Ho Chi Minh City People's Committee and Management Authority for Urban Railways Socialist Republic of Viet Nam

Special Assistance for Project Implementation (SAPI) For HO CHI MINH CITY URBAN MASS RAPID TRANSIT (UMRT) LINE 1, EASTERN SECTION

Final Report

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JAPAN INTERNATIONAL COOPERATION AGENCY

ABeam Consulting Ltd.

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Acronyms and Abbreviations

AFC Auto Fare Collection
DF/R Draft Final Report

DoF Department of Finance (HCMCPC)

DoI Department of Interior (HCMCPC)

DPI Department of Planning and Investment (HCMCPC)

DoT Department of Transport (HCMCPC)

DTUPW Department of Transport and Urban Public Works (HCMCPC)

F/R Final Report

GC General Consultant

GoV Government of Viet Nam

HCMC Ho Chi Minh City

HCMCPC Ho Chi Minh City People's Committee

HOUTRANS The Study on the Urban Transport Master Plan and Feasibility Study in HCM Metropolitan Area

IC/R Inception Report
IT/R Interim Report

JBIC Japan Bank for International Cooperation

JICA Japan International Cooperation Agency

LLC Limited Liability Company

MAUR Management Authority for Urban Railways

MoOCPT Management of Operation Center for Public Transport

MTR Corporation (Hong Kong UMRT company)

O&M Operation and Maintenance
PMU Project Management Unit

PU Preparation Unit

SAPI Special Assistance for Project Implementation

SAPROF Special Assistance for Project Formation

SMRT Singapore MRT

TC Technical Cooperation

TDM Traffic Demand Management

TOR Terms of Reference

TRTC Taipei Rapid Transit Corporation

UMRT Urban Mass Rapid Transit

VNR Vietnam Railways Corporation

VNRA Vietnam Railway Administration

1. Project Background and Objectives

1.1. Project Background

1.1.1. Construction of Urban Mass Rapid Transit

Social Economic Development 5-Year Plan (2006-2010) issues that the actions to improve heavy traffic have been continuously identified as an urgent need in major cities in Viet Nam. In the plan, it is recommended that future urban development must be implemented with appropriate environmental assessment, which is out of reconsidering lack of awareness to environmental issues of infrastructure development project in the industrial complexes in South East Region.

In Ho Chi Minh City (HCMC) urban area, which is the economic center of South East Region, the population was 6.88 million in 1997 and 7.65 million in 2002, and is expected to be 13.5 million in 2020. Consequently, the urban traffic volume has been increased significantly, and the problem of heavy traffic has been escalated. For example, average traffic speed of cars was 23.8Km/h in 2002, and is expected to be deteriorated to 13.3 km/h in 2020. It is no doubt that it is leading to serious air pollution and a major disincentive for sound economical and social activities. One of the big issues here is that the share of vehicles, particularly of motor cycles, is currently 94% in the total urban traffic demand. HCMC holds a public policy objective to decrease it to 50% by 2020.

Accordingly, the government of Viet Nam took the action to construct an Urban Mass Rapid Transit (UMRT) in HCMC which is a metropolis of the country. It is aimed to improve ever worsening traffic congestion and air pollution in HCMC urban area, and consequently to contribute to improving the regional economic growth and the urban environment. HCMC People's Committee (HCMCPC) was financed by the yen loan "Ho Chi Minh Eastern Section in March 2007", as a measure. It was recognized that the UMRT lines were unlikely to recover the full construction costs out of fares, and thus would ultimately require some forms of government subsidy.

UMRT is planned to start the operation in July 2015, which is coming in 6 years. In order to prepare for this in advance, Management Authority for Urban Railways (MAUR) is planning to present a master plan of establishment of the Operation & Maintenance (O&M) organization, and have an approval by HCMCPC by 2012. However, MAUR does not have enough experiences and knowledge regarding incorporation of an enterprise. It is regrettable if it ends up having a delay in the project practice. In order to move the project

forward, the quick decision making by the government of Vietnam is indispensable. Thus, HCMCPC is required to take an immediate action to have understanding and coordination among the relevant institutions to make some progress in preparation works. An urgent startup supported by experienced consultants was imperative.

1.1.2. Establishment of O&M Organization

In 2008, Task Team comprised of eleven members from the major related departments of HCMCPC, i.e. MAUR, Department of Interior (DoI), Department of Finance (DoF) and Department of Transport (DoT), has been formed to study the O&M organization and report to HCMCPC under the Decision No. "4211/QD-UBND" and "5047/QD-UBND" dated October 3, 2008 and Decision No. "5047/QD-UBND" dated November 20, 2008 (see Diagram 1.1 and 1.2). Their main responsibilities are as follows.

[Responsibility of Task Team]

- ➤ Coordinating with foreign consultants in studying and building up an organization and operation model for Ben Than-Suoi Tien Metro Line Operation and Maintenance Company to submit to HCMC People's Committee for review and approval.
- > Preparing plans for recruitment, training and personnel arrangement to ensure that the takeover, operation and development of the City Metro Line are efficient.

Through various studies conducted by Task Team together with General Consultants (GC) before this SAPI work, Task Team made the decision that they would study further the practices of Singapore MRT Corporation Ltd. (SMRT) and Taipei Rapid Transit Corporation (TRTC) for their O&M organization.

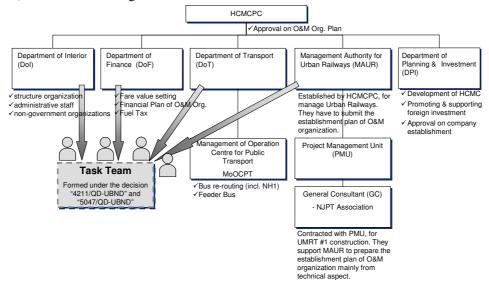


Diagram 1.1 Task Team for O&M organization

HCMCPC, MAUR and JBIC agreed on SAPI for establishment of O&M organization (Jul. 2008)

Task Team has been formed under the decision "4211/QD-UBND" (Oct. 2008) and "5047/QD-UBND" (Nov. 2008)

-Task Team, consisting of several departments of HCMCPC, has been formed for study of O&M organization and as a counter part of SAPI team.

General Consultants (GC) submitted "Working Paper 36" to facilitate preparation work (Nov. 2008)

- "Joint stock company owned by Ho Chi Minh City People Committee (HCMCPC) and its affiliated public organizations" was recommended as best option for O&M scheme through comparison of three cases.

Task Team visited other Asian railway companies (Nov. - Dec. 2008)

- In their visit report submitted to HCMCPC;
 - ➤ Three options, "Direct Operation by MAUR, Equitized company owned by government, and Privatized company", were selected as applicable for O&M schemes.
 - > Task Team declared they would study further Singapore (SMRT) and Taipei (TRTC) as best practice.

Diagram 1.2 Major Activities for Establishment of O&M Organization after SAPROF (Oct. 2006)

1.2. TOR of SAPI Team

1.2.1. TOR of SAPI Team

This SAPI is conducted to propose an action plan for establishment of an operation and maintenance organization and to bring relating supports, as was agreed between HCMCPC and Japan Bank of International Cooperation (JBIC) on 16th July 2008.¹

In the inception report meeting between Task Team and SAPI team held on 12th May 2009, SAPI team was requested by Task Team not to directly contact HCMCPC, other departments in HCMC, and central government, since Task Team had been formed by HCMCPC for coordination of the O&M organization issues. In this connection, TOR 4 for facilitation work was conducted with Task Team only.

[TOR agreed between HCMCPC and JBIC in 2008]

TOR1. To assist establishing the operation and maintenance organization

- 1-1 To define the role and scheme of the O&M organization
- 1-2 To confirm the relevant government agencies and authorities, legal framework, and administrative process in relation to establishment of an O&M organization
- 1-3 To support formulating the outline of essential elements to be considered with regard to establishment of the O&M organization, such as organizational structure, business plan, financial plan. In particular, the elements should include:
 - a) Scope of the organization

Possibility of the equitization and scope of lines (i.e. providing service on just one line or on all of 6 rail lines²) should be considered.

b) Asset ownership

The amount of asset shall approximately be estimated. Balancing with the Government owned assets should be taken into consideration.

- c) Capital (physical capital, nature of capital, shareholder composition, etc), borrowing (lender, condition) and capital ratio will be considered.
- d) Fare policy
- e) Budget restraint

¹ MINUTES OF DISCUSSION ON JBIC ASSITANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR HO CHI MINH CITY URBAN RAILWAY CONSTRUCTION PROJECT (BEN THANH-SUOI TIEN SECTION (LINE 1)) (I) BETWEEN JAPAN BANK FOR INTERNATIONAL COOPERARION AND HO CHI MINH CITY PEOPLE'S COMMITTEE, AND MANAGEMENT AUTHORITY FOR URBAN RAILWAYS, JULY 16, 2008

² As of 11th June 2009, there are seven railway lines in MAUR's plan.

TOR2. To finalize detailed Roadmap toward commercial operation

To ensure concrete execution of necessary tasks by the Vietnamese side after completion of this SAPI, a detailed roadmap toward the start of commercial operation should be prepared. The following actions are to be carried out:

- 2-1 To review and update the existing roadmap prepared by MAUR in accordance with the role of the O&M organization which is to be defined in the TOR1
- 2-2 To discuss with the Vietnamese side and finalize the roadmap
- 2-3 To support HCMCPC and MAUR to obtain an approval by Government of Viet Nam (GoV) on the roadmap as an official document

TOR3. To propose a detailed work plan for preparation of the O&M organization establishment

To ensure concrete conduct of the tasks in the roadmap (which is to be prepared in TOR2) after the completion of this SAPI, detailed terms of reference for the necessary tasks and required human resources for the establishment of the O&M organization should be defined. The following will be conducted:

- 3-1 To define TOR and organize each task by stakeholder who is in charge (such as MAUR, GoV, HCMCPC, and local public bus company)
- 3-2 To discuss and agree on the TOR with the Vietnamese side

TOR4. To facilitate decision making by the Vietnamese side

It is essential to conduct preparation tasks for O&M organization establishment in a timely manner for the smooth implementation of the project. Therefore, it is necessary for GoV to make a decision regarding the establishment of the O&M organization without delay. In addition, it is imperative to explain HCMCPC about the work plan for O&M organization establishment, and to promote prompt decision making. In order to do so, the following will be conducted:

- 4-1 To carry out three seminars regarding TOR1, 2, 3 in order to facilitate decision making by GoV.
- 4-2 To facilitate the discussion during the seminars proactively

2. SAPI Procedure

2.1. Work Flow

To extract issues and opportunities and to establish an accurate basic plan in approximate time, the SAPI Team conducted its TOR through hypothesis-driven approach in accordance with the following steps.

