proposed additional loan of €70.0 million by the end of 2015. The government has asked ADB to provide additional financing of \$59.0 million from ADB's OCR and \$50.0 million from the CTF<sup>6</sup> to finance potential future increases in the cost of the project's civil works, as well as \$5.8 million from the Asian Development Fund (ADF) to finance additional PMS consulting services. The government's application for CTF financing was approved by the CTF Trust Fund Committee on 28 October 2014. The additional financing from ADB and the cofinanciers is likely to be enough to complete the project. The government has committed to providing additional counterpart funds to finance taxes and duties, utility removals, and land acquisition and resettlement (LAR).

7. Four out of the nine contract packages for civil works and equipment have been awarded. Current rates of progress are about 14% for contract package 1, 21% for contract package 2, 90% for contract package 4, and 23% for contract package 5. The depot and the 8.5-km elevated section of line 3 are expected to be completed in late 2016. Procurement is ongoing for four contracts, and awards are expected by the end of 2015. The ADB-financed contract package 3 was awarded on 22 October 2015. The civil works under this contract are expected to be completed by mid-2019, and all the line 3 works should be finished by the end of 2019.

8. The project includes the first railway tunnel ever constructed in Ha Noi, and this work requires strong international technical and project management expertise. Because the project is highly complex, MRB staff requires continuous support in managing daily activities to ensure that implementation meets the cofinanciers' requirements and high international quality standards. The consulting services for phase 1 of PMS under the current project were financed by AFD, but the contract for this phase expired on 30 September 2015. ADB will finance phase 2 of PMS consulting services from its proposed additional financing. The PMS consultant is to be mobilized immediately after loan effectivity, which is currently scheduled for April or May 2016. ADB will assign individual staff consultants to ensure that the PMS services continue until

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<sup>4</sup> This proposed additional financing project uses an August 2015 exchange rate of €1.0 = \$1.1 to convert financial figures, including the financing to be provided by the cofinanciers in euros. The current project used a February 2011 exchange rate of €1.0 = \$1.3 to estimate the overall project cost, including the financing by the cofinanciers in euros, which was equivalent at that rate to \$1,077.2 million.

<sup>5</sup> The civil works costs may rise because houses and buildings above the tunnel section may prove to be obstacles to construction. Before tunnel boring starts, the contractor for the ADB-financed contract package 3 will identify obstacles through a preliminary assessment and develop a detailed work plan that will include actions, a schedule, and costs for land acquisition and resettlement.

<sup>6</sup> The CTF is part of the multidonor global Climate Investment Fund, which supports low-carbon transport to promote greenhouse gas emission reduction.

the phase 2 consulting firm has been mobilized. The terms of reference for the PMS phase 2 consulting services are in the project administration manual (PAM).<sup>7</sup>

9. Based on the criteria of ADB *Operations Manual*, the current project is not performing well because (i) expected outputs are being delivered 4 years behind schedule; and (ii) contract awards and disbursements are significantly behind schedule.<sup>8 9</sup> Therefore, ADB has applied a strict business process to improve the performance of the project. A concept review for the additional financing for the project was conducted in line with the requirements of ADB *Operations Manual*.<sup>10</sup> The review examined options for restructuring the project. It found that the need to connect the maintenance depot in Nhon to a major central interchange through line 3 made it impractical to reduce the project to a scale that could be covered by the original financing. Doing so would result in a significant loss of benefits. The due diligence for the additional financing demonstrated that the project remains technically feasible. It remains economically viable, with an economic internal rate of return of more than 12%. It has a financial internal rate of return of -1.22%, below the weighted cost of capital of 0.70%. HPC has committed to maintaining the subsidy necessary to make the project financially sustainable throughout the metro system's life. Such a subsidy is the norm for most metro systems around the world.