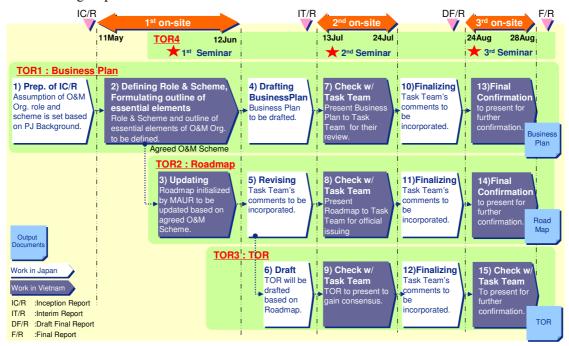


Diagram 2.1 SAPI Overall Task Flow

2.2. Approach

To conduct TOR in short term, the SAPI Team conducted its work along with the concept of "business organization pyramid" shown in Diagram 2.2. The contents in the layer of organization's role, vision and business strategy, and business plan were roughly described as output of TOR 1. The work description for building business management, business process, human resources and IT systems was extracted as output of TOR 2 and 3.

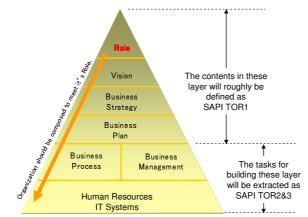


Diagram 2.2 Concept of Business Organization Pyramid

2.2.1. Key Information of TOR 1

At first, Role of the O&M organization has been confirmed through reviewing the project background with Task Team, since the scheme of organization should be defined to meet their role.

After gaining consensus on the role with Task Team, the O&M organization scheme, asset owner ship, scope of organization such as business portfolio and railway line, organization structure and financial plan were discussed and confirmed with Task Team through reviewing related information, such as Vietnamese Laws, practices of other Asian railway companies and preliminary study report "Working Paper 36" prepared by GC.

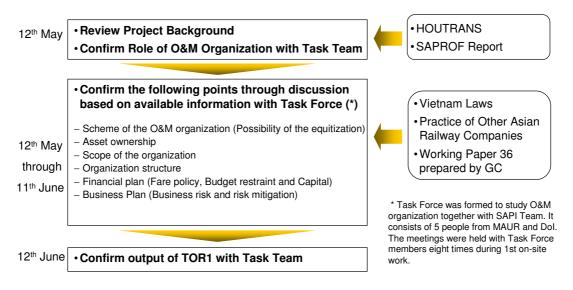


Diagram 2.3 Steps of SAPI Work (TOR 1)

Task Force, consisting of five people from MAUR and DoI, was formed in the inception meeting with Task Team, to study O&M organization together with SAPI Team. During the

1st on-site work, eight meetings in total were held with Task Force members.

To have a consensus on the output of TOR 1 within Task Team, the seminar with Task Team was held at the end of 1st on-site work, on 12th June.

2.2.2. Roadmap and TOR

The roadmap for starting commercial operation initiated by MAUR has been updated together with the detailed work description through the following steps.

[Updating Steps]

- 1) Check the requirements from Vietnamese laws that would be conditions of business organization.
- 2) Extract the activities required to form the company structure along with the business organization pyramid.
- 3) Plot the activities onto the time schedule of UMRT construction project.
- 4) Adjust time line referring to the requirements from Vietnamese laws, training contents prepared by GC and the requirements from MAUR.

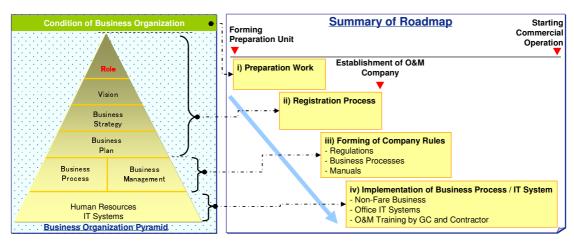


Diagram 2.4 The Process of Updating Roadmap

2.2.3. Facilitating Decision Making by the Vietnamese Side

This SAPI work was divided into three phases. In each phase, the seminar was set as a milestone to gradually form the consensus in Task Team.

<u>Step</u>	Mission (1 st on-site)	Mission (2 nd on-site)	Mission (3 rd on-site)	Subsequent procedure after SAPI
<u>Level of</u> <u>Progress</u>	Gain <u>understandings</u> for the role of O&M organization	Gain understandings for activities and time frame for staring commercial operation	■Gain <u>acceptance for</u> the responsibilities of <u>Task Team</u>	■Conduct accepted tasks accordingly.
Method	Meetings with Task ForceSeminars with Task Team	Meetings with Task Force Seminars with Task Team	Meetings with Task ForceSeminar with Task Team	■Progress monitoring by Task Team
Goal	Agreement on basic policy with regard to the O&M organization	Agreement on the concept of roadmap	Final agreement on the result of SAPI study	■Progress report on each task

Diagram 2.5 Consensus Building Based on Change Management Step

3. Result of SAPI Work

3.1. TOR 1

The following topics have been defined as output of TOR1.

- ➤ Role of the O&M organization
- > Scheme of the O&M organization (Possibility of equitization)
- Asset ownership
- Scope of the organization
 (Portfolio of no-fare revenue businesses and scope of railway lines)
- Organization structure
- Financial plan (Capital, fare policy, and budget restraint)
- Business Plan (Business risk and risk mitigation)
 - * Administrative process in relation to establishment of an O&M organization stated in TOR 1 is not described in this section, since it is reported as one of the activities in the roadmap in the following section.

3.1.1. Role of the O&M Organization

As described in Section 1.1, UMRT project is expected to reduce the modal share of private transports and increase that of public transports to improve the quality of urban living and environment. It is not to make money.

To meet the objective mentioned above, the O&M organization must contribute to promoting UMRT by providing safe and reliable railway services. This was confirmed with Task Team in the meeting held on 12th May 2009. Since a mission statement of company is generally developed to announce their role to public, the result of this subsection could be a part of the O&M company's mission statement.

Role of O&M Organization:

Providing Safe and Reliable UMRT Operation

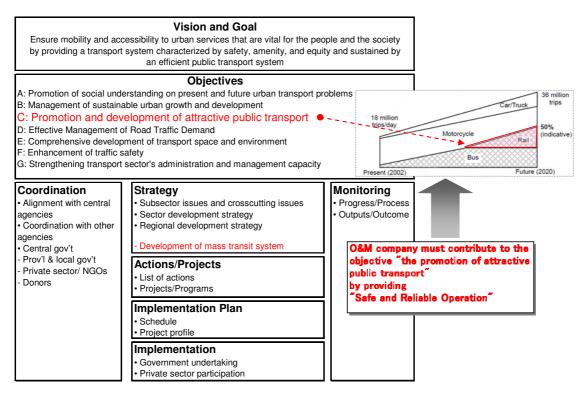


Diagram 3.1 Structure and Components of the Transport Master Plan in HCMC

Source: HOUTRANS

3.1.2. Scheme of the O&M Organization

According to the decision 38/2007/QD-TTg "Criteria for Classification of and List of Enterprise with One Hundred (100) Per Cent State Owned Capital", the state shall hold 100% charter capital of enterprises operating in the industries "management and operation of urban railways" and "operation of urban rail transportation". Therefore, there are only two options for O&M organization, direct operation by MAUR or establishing 100% state capitalized company. Although it is not feasible from the legal viewpoint, the outsourcing option was added to the said comparison to highlight the relative position of the other two options. To select the best option, pros & cons comparison shown in Diagram 3.2 was applied.

In order to separate the O&M organization from the burden of amortization and interest payments incurred from the cost of the railway construction conducted by MAUR, establishing a new company and outsourcing to an existing company, separately from MAUR, are advantageous, compared to direct operation by MARU. Operational cost for HCMC is usually supposed to be highest when outsourcing to a private company, compared to other options, because an outsourcer will charge based on a certain profit plus incurred costs, no matter how small revenues the business makes. The set up work of the O&M organization is a little easier

in the outsourcing option since the existing outsourcer has enough experience. Retaining staff in the O&M organization is not as easy in the case of MAUR's direct operation as in other options since the MAUR staff may be transferred to other departments in HCMC. Flexibility in management is supposed to be higher in an independent, dedicated organization such as an independent O&M company or an outsourcer. In terms of Vietnamese' acquisition of knowledge necessary to manage UMRT by themselves in the future, outsourcing option is worst, since such a company is supposed to be foreign and little knowledge of management is expected to be left to Vietnamese. There are some operational risks of railway management, such as causing inefficiency on business operation could be a factor to reduce ridership, because of no experience in the options of MAUR's direct operation and establishing a new O&M company. Establishing an O&M company with no experience might be supposed to be somehow risky. However if the O&M company in HCMC can expect the help of Technical Cooperation (TC) from Japan for business planning (developing mission, vision, business strategy and business plan), furnishing company regulation and developing business processes & manuals, likelihood of the said operational risks could be reduced. Finally, there will be a chance of realizing founder's profit through IPO (initial public offering) in the future only in the option of establishing an O&M company.