10. Compliance with the loan's social covenants has been satisfactory, and compliance with the environmental covenants has been generally satisfactory. HPC has not complied with the financial covenants, because it has not produced audited financial statements for the cofinanciers' project accounts for FY2012, FY2013, and FY2014. Initial delays in LAR have been mitigated. Resettlement related to the project's depot and access road components is nearing completion, and resettlement plans for the underground section are being finalized. ADB-cleared environmental monitoring plans have been incorporated into all works contracts, and monitoring reports are being provided and disclosed. Submission of the audited financial statements for the original project for FY2012, FY2013, and FY2014 will be a condition for HPC to be able to withdraw from the ADF loan account, to ensure that the loan's financial covenants are complied with. With the award of the tunneling contract, the overall project performance from now to completion is expected to be satisfactory with the additional financing. The proposed loan for the additional financing is included in ADB's country operations business plan for Viet Nam for 2015–2017.<sup>11</sup>

## **B. Impact and Outcome**

11. The aggregate impact and outcome of the project will not change with the additional financing. The impact will be the establishment of an integrated, sustainable public transport system in six districts of Ha Noi.<sup>12</sup> The outcome will be the establishment of competitive metro rail services along the project line 3 corridor.

<sup>7</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

<sup>8</sup> Summary of Project Performance (accessible from the list of linked documents in Appendix 2).

<sup>9</sup> ADB. 2011. Additional Financing. *Operations Manual*. OM H5/OP. Manila (para. 3).

<sup>10</sup> ADB. 2011. Additional Financing. *Operations Manual*. OM H5/OP. Manila (para. 49).

<sup>11</sup> ADB. 2014. *Country Operations Business Plan: Viet Nam, 2015–2017*. Manila.

<sup>12</sup> The number of districts covered by line 3 increased in 2012 from five to six after Tu Liem District was split into Tu Liem North and Tu Liem South for administrative purpose.

### C. Outputs

12. The project outputs with additional financing will remain the same: (i) line 3 of the Ha Noi metro system put into operation, and (ii) the improvement of implementation capacity at the MRB. The additional financing will cover the additional costs of developing line 3 and the consulting services for phase 2 PMS to further improve the MRB's implementation and operations abilities.

### D. Investment and Financing Plans

13. Based on the current euro–US dollar exchange rate in August 2015, the original overall project cost estimate was equivalent to \$990.5 million. Due to expected increases in the costs of the civil works and potential LAR, the project cost is now estimated to be equivalent to \$1,375.7 million (Table 1).

**Table 1: Project Investment Plan (\$ million)**

Item	Current Amount <sup>a</sup>	Additional Financing <sup>b</sup>	Total
<b>A. Base Cost<sup>c</sup></b>			
1. Metro Line 3 construction			
a. Civil works	401.5	75.1	476.6
b. Equipment and systems	275.2	156.7	431.9
c. Land acquisition and resettlement	24.3	2.6	26.9
2. Implementation support			
a. Consulting services	47.4	42.4	89.8
b. Incremental administration	35.2	0.0	35.2
<b>Subtotal (A)</b>	<b>783.6</b>	<b>276.8</b>	<b>1,060.4</b>
<b>B. Contingencies<sup>d</sup></b>	<b>147.7</b>	<b>105.7</b>	<b>253.4</b>
<b>C. Financing Charges During Implementation<sup>e</sup></b>	<b>59.2</b>	<b>2.8</b>	<b>62.0</b>
<b>Total (A+B+C)</b>	<b>990.5</b>	<b>385.2</b>	<b>1,375.7</b>

ADB = Asian Development Bank, CTF = Clean Technology Fund.

Note: Numbering may not sum precisely because of rounding.

<sup>a</sup> Includes taxes and duties of \$ 71.0 million financed from government resources.

<sup>b</sup> Includes taxes and duties of \$21.3 million to be financed from government resources. Taxes and duties will be exempted. ADB and CTF loans may finance local transport and insurance costs.

<sup>c</sup> In mid-2015 prices.