Three evaluation criteria, "Operational cost", "Easiness of the setup work of the O&M organization" and "Vietnamese acquisition of knowledge of managing UMRT" contain higher importance than others, since they directly affect securing sustainable operation of UMRT. Since "Founder's profit" is not mandatory requirement of operation of UMRT, it's importance is relatively lower than others. To consider that importance in pros & cons comparison, each evaluation criteria is weighted with "high", "middle" and "low".

Through this comparison, "Establishing 100% State Capitalized Company" gets greater advantage than direct operation by MAUR.

Even if management and operation of UMRT are handled by 100% state capitalized company, partial outsourcing may work in the functions where expertise is available outside the company, such as maintenance of rolling stocks, cleaning of facilities, security force, advertizing planning, development and maintenance of office IT systems, etc.

			•	· • • • • • • • • • • • • • • • • • • •	•	
Evaluation Criteria			Direct Operation by MAUR, HCMC	100% State Capitalized Company	MAUR Outsourcing to an Existing Private Company(*5)	
Financial	Separation of the O&M organization from amortization & interest payment of construction cost	Middle	No:	Yes	Yes	
朣	Operational cost	High	Moderate	Moderate	High	
ional	Easiness of the setup work of the O&M organization	Middle (*1)	A little difficult	A little difficult	Yes	
Organizational	Easiness of retaining staff in the O&M organization	High	No ^(*2)	Yes	Yes	
Org	Flexibility in the management	Middle	No (*3)	Yes	Yes	
-How	Vietnamese acquisition of knowledge of managing UMRT	High	Yes	Yes	No	
Know-How	Operational risks on the railway management	Middle (*1)	Some	Some	Fewer (*4)	
Other	Founders' profit (by IPO)	Low	None	Yes	None	
*1: Importance gets smaller when there is some means to compensate the bad impacts from the issue. *2: There is a risk that staff may be transferred to other departments in HCMC.						

^{*1:} Importance gets smaller when there is some means to compensate the bad impacts from the issue

Diagram 3.2 Comparison of O&M Organization Scheme

In the law 60/2005/QH11 "Law on Enterprises", there are three company schemes, "one member Limited Liability Company (one-LLC)", "two or more members LLC" and "Joint Stock". Currently, however, the ownership of UMRT O&M company cannot be shared by any private companies (neither local nor foreign), because the Government Decision prohibits it. Therefore there is little need to set it up as either "two or more member LLC" or "joint stock" now. Furthermore, setting a joint stock company makes sense only if HCMCPC has a strong intention of distributing shares to the private sector in order to bring in private companies' capital and efficiency, or to get a return from the IPO (initial public offering) with the condition that the decision "38/2007/QD-TTg" has been revised.

Scheme of O&M Organization:

One member Limited Liability Company (One-LLC), 100% Owned by HCMC.

3.1.3. Asset Ownership

Since railway facilities are generally categorized into two types, "infrastructures" such as tunnels, bridges, etc. and "E&M" such as rolling stocks, signals, IT system, etc., there are three options for asset ownership as shown in Diagram 3.3.

➤ Option 1; no assets are transferred from HCMC to the O&M company

^{*2:} There is a risk that staff may be transferred to other departments in HCMC. *3: In general, incentive to pursuit to efficiency is weak in public organizations, commonly in the world. It is also true in railway operations.

^{*4:} This may work if MAUR has had experiences of railway operations to set proper criteria to control the outsourcer. *5: Due to the Decision 38/2007/QD-TTg, a private company is not allowed to manage and operate an urban railway.

- > Option 2; only E&M assets purchased by MAUR of HCMC are transferred to the O&M company as equity in kind and infrastructure assets are left to MAUR
- > Option 3; both E&M and infrastructure assets purchased and constructed by MAUR are transferred to the O&M company as equity in kind

Pros and cons of the three options have been compared in terms of both qualitative and quantitative aspects.

The O&M company's incentive to efficiency is supposed to be largest in Option 3 with all means of assets to improve its efficiency. Risks associated with holding assets, such as spoiling assets with bad management, will be separated from MAUR of HCMC and transferred to the O&M company most effectively in Option 3. Potential IPO value of the O&M company will be largest in Option 3 because of asset values.

A large cash shortage is anticipated in 2025 due to a large amount of spending on E&M assets and rolling stocks (See Diagram 3.15 and 3.16 in Sec. 3.1.9). The anticipated amount of cash shortage is least in Option 2 and 3, compared to option 1, since option 1 can not expect the effect of tax shield derived from asset depreciation. Option 3 also has an advantage in "net present value" (NPV) and "internal rate of return" (IRR) while so does Option 1 in the expected timing of realizing a profit. The performance in cash flow, shown in such as the amount of cash shortage, NPV and IRR, is generally more important than that in profit and loss, since a cash shortage may cause suspension of the company operation. Although Option 1 suggests a more efficient company with least assets, a more stable company with enough cash and assets, suggested by Option 3, is supposed to be more suitable for public transportation service.

					• • • • • • • • • • • • • • • • • • •	
			Option 1	Option 2	Option 3	
Assets Transferred from MAUR to O&M CO after Completion of Construction		None	Only E&M assets, as equity in kind	Both E&M and infra assets as equity in kind		
Ownership Infrastructure		ership Infrastructure HCMC HCMC		HCMC	O&M CO	
of C	Original Assets	E&M (Operating)	HCMC	O&M CO	O&M CO	
Ownership and Purchasing Responsibility of Renewal Assets			O&M CO	O&M CO	O&M CO	
			Pros & Cons	Advantage	Disadvantage	
ive	Incentive to Efficiency		Least	Large	Largest	
Qualitative	Risk Separatio	n from HCPC	Least effective	Modestly effective	Most effective	
Ö	Potential IPO Values		Least	Modest	Largest	
ve	Anticipated Ca (million USD)	sh Shortage in 2025	Largest (Beyond 215)	least (72.7)	Least (72.7)	
ntitative	Net Present Value		Least	Modest	Largest	
Quani	Internal Rate o	f Return	Least	Modest	Largest	
Ø	Expected Timir	ng of Realizing a Profit	Earliest	Middle	Last	

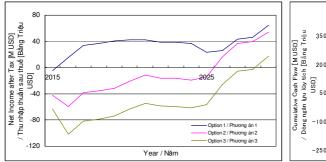
Asset owner should prepare the maintenance budget for their own assets every year.

Diagram 3.3 Comparison of Asset Ownership

No charges on usage of any assets are requested by HCMC/MAUR and none on maintenance of any assets by the O&M CO, in any of three options.
 Write-offs and write-downs below the actual value discussed in Working Paper 36 are not considered, since both are not supported by any laws or

accounting practices in Vietnam.

Although the Working Paper 36 submitted by GC suggested the writing off or writing down the value of the asset to lessen the depreciation burden, there is no accounting rules to support these practices in Vietnam. All in-kind contributions to the Charter Capital of the O&M company must be effected in accordance with Article 29 and 30 of the Law on Enterprises. In relation to newly purchased operation assets, to SAPI team's understanding, it would be necessary for such assets upon contribution to be valued at their invoice value.



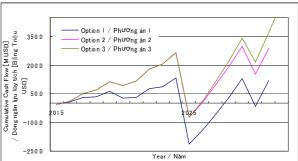


Diagram 3.4 Comparison of Net Income After Tax and Cumulative Cash Flow

Asset ownership:

Both E&M and infrastructure assets should be transferred from HCMC to the O&M company as equity in kind contribution.

3.1.4. Scope of the Organization – Railway Lines

If there are two or more UMRT O&M companies in the city in the future, there will be inefficiency in many aspects described in Table 3.1. Therefore, the first O&M company should operate all lines in HCMC, starting Line 1 through Line 7.

Table 3.1 Inefficiency in Multi-Operators

Viewpoint	Disadvantages				
Passengers	· Even with a discount in connecting ride, two fare systems are still costly and				
	troublesome for passengers, pushing down ridership accordingly.				
	· Different looks of directional signs and boards as well as connecting walk				
	between two stations are inconvenient for passengers.				

Company	· Duplications are inevitable: 1) Head Office and all facilities including office IT			
Management	systems, 2) Management team and administration staff at Head Office and 3)			
	Operation Control Center, Maintenance Center, etc.			
	· Developing/updating <u>fare system</u> and <u>time table</u> to make connecting ride better			
	in addition to building an integrated information system for AFC.			
	· It is difficult for the two operators to flexibly accommodate each other with			
	staff such as drivers when one party needs it.			
Employees	· It may be difficult to train drivers of a new operator in the preceding operator's			
	actual working environment (24-month work experience is required for the			
	license by law).			
HCMC	· A larger amount of subsidy is likely to be demanded by the two or more			
	operators because of the inefficiency and lost economy of scale.			

3.1.5. Scope of the Organization - Non-fare Business

Non-fare businesses, generally, can be categorized into two types, "railway facility related" and "non-related". The businesses using railway facilities, such as advertisement at stations and on/in rolling stocks, station space rental, parking lots and kiosks, are categorized as "railway facility related". The business, which requires huge investments in addition to railway, such as bus, taxi, and property development, is categorized as "non-related".

[Railway Facilitated Business]

All companies shown in Diagram 3.5 are involved in "railway facility related" businesses, since a railway company can make UMRT attractive for passengers and earn additional revenue without huge additional investments. The O&M company in HCMC could also be involved in these services without difficulty.



Diagram 3.5 Non-Fare Revenue in Other Asian Cities

Source: Latest available information at the end of May 2009 on the websites of SMRT, TRTC, MTR and Osaka city. SMRT and TRTC are fiscal year 2007. MTR and Osaka are fiscal year 2008.

[Non-Related]

- Property Development -

In south-east Asia, property development and non-railway transportation services are popular for "non-related" business for urban railway service companies.