<sup>d</sup> Physical contingencies computed at 30% for civil works and 6% for consulting services; price contingencies computed at 5% on foreign exchange costs and 15% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>e</sup> Includes interest and commitment charges. Interest during construction for ADB loan from ordinary capital resources has been computed at 5-year (corresponding to the implementation period) US dollar fixed swap rate, plus a spread of 0.50%. Commitment charges are 0.15% per year to be charged on the undisbursed loan amount. Interest during implementation of the consulting services for ADB loan from its Special Funds has been computed at an interest rate of 2.0% per annum during the grace period and thereafter. The CTF loan has an interest charge of 0.25% and a management fee of 0.18% of per annum.

Source: Asian Development Bank and government estimates.

14. The overall ADB project cost comprises \$293.0 million of ADB's existing financing for the current project and the proposed additional financing from ADB and the CTF of \$114.8 million. The additional ADB and CTF loans will finance the expected increase in the civil works costs and the cost of consulting services for phase 2 PMS, excluding any taxes and duties to be imposed on the works and services, as well as financing charges during implementation. All financing charges are to be capitalized.

15. Under the parallel collaborative cofinancing arrangement, additional loans already approved of €69.0 million (\$75.9 million equivalent) from AFD and €85.0 million (\$93.5 million equivalent) from DGT, along with the loan of €70.0 million (\$77.0 million equivalent) expected from the EIB, will finance the expected increase in the costs of the civil works, electrical and mechanical systems, rolling stock, and consulting services under their respective contract packages. The cofinanciers' financing, per the project's investment plan, and their collaboration with ADB will be subject to the satisfactory conclusion of their internal approval processes.

16. The government's additional counterpart funds of \$24.0 million will finance taxes and duties, any additional LAR costs, and utility lines diversion, according to the cost estimates approved by the Prime Minister in December 2014.

17. The government has requested a loan equivalent to \$59.0 million from ADB's OCR and a loan in various currencies equivalent to SDR4,107,000.00 (\$5.8 million) from ADB's Special Funds resources, to help finance the project. The OCR loan will have a 20-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, a commitment charge of 0.15% per year, and such other terms and conditions set forth in the draft loan and project agreements. The ADF loan will have a 25-year term, including a grace period of 5 years, an interest rate of 2.0% per annum during the grace period and thereafter, and such other terms and conditions set forth in the draft loan and project agreements. The CTF will cofinance the project with a loan of \$50 million with a 40-year term, including a grace period of 10 years, a management fee of 0.18% per annum on the undisbursed balance of the loan, and an interest charge of 0.25%.<sup>13</sup> ADB will administer the CTF loan in accordance with the CTF loan agreement with the government.

18. The borrower of the additional ADB and CTF loans will be the government. The government will onlend the entire loan proceeds to HPC under a subsidiary financing agreement acceptable to ADB. The financing plan is in Table 2.

**Table 2: Financing Plan**

Source	Current <sup>a</sup>			Additional Financing		Total	
	Amount (\$ million)		Share of Total (%)	Amount (\$ million)	Share of Total (%)	Amount (\$ million)	Share of Total (%)
	As of Feb 2011	As of Aug 2015					
ADB	293.0	293.0		64.8	16.8	357.8	26.0
OCR (loan)	293.0	293.0	29.6	59.0	15.3	352.0	25.6
ADF (loan)	0.0	0.0	0.0	5.8	1.5	5.8	0.4
CTF	0.0	0.0	0.0	50.0	13.0	50.0	3.7
AFD	143.0	121.0	12.2	75.9	19.7	196.9	14.3
DGT	325.0	275.0	27.8	93.5	24.3	368.5	26.8
EIB	95.0	80.3	8.1	77.0	20.0	157.3	11.4
Government	221.2	221.2	22.3	24.0	6.2	245.2	17.8
<b>Total</b>	<b>1,077.2</b>	<b>990.5</b>	<b>100.0</b>	<b>385.2</b>	<b>100.0</b>	<b>1,375.7</b>	<b>100.0</b>

ADB = Asian Development Bank, ADF = Asian Development Fund, AFD = Agence Française de Développement, CTF = Clean Technology Fund, DGT = Direction Générale du Trésor, EIB = European Investment Bank, OCR = ordinary capital resources.