MTR, the Hong Kong UMRT company, is famous for railway and property development. It was founded prior to the UMRT construction to manage railway construction and property development both at the same time. The HK Government provided MTR with the exclusive land development rights at low price, instead of cash subsidy. To generate income, MTR purchases the property around its stations at lower price and sells it to a developer at higher price.

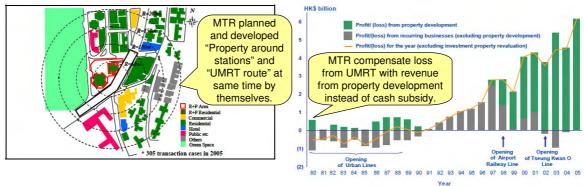


Diagram 3.6 Property Development of MTR (Hong Kong)

Source: Lincoln Institute of Land Policy "Rail and Property Development in Hong Kong: Experiences, Impacts, and Extensions", Robert Cervero and Jin Murakami

Through reviewing the Hong Kong case, the following success factors have been extracted.

- ✓ Strong support from government for property acquisition, such as exclusive right at low price.
- ✓ Synchronization between property development plan and UMRT construction plan.
- ✓ Property acquisition before UMRT construction.

In HCMC, since the project for UMRT Line #1 is already on going, it is difficult for the O&M company to proceed the property development as MTR did. However, the lines from No. 2 to 7 have some possibility of property development in advance, because they are still in planning or study phase.

- Feeder Bus Services -

SMRT, Singapore UMRT company, is famous for various transport services. It was derived

from Singapore government's strategic policy. Singapore unified its traffic authorities and put various transport means into SMRT. HCMC intentionally divided its transportation authority into two departments, MAUR for UMRT and Department of Transport (DoT) for other transports. The two companies, SMRT in Singapore and the O&M company in HCMC, have different back-grounds.

Since feeder bus services are out of the original scope of MAUR and the O&M company, additional huge investment will be required to realise the services. On the other hand, DoT has possibility to realize the feeder bus services without huge investment, since existing bus companies supervised by DoT could transfer their current buses to feeder bus services and utilize their existing facilities. Therefore, in HCMC, DoT is best to realize feeder bus services with smaller investment, by directing existing bus companies.

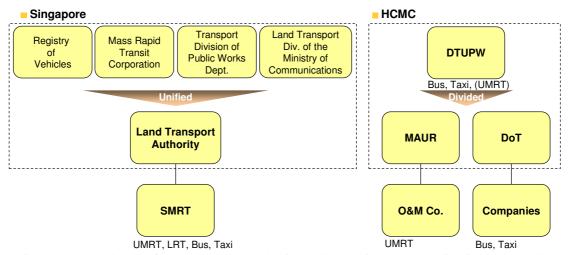


Diagram 3.7 Scheme of Transportation Authority and Operating Company in Singapore and HCMC

••••••••••••					
Engaged Authority (Operator) Requirement for starting the feeder bus services	MAUR (O&M Company)	DoT (Existing Bus Co.)			
Planning of Traffic Network	Coordination with DoT is	Coordination with MAUR is			
Coordination with other transports is required.	required (e.g. feeder bus routes to avoid duplication)	required (e.g. time table of feeder bus).			
Investment for Infrastructures	O&M company should	Existing bus companies could			
Buses and related facilities have to be prepared.	prepare buses and related facilities.	transfer their buses to feeder bus services and share their existing facilities. (*1)			
Operation and Maintenance Knowledge and Skill	O&M company should prepare experienced	Existing bus companies could transfer their resources to			
Knowledge and skill are required before commercial operation.	people and/or train un- skilled people.	feeder bus services. (*1)			

NOTE: (*1) DoT needs to restructure the existing bus routes to realize the feeder buses. NH1 route which covers the route of UMRT#1 may be one of routes to consider.

Diagram 3.8 Comparison of Authority (& Operator) for Feeder Bus Service

^(*2) When O&M company obtains financial and managerial capability to operate the feeder bus services, the O&M company may consider taking over the feeder bus services from existing bus companies.

As a plan of MAUR, the feeder bus services will be taken over by the O&M company after the company's getting financially stabilized. It is supposed to be feasible because Taipei UMRT company, TRTC, also has experience of introducing bus services for their UMRT passengers after the establishment of company, one year before their railway network completion.

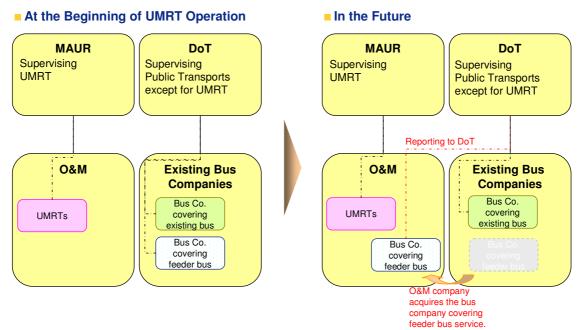


Diagram 3.9 Taking Over Plan of Feeder Bus Services

Scope of Organization

[Railway Line]

- The O&M company should cover all UMRT lines from the viewpoint of HCMC's whole efficiency.

[Non-fare business]

- The O&M company can be involved in "railway facility related business", such as
 advertisement at stations and on/in rolling stocks, station space rental, parking lots
 and kiosks, to earn additional revenue and make UMRT attractive for passengers as
 other Asian railway companies do.
- Although URMT Line #1 can not successfully implement property development due to time constraint, Line #2 to #7 have possibility of successful property development with two conditions; (1) authorization and support from HCMC and (2) availability of cash for investment.

- Feeder bus services will be taken initiative by DoT initially by supervising existing bus companies. When the O&M company obtains financially stabilized operation, MAUR and DoT will see if the O&M company can take over them.

3.1.6. Reporting and Coordinating Works in HCMC

As described in section 3.1.2, O&M company will be established under MAUR. After starting commercial operation, O&M company should periodically submit the business plan and report to MAUR for their review and approval. In case that O&M company have plan to request the subsidy from HCMC and/or change their time tables, they have to describe detailed explanation in the business plan. Upon receiving the business plan from O&M company, MAUR should review it and coordinate with related departments.

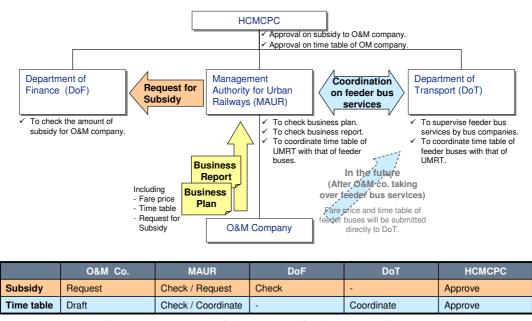


Diagram 3.10 Reporting and Coordination Works in HCMC

3.1.7. Organization Structure

TRTC in Taipei and Osaka City Transportation Bureau operate UMRT lines within one city and are involved in railway facility related businesses as their non-fare business, while SMRT and MTR have various business portfolio. Since the scope of the O&M company in HCMC is simiralr to TRTC and Osaka, the organization of TRTC and Osaka could be of good reference in considering the organization of the O&M company.

Based on the functions held in TRTC and Osaka, and Vietnamese one member LLC style, the

organization structure of company has been discussed and designed as follows. (See appendix for the plotting of the functions of TRTC and Osaka onto the O&M company's organization.)

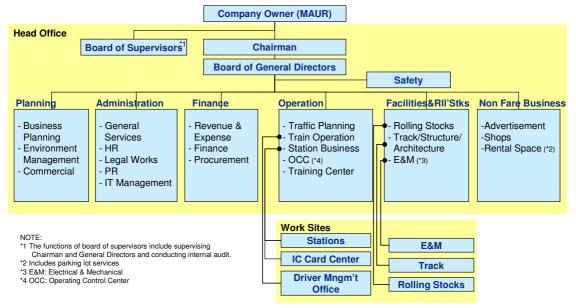


Diagram 3.11 Head Office Organization Structure of O&M Company

3.1.8. Office IT System

Office IT system is an effective tool for a railway company. It is a quite common understanding in the world. The system generally provides six functions mainly in back-office and maintenance. For example, the G/L function assists the O&M company to recognize the revenue and deposit separately and secure appropriate book keeping. In addition to G/L function, budget management can provide an effective reporting function, showing the comparison of budget and actual revenue per day, month and year.

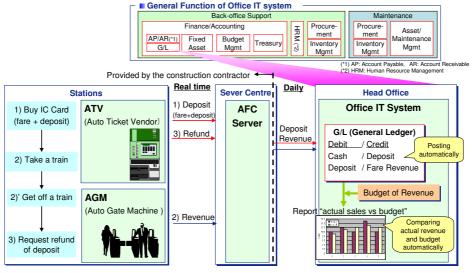


Diagram 3.12 General Function of Office IT System (back office support)

3.1.9. Financial Plan

To estimate the financial condition of the O&M company in the future, "Profit and Loss Statement" and "Cash Flow Statement" are calculated on the following conditions.

[Fare Revenue]

Since the fare price each year should be adjusted based on the number of actual passengers and economic status at the time, it is no use discussing the price in detail at this stage. Therefore the fare price, affordable to the passengers, studied in SAPROF and updated in the Working Paper 36 prepared by GC, is applied to the initial fare price setting with the rates of economic growth listed in Table 3.4 in this report. To compensate the cash-out caused by renewal of E&M, price increase based on the rates of economic growth is considered every 5 years until 2025.

- Fare Price -

2015	VND	5,000 +	500	x (Travel length in km)
2016-2019	VND	7,000 +	700	x (Travel length in km)
2020-2024	VND	9,000 +	900	x (Travel length in km)
2025-	VND	11,000 +	1,000	x (Travel length in km)

For ridership, the number of passengers estimated in the Working Paper 36 is used.

[Non-fare Revenue]

The average ratio of non-fare revenue (railway facility related) against total revenue of UMRT companies in other Asian cities, approximately 10%, is used to estimate non-fare revenue of the O&M company.