<sup>a</sup> The current amounts are shown by the figures based on the euro–US dollar exchange rates as of February 2011 when the current project was approved and as of August 2015 when the proposal for additional financing was being prepared. The additional financing and total amounts are based on the August 2015 exchange rate.

Source: Asian Development Bank and government estimates.

<sup>13</sup> The project has been allocated \$50 million from the approved Viet Nam Investment Plan.

## E. Implementation Arrangements

19. No change will be made to the project's implementation arrangements with the additional financing. Other changes from the original financing arrangements have been recorded in the PAM (footnote 7), for which the project administration manual has been updated. HPC will be the executing agency and MRB the implementing agency. HPC has established a major projects steering committee for metro system development. It is chaired by the HPC vice-chairman, who is responsible for project oversight and coordination. MRB is overseeing the planning, design, and implementation of the metro system.

20. To address issues hindering project performance, ADB and the PMS consultants have conducted project implementation training for MRB staff on project management, social and environmental safeguards, and financial management. MRB has also gained improved skills and knowledge during the procurement of major project contract packages. Project performance, costs, and compliance with agreed schedules are monitored by MRB and the cofinanciers in monthly project progress meetings and during project review missions. All project documents are disclosed in accordance with ADB's Public Communications Policy 2011. The central government has also agreed to provide stronger coordination and support for the development of the Ha Noi metro system through regular national steering committee meetings that are also attended by the development partners. The project is scheduled to be physically completed by 30 June 2019, and the targeted additional loan closing date is 31 December 2019.

21. ADB, AFD, DGT, and the EIB will inform one another in advance of any missions, explore joint participation in such missions, and report to one another on the findings of the missions and the progress of their respective project components. The cofinanciers agree that a single process for social and environmental assessment and planning, safeguard documentation, consultation, and disclosure be conducted that satisfies both their own requirements and those of ADB's Safeguard Policy Statement (2009). ADB will be responsible for conducting due diligence, reviewing documents, and monitoring project activities in accordance with the Safeguard Policy Statement and will share all documents related to this process with the cofinanciers. AFD, DGT, and EIB will conduct the due diligence, monitoring and document reviews, and supervision of activities that are not required by ADB's Safeguard Policy Statement but may be required by the other cofinanciers.

22. ADB, AFD, DGT, and EIB will administer their respective contracts in accordance with their own policies and procedures. The cofinanciers will inform one another promptly of any event that interferes or threatens to interfere with the processing and implementation of their respective loans. The cofinanciers will each retain their independent rights of action and decision under their respective legal agreements with the government.

**Table 3: Implementation Arrangements**

Aspects	Arrangements		
Implementation period	February 2016–June 2019		
Estimated closing date	31 December 2019		
Management			
(i) Oversight body	Vice-chairman of the HPC (chair); Department of Investment and Planning, Department of Finance; and others under the HPC and line ministries (director-general and/or deputy-director-general levels)		
(ii) Executing agency	Ha Noi People's Committee		
(iii) Key implementing agencies	Ha Noi Metropolitan Railway Management Board		
(iv) Implementation unit	Project implementation division 1, 41 staff		
Consulting services	Quality- and cost-based selection (80:20, full	216 person-months 127 person-months international,	\$ 4.7 million

Aspects	Arrangements
	technical proposal) 89 person-months national
Procurement	International competitive bidding
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed between the government and ADB.

ADB = Asian Development Bank, CTF = Clean Technology Fund, HPC = Ha Noi People's Committee, OCR = ordinary capital resources.

Source: Asian Development Bank.

### III. DUE DILIGENCE

#### A. Technical

23. Technical requirements will remain unchanged. After the award of remaining major contracts, scheduled by the end of 2015, the project is expected to perform satisfactorily until completion.

#### B. Economic and Financial

24. **Economic analysis.** The project remains economically viable despite cost increases and delays. The 2010 economic analysis was updated taking into account the actual (i) capital costs, (ii) construction schedule, (iii) changes in the income per capita in Ha Noi, and (iv) difference between the 2009 and 2014 real dong–US dollar exchange rates. The original traffic forecasts were assumed to have been achieved 5 years later than anticipated by the original analysis. The revised economic internal rate of return of the project is 12.9%, slightly higher than the original 12.7% estimate.

25. **Financial analysis.** The project's financial internal rate of return is –1.22%, with a weighted average cost of capital of 0.70%. Therefore, the project is not considered financially viable. Based on projected fare revenues, the project is expected to require a total subsidy over its life of \$709 million, which subjects the project to a high financial sustainability risk. The large amount of subsidy the government must provide over the long term as well as uncertainty over whether sufficient expertise will be available to properly operate and maintain the rail system after construction puts a heavy burden on the government agencies.

26. To address these issues, the loan agreements include covenants requiring the preparation of a financial management and sustainability action plan (FMSAP). The plan will seek to develop alternative models for revenue generation that have been used successfully elsewhere in the world to help finance public transit systems, including for example the sale of advertising space in the metro stations, government surcharges on the price of fuel, as well as credit enhancement mechanisms (including of escrow mechanisms for government subsidies) and give firm recommendations for implementation of the action plan by the government. The plan will also examine how international private sector metro rail operators can be brought in to strengthen the operations and maintenance functions once the project line goes into operation. The government is determined to making all efforts to make the project sustainable.

#### C. Governance

27. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government, HPC, and MRB. The specific policy requirements and supplementary measures are described in the PAM (footnote 7). A project integrity risk assessment determined that the poor project performance and cost increases so far could not be attributed to poor

governance or corruption. Project-related governance has improved at both the national and local government levels. Financial probity has increased, and national legislation covering financial reporting and accounting standards has improved. However, the management and institutional capacity of the MRB remains a concern.

#### **D. Poverty and Social**

28. The better public transit system to be provided under the project will benefit all people in the areas served by line 3, especially those whose mobility is restricted. Among the prime beneficiaries will be workers from the rural and suburban areas, women, elderly people, and students, all of whom use public transport more than other groups. The gender category for current project and the additional project financing is effective gender mainstreaming. Implementation of the project's gender action plan has been delayed but has slowly improved since the MRB mobilized a full-time gender specialist in July 2015 to monitor it.

#### **E. Safeguards**

29. No additional environmental, resettlement, or indigenous peoples' impacts will result from the additional financing. The project's physical scope remains the same, and all safeguards documents prepared for the current project will remain in effect. The project with the additional financing will continue to be considered category C for all safeguards.

##### **1. Involuntary Resettlement**

30. A draft resettlement plan for the line 3 works was prepared in 2011. ADB approved an updated resettlement plan for the depot and the access line in February 2014. Compensation payments were completed in January 2015. ADB conducted a due diligence review of the resettlement activities during February–April 2015. The review concluded that the compensation and assistance provided to affected households, the consultations with affected persons, and the grievance redress procedures generally followed the provisions in the resettlement plan. The decision for forced land recovery followed the procedures provided by the government's existing regulations. An updated resettlement plan was approved by ADB in August 2015 to cover the impacts of development of line 3's underground section. This followed an updating and improvement of entitlements for the affected households, as well as consultations and surveys. The payment of compensation and provision of assistance to affected households is a precondition for the start of the underground section civil works. An addendum to the resettlement plan will be needed once the impacts of work on the tunnel section have been verified by the civil works contractor. Internal and external monitoring of resettlement activities for the entire alignment on line 3 is being conducted.