Parking Lots Shops (Kiosk, Shopping Malls)	NA NA	-	NA NA	-	1.6% 3.0%	i I	0.1	-,,,,,,
Space rental (ex. retail stores/office spaces/Telecom/optical fiber etc)	7.6%	34.5	11.2%	1,546	,	i I	5.4	8.107
Advertisements	3.7%	17	5.4%	741	3.8%	387		
Non- Fare (Railway Facility Related) [a]	11.3%	52	16.6%	2,287	9.7%	981	5.4%	8,107
	%	mS\$	%	mKH\$	%	mNT\$	%	mYen
Revenue Source		Singapore (MRT)		HongKong (MTRC)		Taiwan-Taipei (TRTC)		-Osaka AKA)

Diagram 3.13 Ratio of Non-Fare Revenue (Railway Facility Related) in Other Asian Cities

Source: Latest available information at the end of May 2009 on the websites of SMRT, TRTC, MTR and Osaka City. SMRT and TRTC are fiscal year 2007. MTR and Osaka are fiscal year 2008.

[Staff Costs]

To estimate the staff costs, the following salary table is used. In addition to salary, 20% of salary is considered as social benefit cost.

Table 3.2 Monthly Staff Cost

Position	Monthly Staff Cost [USD]					
	* incl. social benefits cost					
Management	$2,000 \rightarrow (2,400)^*$					
Managing director	$1,000 \rightarrow (1,200)^*$					
Manager, engineer and skilled worker	650 → (780)*					
Deputy manager	500 → (600)*					
Semi-skilled worker	$350 \longrightarrow (420)^*$					
Unskilled worker	200 → (240)*					
Office worker	$400 \longrightarrow (480)^*$					

Reference: JETRO homepage

[Power Costs]

Electric power costs for operating trains, stations and depots are considered based on the estimated power consumption [kW] in GC documents.

[Cleaning Costs]

Cleaning costs for trains and stations are considered based on available area [m²] in GC documents.

[Spare Parts Costs]

Costs of spare parts for the following categories are estimated based on total construction cost.

Table 3.3 Maintenance Term

Category	Maintenance Term	
Minor	Daily, weekly, monthly and yearly	
Medium	Every 4 years	
Major	Every 8 years	

Source: The ministerial ordinance to specify a standard in case of technology about the railroad (Japanese Ministry of Land, Infrastructure and Transport)

[Cost of Non-Fare Business]

Although it depends on type of business, the cost of non-fare businesses is estimated as 60% of non-fare revenue, in average.

[Price Escalation]

For long term estimation, the economic growth is considered as a major factor affecting costs. The rate of the economic growth in Japan is applied to renewal and additional purchasing of E&M and rolling stocks, because they will be imported from Japan. The rate in Vietnam is applied for other items. To consider the fluctuation of exchange rate between Vietnam and Japan, the average annual change in exchange rate,in last 5 years, 1%, is added to Japanese economic growth rates, as shown in Table 3.4.

Table 3.4 Average Annual Economic Growth Rates

	Average annual econoemic growth rates [%]		
Year	Vietnam	Japan * after applying fluctuation of exchange rates	
2006 – 2020	5.0	1.4 → (2.4)*	
2021 – 2030	3.7	1.1 → (2.1)*	
2031 - 2040	3.2	0.6 → (1.6)*	
2041 -	2.5	0.0 → (1.0)*	

Source:

Note:

[Dividend]

When the O&M company makes a profit, 30% of net income after tax is considered to be paid out to HCMC as a dividend.

Based on the above conditions, "net income before tax" and "net cash flow before tax" of the O&M company are plotted in Diagram 3.14 and 3.15, respectively. While the O&M company keeps losses until 2028, its cash flow turns to positive in the second year of operations.

⁻ Economic growth rates: Japan Center for Economic Research, Changing Demographics in Asia (January 2007)

⁻ Fluctuation of exchange rates: JETRO homepage

⁻ For staff cost, 2% is applied as escalation rate, since it is generally .lower than economic growth.

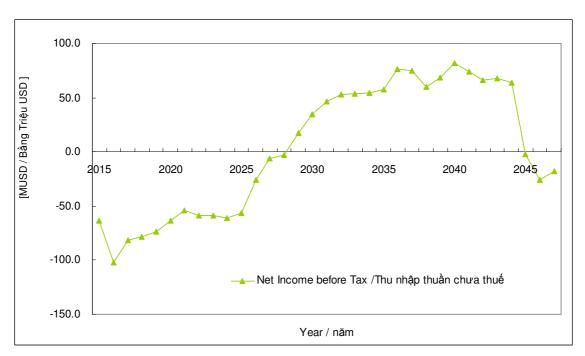


Diagram 3.14 Net Income before Tax of O&M Company

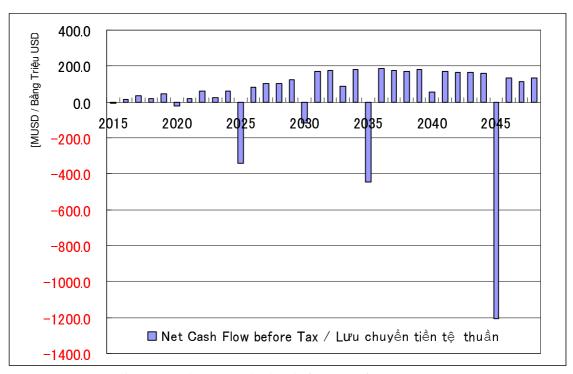


Diagram 3.15 Net Cash Flow before Tax of O&M Company

NOTE: Positive cash flow shows that O&M company is in good financial condition. It needs to be deposited into Bank account. Negative cash flow shows that O&M company is in unstable financial condition. It requires to be compensated with cumulative cash flow of O&M company and the subsidy from HCMC.

Although negative cash flow occurs in every 5 years due to renewal purchase and additional investment of E&M and rolling stocks in the financial plan, some of them may be spread over several years and could be covered by cumulative cash flow in realty. Because actual renewal and investment of rolling stocks will be implemented based on their operational condition, cash out will not concentrate in just one of five years. To avoid confusion, it is important to check out cumulative cash flow, which is projected in Diagram 3.16.

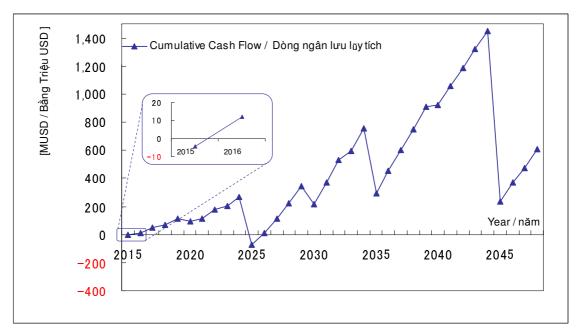


Diagram 3.16 Cumulative Cash Flow of O&M Company

NOTE: For corporate income tax (CIT) calculation, tax exemption and loss transfer stated in the Circular 130/2008/TT-BTC are applied.

As shown in Diagram 3.16, there will be some cash shortages until 2025, due to low ridership and renewal purchase and additional investment of E&M and rolling stocks, but not after that. Therefore financial supports from HCMC are required only for the first decade if things go well as planned.

In addition to the financial supports mentioned above, HCMC and MAUR should consider the following expenses and investments for opening. Since the O&M company will have no revenue before starting operations and only small amount of revenue for a while after starting operations, HCMCPC and MAUR need to contribute cash to the capital of the O&M company.

- Opening Expenses -
 - Expenses for office furniture and equipments.
 - > Staff costs from the establishment of the O&M company to the start of

commercial operations.

- > Advertisement to promote ridership
- Investment -
 - > Investment for non-fare business
 - Investment for the office IT systems.
- Making-up for cash shortage -
 - Cash shortage in 2015 (Opening year)

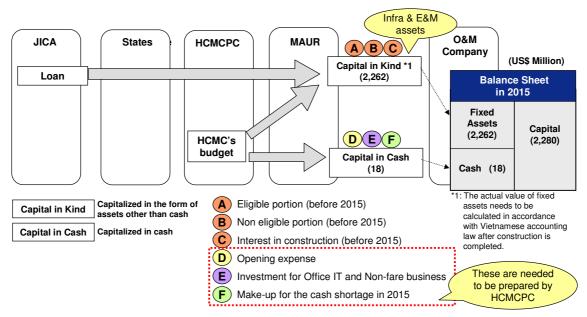


Diagram 3.17 Investment Flow for the Establishment of O&M Company

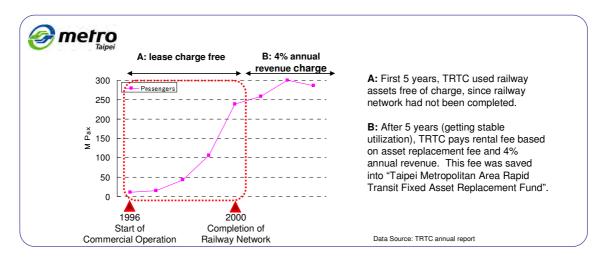
Financing of these necessary cash should be considered and prepared by HCMCPC and MAUR well before the opening. For example, financing means for investment on office IT systems should be discussed including applying to JICA Loan.

3.1.10. Business Risks

Generally, prior to starting business, a company identifies and assesses the business risks which could cause a significant impact on the company's performance and prepares the mitigation plans. Since some of mitigation methods are subject to financial budget and/or the decision of party bearing or sharing some part of the risks, the mitigation plan should be described in a business plan and recognized by related parties at the detailed planning phase.

In other Asian cities, there were many cases that financial risk initially happened due to low ridership. That risk could also happen in HCMC.