##### **2. Environment**

31. ADB conducted an environmental due diligence review of ongoing works in March 2015. It found the construction sites to be generally tidy and organized. Security personnel were assigned at the construction site, and the public was denied access to the area. The workers were using proper protective equipment and were provided with satisfactory facilities. Disposal sites for hazardous materials had been allocated and approved by the relevant authorities. Despite some noise generated by project vehicles on some nights, no major environmental issues were observed. In May 2015, however, two accidents occurred at the construction site



involving the operation of heavy equipment.<sup>14</sup> These incidents resulted from noncompliance with the project's safety requirements that are included in the site-specific environmental management plans. MRB has addressed the issues by instructing the contractors to prepare and implement preventive and corrective action plans. The construction supervision consultant is carefully monitoring the implementation of the contractor's method statements as well as conducting regular safety training sessions and supervising the corrective actions.

## F. Risks and Mitigating Measures

32. The risk category for the additional loan is *complex* because ADB's overall financing exceeds \$200 million and project progress has been slow. The individual risks were assessed, and the overall project risk was rated *medium*. The assessment found the limited financial management capacity of MRB and the uncertainty over the project's financial sustainability to pose the highest risks. The major project risks and mitigating measures are summarized in Table 4 and detailed in the risk assessment and risk management plan.<sup>15</sup> Overall, benefits and positive impacts are expected to outweigh any mitigation costs.

**Table 4: Summary of Major Risks and Mitigating Measures**

<b>Risks</b>	<b>Mitigating Measures</b>
Lack of government policy support for modal shift from use of private vehicles to use of public transport.	The government, HPC, and MRB will (i) prepare future projections for use of public transport and approve implementing rules for the modal shift, and (ii) the cofinanciers will support the implementation of policy measures with adequate refinancing and improvement of HPC's and MRB's capacity through training.
Costs increase more than expected and the project is delayed.	International experts will be engaged to support project management. Cofinanciers will monitor contract costs regularly. HPC has committed to cover additional project costs.
Local government approvals of LAR activities are delayed.	Requirements on LAR-related documentation are clearly communicated to city and district authorities and correctness of documentation and timeliness of their approvals closely monitored by consultants, MRB, and the cofinanciers.
Sustainability of the project is undermined by a lack of financial subsidies by HPC and uncertainty over sufficient O&M capacity of the rail system operator after construction	The government will avail of loans for sustainable transport and infrastructure development. Strong financial covenants in the loan agreements for the additional financing require the preparation of an FMSAP to explore and develop alternative models for revenue generation to finance public transit and private sector engagement in O&M.
Lack of MRB's financial management capacity may pose an integrity risk and delay project implementation.	ADB will help MRB set up an integrated financial project management and accounting system and train MRB staff to operate the system.
Lack of a clear project communication plan may risk project transparency and public engagement.	The cofinanciers and MRB are preparing a communication strategy for the short, medium, and long terms that will ensure that project information is disseminated more widely and understood by the public and that transparency is improved.

FMSAP = financial management and sustainability action plan, HPC = Ha Noi People's Committee, LAR = land acquisition and resettlement, MRB = Ha Noi Metropolitan Railway Management Board.

Source: Asian Development Bank.

<sup>14</sup> The accidents occurred during work under contracts financed by cofinanciers. The accidental dropping by crane lifting of a pile of material damaged a construction fence. The collapse of a crane boom and its load caused minor injuries to two motorbike riders and their motorbike and damaged advertising panels, and electrical equipment.

<sup>15</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

#### IV. ASSURANCES AND CONDITIONS

33. The government, HPC, and MRB have assured ADB that implementation of the project shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and loan documents.

34. The government, HPC, and MRB have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement and project agreement.

35. The government has agreed that (i) the OCR, ADF, and CTF loan agreements will be subject to cross-effectiveness and will not be declared effective until all three agreements have been duly authorized or ratified by and executed and delivered on behalf of the government; and (ii) no withdrawals will be made from the ADF loan account for consulting services until the government submits to ADB the audited financial statements for the original project for FY2012, FY2013, and FY2014.

#### V. RECOMMENDATION

36. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve

- (i) the loan of \$59,000,000 to the Socialist Republic of Viet Nam for the additional financing of the Ha Noi Metro Rail System Project (Line 3: Nhon–Ha Noi Station Section), from ADB's ordinary capital resources, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 20 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board;
- (ii) the loan in various currencies equivalent to SDR4,107,000 to the Socialist Republic of Viet Nam for financing of the Project Management Support Phase 2 services of the Ha Noi Metro Rail System Project (Line 3: Nhon–Ha Noi Station Section), from ADB's Special Funds resources, with an interest charge at the rate of 2.0% per annum during the grace period and thereafter; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board; and
- (iii) the administration by ADB of the loan not exceeding the equivalent of \$50,000,000 to the Socialist Republic of Viet Nam for the additional financing of the Ha Noi Metro Rail System Project (Line 3: Nhon–Ha Noi Station Section), to be provided by the Clean Technology Fund.

Takehiko Nakao  
President

16 November 2015

## REVISED DESIGN AND MONITORING FRAMEWORK

<b>Impacts the Project is Aligned with</b>			
<b>Current Project</b> An integrated sustainable public transport system in five districts of Ha Noi.			
<b>Overall Project</b> An integrated sustainable public transport system in six districts of Ha Noi <sup>1 2</sup> .			
<b>Results Chain</b>	<b>Performance Indicators with Targets and Baselines</b>	<b>Data Sources and Reporting Mechanisms</b>	<b>Risks</b>
<b>Outcome</b> <b>Current project</b> Competitive metro rail services along the project corridor  <b>Overall project</b> Unchanged.	<b>Current project</b> Peak loading of 785,000 passenger-km per day and 5,800 passengers per hour per direction on line 3 by 2017  Weighted average travel time per passenger along the project corridor reduced by 25% from 2011 baseline level of 52 minutes by 2017  <b>Overall project</b> Peak loading of 785,000 passenger-km per day and 5,800 passengers per hour per direction on line 3 by 2020  Weighted average travel time per passenger along the project corridor reduced by 25% from 2011 baseline level of 52 minutes by 2020	Government and public transport operator statistics  Benefit monitoring reports	Policy and regulatory reforms to support modal shift not enacted in a timely manner  Public transport services are not financially sustainable.
<b>Outputs</b> <b>Output 1</b> <b>Current project</b> Metro line 3 is operational	<b>Current project</b> 1a. Completion of 12.5 km tunneled and elevated track works, 12 stations and depot at Nhon, including gender-sensitive facilities at stations by the end of 2015  1b. Provision and operational commissioning of all systems, equipment,	Audited Project Financial Accounts  Progress reports  Project review mission reports  Project completion reports	Lack of MRB's financial management capacity may pose an integrity risk and delay project implementation.  Problems arising from limited experience in (i) implementing a large complex

<sup>1</sup> The project's impact is aligned with the government's Five-Year Socio-Economic Development Plan, 2011–2015 as well as the government's Transport Strategy 2020 that identifies transport development as key to sustaining socioeconomic development.

<sup>2</sup> The number of districts covered by line 3 increased in 2012 from five to six after Tu Liem District was split into Tu Liem North and Tu Liem South for administrative purpose, without changing the physical coverage of the former Tu Liem District (footnote 12 of the RRP).