Taipei Rapid Transit Corporation (TRTC) and Singapore MRT Ltd (SMRT) are known as successful cases. They were financially supported by their governments for first years, from start operations to completion of railway network. In Taiwan, all railway assets belong to the government and are leased to TRTC. In the first 5 years of operations, before the completion of railway network, the assets were leased for free. After that, TRTC is required to pay 4% of their operating revenue. The payment is transferred to "Taipei Metropolitan Area Rapid Transit Fixed Asset Replacement Fund", which is used for replacing the old facilities and can be of good reference for HCMC.



<u>Diagram 3.18 Risk Mitigation for Initial Years in Taipei Rapid Transit Corporation (TRTC)</u>

In 1987, SMRT started the UMRT operation under License and Operating Agreement (LOA) with the Land Transport Authority (LTA). After 11 years, in 1998, SMRT bought all operating assets (including rolling stocks) from LTA at net book value, while infrastructures (the tracks and stations) are still leased from LTA for a nominal fee. At the same time, SMRT had another contract, "second LOA", with LTA. In that contract, an annual license fee is calculated at 0.5% of the annual passenger revenue for the first 5 years, 1998 - 2003, and at 1% from 2003 to 2010. Thereafter, the percentage will be determined by LTA and renewed every ten years.

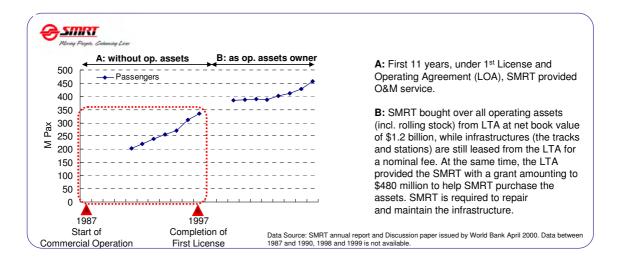


Diagram 3.19 Risk Mitigation for Initial Years in Singapore MRT Ltd (SMRT) Case

At this stage, several major business risks on the O&M company have been identified and risk mitigation are proposed as follows.

Business Risks				Proposed Risk Mitigation
Revenue	Fare rate	Delay in Fare Increase	The O&M company expects an increase in the fare in referring to the inflation rate, in the future. If the pace of the increase in fare gets hugely behind that of inflation because HCMCPC refuses to approve, only costs increase relatively, significantly squeezing the profit of the company or putting it into a loss.	When the revenue before tax becomes negative in the first 10 years and smaller than 10 % of the expected revenue after 10 years, and there occurs a significant delay in fare Increase, the O&M Company is entitled to ask for fare increase for the following year, and if the increase does not occur in the following year, it is also entitled to receive the funding support from HCMCPC until the fare is actually increased.
	Ridership	Delay in Network Formation	The O&M company depends significantly on the effect of network formation for its ridership estimate to realize. If the delay in the network formation of UMRT occurs because of a stop in HCMC's process, for instance, it would result in smaller ridership, a smaller revenue size than estimated and therefore an operating deficit.	(i) Establish a Base Case for ridership growth based on initial network development plan with timing of opening for each additional UMRT Line. This Base Case should be reviewed annually on the basis of new network development plan at the time. (ii) Based on the Base Case, the achieved ridership is assessed each year and if there is a significant Delay in Network Formation and actual ridership deviates below the lower 20% level from the Base Case, The O&M Company is entitled to receive the funding support from HCMCPC.
		Threats to Passengers' Safety	People tend to avoid using railway in a situation where they find threats to passengers' safety, such as epidemic and terrorism. It will push down ridership significantly, during a relatively short period.	The same mechanism of mitigation as above should be applied, but a part of such short term risk can be covered by an insurance policy, too.
Unexpected expenses		Critical Accident	Critical accidents, once happened, would require a significant amount of money to compensate damages for passengers, staff and others.	It should be covered by civil liability insurance*. * According to Article 62 of Railway law, the urban railway transport enterprise must buy civil liability insurance.

Diagram 3.20 Business Risks and Proposed Risk Mitigation

[Sensitivity Analysis]

As mentioned above, in other Asian cities, there were many cases that financial risk initially happened due to low ridership. It could also happen in HCMC. To see how changes in ridersip will impact the financial condition of O&M company, sensitivity analysis with two

different scenarios was applied.

- Scenarios-

> Optimist Case (Ridership: Base x 120%)

> Pessimist Case (Ridership : Base x 80%)

In case that ridership is 20% lower than expected, OM company will constantly face financial problem as shown in Diagram 3.21.



Diagram 3.21 Effect of Changes in Ridership

3.2. TOR 2

To ensure concrete conduct of the activities in the roadmap, the detailed work description of activities is described in the following subsections in the order of task number listed in the appendix 4 "Roadmap for Starting Commercial Operation".

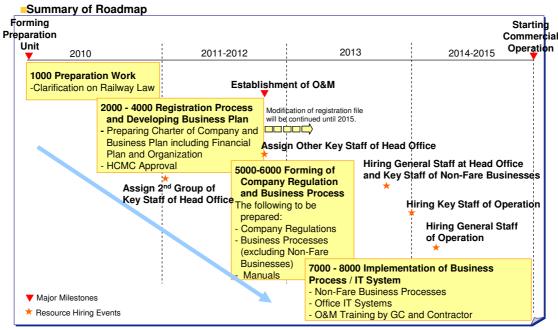


Diagram 3.22 Overview of Roadmap

3.2.1. Timing of Establishment of O&M Company

Considering the preparation work for starting commercial operation, nearly 3 years are required at least. Therefore the deadline of establishment of the O&M company is September 2012. Although the staff of the preparation unit (PU) will be key staff of the O&M company as MAUR plans, there is still some risks of losing the staff of PU due to HCMC's relocation order. To avoid that risk, the earlier establishment of the O&M company is suggested.

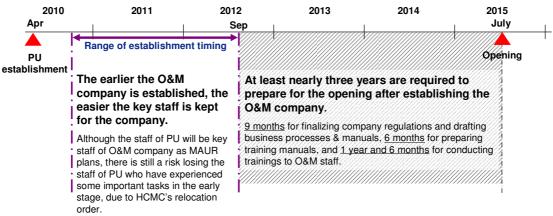


Diagram 3.23 Timing of establishment of O&M company

3.2.2. Establishment of Preparation Unit (1000)

By April 2010, MAUR should establish the preparation unit (PU) and assign its staff to PU to manage the clarification work with MoT and registration work with DPI.

The first main work of PU will be clarification work with MoT. Therefore, business planning and legal staff should be assigned. When the clarification work is roughly settled, PU should start the registration work to establish the O&M company. At this stage, staff for human resources, finance and environment should be assigned to prepare the charter of company and the staff-hiring plan. During these clarification and registration work, PU staff will obtain the knowledge of railway. To transfer that knowledge, the staff of PU should be transferred to the key positions of the O&M company.

In case that staff of PU becomes key staff of the O&M company prior to the establishment of the O&M company, PU can start drafting company rules. To handle that work, staff for general services, safety, operation and maintenance should be assigned to PU.

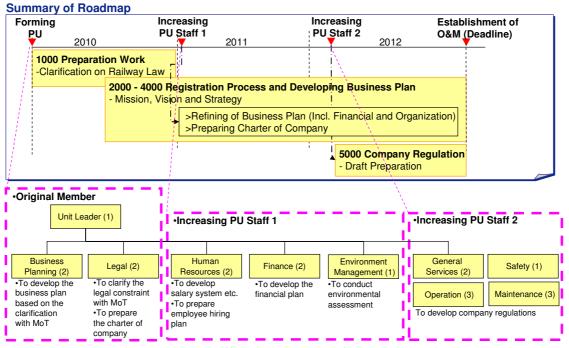


Diagram 3.24 Staff Assignment Plan of Preparation Unit

3.2.3. Clarification on Railway Law (1010)

As Diagram 3.25 shows, in Railway Law and related decrees/decisions, there are several legal constraints that directly affect the hiring plan, salary level and training plan of the O&M

company. Therefore this issue must be settled before conducting the registration process.

It is quite difficult to find out the resources in Vietnam who are legally/practically satisfied with work experience and certificates stated in Diagram 3.25. Although people working/worked in Vietnam National Railway (VNR) are legally satisfied with those requirements, their experience and certificates could not work well in UMRT from practical viewpoints. Since UMRT #1 in HCMC is electrical urban railway, the technical requirement and philosophy of operation, maintenance and safety are totally different from those of VNR (diesel intercity railway). To manage UMRT properly, people in Vietnam have to built their work experience and knowledge from zero point.

	Qualification	Work Experience
Personnel in the prime responsibility for technical management of transport operation (*1) (*2)	A university degree	At least three years' experience in railway transport operation
Personnel in the prime responsibility for technical management of railway infrastructure (*1) (*2)	A university degree	At least three years' experience in operation of railway infrastructures
The leader in charge of safety affairs (*2) (*3)	A university degree in railway facilities	At least three years' experience in managing railway infrastructure
Personnel in direct service of train operation (*4)	Professional diplomas or certificates suitable to their titles granted by training establishments recognized by the MoT.	- Not in particular -
Train drivers (*4)	Professional diplomas or certificates in driving railway traffic means, granted by training establishments.	Train assistant-drivers for 24 consecutive months or more

^{*1:} Decree 109/2006/ND-CP

Diagram 3.25 Legal Constraints in Railway Law and Decrees

To manage and operate UMRT properly, MAUR should clarify with MoT how UMRT #1 project can proceed. Those legal requirements on personnel qualification, to SAPI team's understanding, are stated to secure qualification of operation and safety. Therefore the following exemption and amendment could be one of alternative solutions.

For work experience in railway stated in Decree 109/2006/ND-CP and Decision 61/2007/QD-BGTVT:

In the UMRT #1 project, GC and construction contractor who have great experience in railway sector will provide training before opening and technical support until 5 years later after the starting commercial operation. They could be worth 3 years experience required in the decree/decision. Thus UMRT #1 should be exempted from these requirements until the

^{*2:} This may not apply to all managers but only to the leader of operation/maintenance/safety department of the O&M company.

completion of technical support by GC and construction contractors.

For training establishment recognized by MoT stated in Railway Law.

Since UMRT #1 is the first electric trains in Vietnam, there is no appropriate training establishments and trainers. Therefore the training center established by GC and construction contractor will practically be the best to manage the training for UMRT. If MoT recognize that training center as official training establishment, it can be relieved from legal constraint

For work experience of train drivers stated in Railway Law.

As mentioned above, in the UMRT #1 project, GC who have great experience in railway sector will provide training before opening and technical support until 5 years later after the starting commercial operation. They could be worth 24 consecutive experience required in Railway Law. Thus UMRT #1 should be exempted from these requirements until the completion of technical support by GC and construction contractors. In addition to that exemption, amendment on Railway Law is required. Since there is no position assisting drivers in UMRT, it would be no more feasible after opening UMRT.

In addition to the legal constraints on personnel qualification described above, there is another legal constraint issue on the examination of driving licenses.

The Decision 44/2005/QĐ-BGTVT states 4 types of driving licenses and allows persons granted train-driving license to drive only the type of railway traffic means as specified in their respective driving license. The types of driving license include for diesel trains, electric trains, steamed trains and specialized vehicles moving on rail tracks.

The decision also requires educational qualification and work experience for the examination team.³ Since there is no electrical trains in Vietnam, examination method and team for electrical trains have not been established yet. As an exclusive examination agency, Vietnam Railway Administration (VNRA) has responsibility to establish the method and the team prior to the starting commercial operation of UMRT #1. However, they have no experience of

There are three Qualifications of Examination Team. 1. Possessing professional diplomas or certificates in driving railway traffic means in correlation with the means that the examinee to be tested and granted by training establishments. 2. Having practical work experience of at least 5 years, directly driving the type of train for at least 3 years, and mastering the railway traffic means, procedure and norm exploiting the railway engineering, and safety rules for train operation. 3. Having passed the training course prescribed for professional skill on examination and been provided an examinant card by Vietnam Railway Administration.

electric trains. The educational qualification and work experience listed above would be legal constraints for them.

In the plan of UMRT #1 project, the training center for train drivers will be established to obtain knowledge of driving electric trains from Japan. This center would be in the best position to handle the training and to grant the license for driving electric trains. Although it is subject to MoT's approval, this could be an alternative to solve the legal issue on driving licenses. When the training center of O&M company is responsible for granting the license of electric trains, the center should be established under board of general directors to keep independent from operation department as shown in Diagram 3.27.

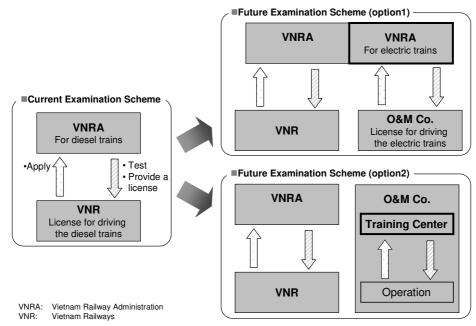


Diagram 3.26 Examination Scheme of Driving Licenses

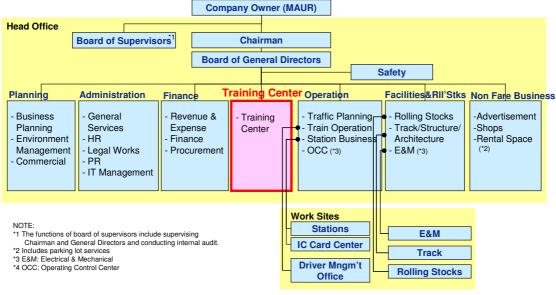


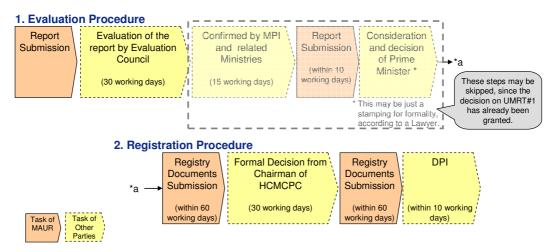
Diagram 3.27 Head Office Organization Structure of O&M Company

3.2.4. Registration (2010)

In case that the O&M company will be established as a 100% state capitalized one member LLC, the administration process in relation to establishment comprises two parts; (1) scheme evaluation specified by the decree 180/2004/ND-CP "On Establishment, Reorganization and Dissolution of State Companies"; and (2) registration specified by 139/2007/ND-CP "Providing detailed guidelines for implementation decree providing detailed guidelines for implementation".

According to Article 61 through 62 of Railway Law, the management of urban railway is stated as under the responsibility of provincial-level People's Committees. Therefore this establishment falls under the deciding competence of Chairman of HCMCPC.

At the first step "evaluation", the establishment of a state company must be confirmed by related parties prior to the registration. These steps may be skipped in this case, since the decision on UMRT#1 has already been granted (Diagram 3.28) After obtaining formal stamp from Prime Minister, MAUR should obtain the formal decision from Chairman of HCMCPC. The decision must go along with the decision on appointment of, or signing of contracts with, the General Director of the company.



^{*1:} Overall procedure is based on Decree 180/2004/ND-CP. Decree 180 specifies procedures for the establishment of a new State-owned enterprise, although it must be noted that Decree 180 is for implementing the Law on State Owned Enterprises which, in theory, has been superseded in so far as establishment procedures are concerned, by the Law on Enterprises. There are, however, no laws or regulations specifically replacing or abolishing Decree 180.

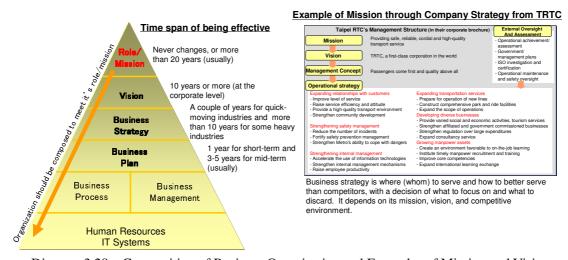
Diagram 3.28 Administration Procedures Related to Establishment of O&M Company

^{*2:} The registration procedure is based on Law on Enterprise 60/2005/Q11 and Decree 88/2006/ND-CP.

3.2.5. Mission, Vision and Business Strategy (3000) – Business Plan (4000)

Organization should be composed of several important factors to meet its role/mission (Diagram 3.29). Business Plan needs to be developed to effectively execute business strategy, which is developed to realize the organization's vision that is based on the role/mission. Each factor varies in its time span to be effective and to maintain.

"Mission" refers to the high-level role that the organization strives to announce internally and/or externally as a reason to exist socially. "Vision" refers to a future status that stimulates and makes its employees and other stakeholders feel enjoyable and constructive to be associated with the organization. Business strategy is where (whom) to serve and how to better serve than competitors, with a decision of what to focus on and what to discard. It depends on its mission, vision, and competitive environment. The management of the O&M company should develop its own mission, vision and business strategy to align its management team and employees to seek for the same business goal. Although the mission, vision and business strategy should not be copied from other companies, here presented below is the structure of mission, vision, and business strategy of Taiwan RTC, just for a reference.



<u>Diagram 3.29</u> Composition of Business Organization and Examples of Mission and Vision

Source: TRTC report

The name of the company needs to be decided to register. The SAPI team has suggested a pattern of naming structure (city name + mission) and several possible examples of the O&M company's name. See the appendix.

3.2.6. Company Regulation (5000) – Business Processes (6000)

Each division should have its business rules and procedures described in detail. As a whole,

the set of those becomes the company's regulations. Business processes and manuals should be designed and prepared for reference, based on the company regulations. The business processes need to be drawn in an accurate, systematic and consistent manner (see Diagram 3.30), since they will be a part of business requirements for office IT systems.

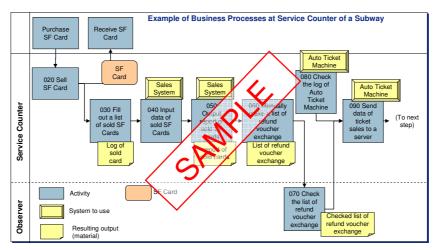


Diagram 3.30 Example of Business Processes

3.2.7. Office IT System (7000)

Generally, office IT systems are configured and developed by IT vendor(s) based on the user requirement, even if the main applications are developed on a package software product. It is not like purchasing and using an on-the-shelf software package for individuals, such as Microsoft Word/Excel/Outlook. The O&M company should prepare the bid package for the vendor selection. The bidders will propose the most suitable office IT systems based on the bid package. Since each process takes fairly long (see Diagram 3.31 below), the company management should prepare well in advance, assign right people and smoothly move the process forward.

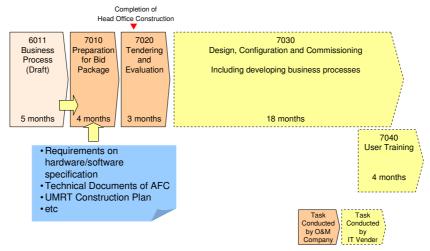


Diagram 3.31 Process for the Implementation of Office IT Systems

3.2.8. Non-fare Businesses (4000 - 8000)

Non-fare business highly depends on the location of stations, passengers' needs, competitive position of customers (e.g. lessees of rental space) and strategy of competitors (e.g. other transports). It requires different knowledge and skill from the railway business. To attain the 10% revenue target in the financial plan, the O&M company should research the market (including competitors) to develop their marketing ideas as much as possible to reflect on the business strategy of each non-fare business. Then management members should make a rough plan based on each business strategy before joining key staff members go into details to finalize their business plans.