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	and rolling stock designed with gender-specific features by the end of 2019		internationally supported project and (ii) integrating urban transport modes Delays in land acquisition and resettlement for main line station works  Lack of a clear project communication plan may risk project transparency and public engagement
<b>Overall project</b> Unchanged.	<b>Overall project</b> 1a. Completion of 12.5 km tunneled and elevated track works, 12 stations and depot at Nhon, including gender-sensitive facilities at stations by the end of 2019  1b. Provision and operational commissioning of all systems, equipment, and rolling stock designed with gender-specific features by the end of 2019		
<b>Output 2</b> <b>Current project</b> Improved implementation capacity of MRB  <b>Overall project</b> Unchanged.	<b>Current project</b> 2a. All MRB staff meet minimum skills criteria of their positions by 2015  <b>Overall project</b> 2a. All MRB staff meet minimum skills criteria of their positions by 2019	Progress reports  Project review mission reports	

### Key Activities with Milestones

1. Construct metro line 3, including stations and depot facilities, install E&M systems, provide rolling stock, and make metro operational (unchanged)
  - 1.1. Award all civil works contracts in August 2015 and complete civil works by June 2019 (changed)
  - 1.2. Provide and install E&M systems and rolling stock. Award all contracts by December 2015. Complete work by June 2019. Commission system by December 2019 (changed)
  - 1.3. Acquire all land and complete resettlement by December 2015 (changed)
2. Provide implementation capacity support to the MRB (changed)
  - 2.1. Complete detailed design by July 2013 (changed or completed)
  - 2.2. Consulting services for design verification mobilized by August 2011.
  - 2.3. Consulting services for project management support mobilized by April 2013.
  - 2.4. Consulting services for safety audit mobilized by March 2013 (changed or completed)
  - 2.5. Recruit consultant for phase 2 of project management support by June 2016 (added)

**Inputs****ADB**

\$293.0 million (current)  
 \$ 59.0 million (additional, OCR)  
 \$ 5.8 (additional, ADF)  
 \$357.8 million (overall)

**CTF**

\$ 0.0 million (current)  
 \$50.0 million (additional)  
 \$50.0 million (overall)

**AFD**

€110.0 million (current)  
 € 69.0 million (additional)  
 €179.0 million (overall)

**DGT**

€250.0 million (current)  
 € 85.0 million (additional)  
 €335.0 million (overall)

**EIB**

€ 73.0 million (current)  
 € 70.0 million (additional)  
 €143.0 million (overall)

**Government of Viet Nam**

\$221.2 million (current)  
 \$ 24.0 million equivalent (additional)  
 \$245.2 million equivalent (overall)

**Assumptions for Partner Financing****Current Project**

AFD will provide cofinancing under collaborative administration and parallel procurement for outputs 1 and 2.

DGT will provide cofinancing under collaborative administration and parallel procurement for output 1.

EIB will provide cofinancing under collaborative administration and parallel procurement for output 1.

**Overall Project**

AFD will provide cofinancing under collaborative administration and parallel procurement for output 1.

EIB and DGT unchanged.

ADB = Asian Development Bank, AFD = Agence Française de Développement, CTF = Clean Technology Fund, DGT = Direction Générale du Trésor (General Directorate of Treasury), EIB = European Investment Bank, E&M = electrical and mechanical, km = kilometer, MRB = Ha Noi Metropolitan Railway Management Board, OCR = ordinary capital resources.

Source: Asian Development Bank.

### **LIST OF LINKED DOCUMENTS**

<http://adb.org/Documents/RRPs/?id=40080-025-3>

1. Loan Agreement: Clean Technology Fund
2. Loan Agreement: Ordinary Operations
3. Loan Agreement: Special Operations
4. Project Agreement: Clean Technology Fund, Ordinary Operations
5. Project Agreement: Special Operations
6. Sector Assessment (Summary): Urban Transport
7. Project Administration Manual
8. Summary of Project Performance
9. Contribution to the ADB Results Framework
10. Development Coordination
11. Financial Analysis
12. Economic Analysis
13. Country Economic Indicators
14. Summary Poverty Reduction and Social Strategy
15. Gender Action Plan
16. Risk Assessment and Risk Management Plan

### **Supplementary Document**

17. Supplementary Annexes to Financial Analysis