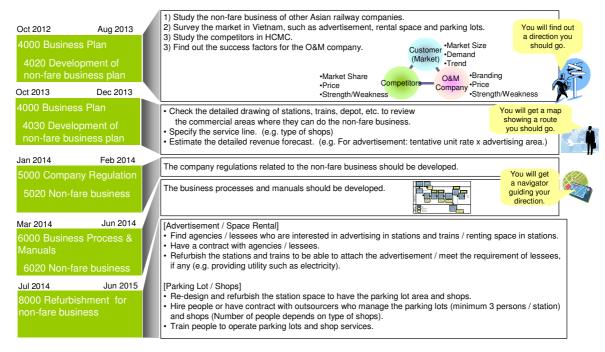


Diagram 3.32 Activities of Non-Fare Business

Operating shops, including restaurants, is not an easy business but worth challenging. A reasonable and suggested way is; 1) starting with operating kiosks, 2) secondly trying franchising businesses (such as retail/restaurant/cafe), and lastly 3) challenging with your own brand of businesses after some years' experiences.

3.2.9. TOR2-2

The updated roadmap, attached to this report as appendix-4, the detailed work description of activities shown in subsection 3.2.1 through 3.2.8 were reviewed and agreed by Vietnamese side, Task team. Especially, the following points were confirmed by all attendees, Task team, GC and SAPI team, as important milestones.

- Forming preparation unit (PU) by April 2010.
- Establishment of O&M company by September 2012.
- > Starting commercial operation by July 2015.

As described in subsection 3.2.1, MAUR is planning to transfer the staff of PU to O&M company to retain the knowledge of railway management. However there is a risk to loose the staff of PU by staff reshuffling in HCMC. To avoid that risk, MAUR disclosed, they would like to establish the O&M company earlier than September 2012. In their plan, the earliest is the end of 2010.

3.2.10. TOR2-3

In the article 55 of Railway Law, there is a clause related to UMRT: "urban railway investment, construction, management and business shall be organized by provincial-level People's Committees." Therefore the activities listed in the roadmap, except for the issues related to establishment of state enterprise, JICA loan and technical terms, are subject to HCMCPC approval only. According to Task team, UMRT #1 project has been already approved by Prime minister. Thus the approval on establishment of O&M company is also under the decision of HCMCPC. Those were confirmed with Task team in 1st seminar and 5th seminar respectively.

3.3. TOR 3

3.3.1. TOR3-1 Terms of reference for establishing O&M company

To ensure concrete conduct of the tasks in the roadmap (which was prepared in TOR2) after the completion of this SAPI, detailed terms of reference for the necessary tasks and required human resources for the establishment of the O&M company were defined with each stakeholder who is in charge of establishment work.

- MAUR -

MAUR's major tasks for establishing the O&M company are 1) forming preparation unit (PU) by April 2010 which will be in charge of the preparation work for establishing the O&M company and 2) increasing the man power of PU in a timely manner..

Major tasks of PU will be clarification work about Railway Law with MoT, company

registration and drafting company regulation as described subsection 3.2.2. The member of PU will obtain knowledge of railway management during those works. To transfer that knowledge to O&M company, the member of PU should be transferred to key position of O&M company. In this connection, MAUR should assign people from MAUR and/or other department of HCMC who are able to conduct the preparation works and agree to job transfer.

- Preparation Unit (PU) -

Preparation unit's major tasks for establishing the O&M company are 1) clarification work about railway law and related decree/decision with MoT (for details see subsection 3.2.3), 2) company registration work (for details see subsection 3.2.4) and 3) drafting company regulations.

During company registration work, PU should refine the financial plan drafted SAPI study to calculate the amount of cash contribution from HCMCPC to O&M company.

- Task Team -

Task team's major tasks for establishing the O&M company are 1) reporting the progress of preparation work to HCMCPC regularly to obtain their understanding and 2) review the documents submitted by PU in a timely manner.

During company registration work, Task team should evaluate the amount of ash contribution proposed by PU in a timely manner to meet the deadline of establishment.

- HCMCPC -

To secure the time line stated in the roadmap, HCMCPC should review and approve the documents submitted by Task team and/or MAUR in a timely manner. There are two scheduled submissions. One is for forming PU, the other is for establishment of O&M company.

Prior to establishment of O&M company, HCMCPC should approve the cash contribution to O&M company to cover initial investment and operation expenses for initial years.

HCMCPC should also review the report regularly submitted by Task team to monitor the

progress of implementation work.

- Department of Planning and Investment (DPI) -

DPI should issue a business registration certificate to O&M company within a time-limit of ten working days from the date of receipt of a valid application file as stated in Law on Enterprise.

	Task				Parties i	n Charge		
Name	Description	Date	HCMCPC	DPI	Task Team	MAUR	PU	MoT
Establishment of Preparation Unit (PU) for O&M	Preparation Unit (PU) should be established to conduct the work for the establishment of the O&M company. (For the details, refer to 3.2.2)	Apr. 2010	Approve	-	-	Prepare for approval	-	-
Clarification on Railway Law	Since some articles in Railway Law and related decrees/decision are technically unfeasible for UMRT, they should be clarified with MoT. Those articles directly affect the plan of staff hiring and training of the O&M company. Thus this should be conducted before company registration. (For the details, refer to 3.2.3)	Dec. 2010	-	-	-	-	Clarify legal constraints with MoT	Reply to clarification requested by PU
Registration	Business registration should be conducted to establish the O&M company in accordance with the Law on Enterprise and related decrees. (For the details, refer to 3.2.4)	Sep. 2012	Approve	Issue business registration certificate	Evaluate	-	Prepare plan for establishment of O&M company	-

Diagram 3.33 Tasks for Establishing O&M Company

3.3.2. TOR3-2 Topics agreed with Vietnamese side

Through the seminars held with Task team, the following topics were agreed.

- MAUR -

As described in the roadmap, MAUR will form the preparation unit (PU) in their department by April 2010. For the member of PU, MAUR will choose the people who can manage the preparation works and have no objection to job transfer from MAUR and/or other departments. After the establishment of O&M company, MAUR will close PU and order the member of PU to transfer to the key position of O&M company to retain the knowledge of railway management which they will obtain during the preparation works.

- Task Team -

Task team will supervise the progress of preparation work by PU and report it to HCMCPC regularly to obtain their understanding. They will also review the documents related to

registration submitted by PU in a timely manner.

- HCMCPC -

HCMCPC will review and approve the registration documents including cash contribution as their obligation.

3.4. TOR 4

It is essential to conduct preparation tasks for O&M organization establishment in a timely manner for the smooth implementation of the project. Therefore, it is necessary for Vietnamese side to make a decision regarding the establishment of the O&M organization without delay. In addition, it is imperative to explain Vietnamese side the work plan for O&M organization establishment, and to promote prompt decision-making. In order to promote decision-making by Vietnamese side about TOR1, 2 and 3, five seminars with Task team, formed as steering committee in Vietnamese side, were carried out.

- 1st seminar on 12th May -

This seminar was held as kick-off to understand each other. At the first, the role of O&M organization was confirmed as "Providing Safe and Reliable UMRT Operation" with Task team. Then SAPI team explained the procedure and time schedule of SAPI study. At the end, Task team disclosed that they are interested in property development and feeder bus services by O&M organization. They also expressed that, in SAPI study, fare rate must be along with GC's latest study, working paper 36.

- 2nd seminar on 12th June -

This seminar was held for progress confirmation on 1st on-site work. Scheme, scope, organization structure, financial plan and business risks of O&M organization and asset ownership were confirmed with Task team. As output of TOR 2 and 3, SAPI team presented overview of roadmap, legal constraints on personnel qualification and rough registration procedure. In replying to Task team's request stated in 1st seminar, SAPI explained that successful cases of property development and bus services in other Asian cities and did not recommend them to UMRT #1 due to following reason. 1) Property development: time constraint. 2) Bus services: DoT is best position to manage this.

In respond to SAPI team's explanation, Task team requested SAPI team to conduct further study

on following points.

- ➤ Amount of revenue from non-fare business. (railway facility related)
- Details on legal constraints
- ➤ Organization charts. (to be adjusted with one-LLC type under MAUR and further developed with detailed information such as number of personnel per each department, title and required qualification, cost for salary and training cost/contents.)
- > Detailed estimation of financial plan including cash contribution from HCMC
- > Conditions to be defined to appeal for investments of other lines
- Conditions for the coordination of management and operation between MAUR's O&M company and other BOT based O&M company

Task team also declared about the preparation work of establishment of O&M company as follows;

- ➤ MAUR will form preparation unit (PU) by April 2010 under MAUR
- ➤ The staff of PU will transfer to O&M company after establishment of O&M company
- ➤ HCMCPC already approved and prepared the budget for staff training
- ➤ Task team would like to request long term technical support from JICA to increase capability of O&M company

- 3rd seminar on 13th July -

This seminar was held for replying to Task team's request expressed in 1st on-site work and confirming the topics to be studied in 2nd on-site work. SAPI team clarified Task team's request as follows. Task team agreed to following and mentioned that timing of taking over feeder bus services by O&M company should be after their getting financial stability.

- ➤ Non-fare revenue: The target could be 10% same as other Asian cities
- > Property development : It is not scope of SAPI's work
- > Training cost: At this stage, it is difficult to specify all activities, thus it should be

included in gross expenses

> Training contents: Those are scope of GC and contractors, not scope of SAPI team

Although it is not scope of work, SAPI team presented some concession cases from other countries for Task team's reference in replying to additional request from Task team.

At the end of this seminar, Task team disclosed the date of starting commercial operation was changed to July 2015 from January 2014. Task team requested SAPI team to revise the detailed roadmap accordingly and conduct further study on BOT scheme.

- 4th seminar on 24th July -

This seminar was held for progress confirmation on 2^{nd} on-site work. In replying to Task team's requests and comments stated in 2^{nd} and 3^{rd} seminar, the following topics were confirmed.

- Organization structure based on one-LLC, with detailed number of personnel per department, title and qualification
- Detailed financial plan including amount of cash contribution from HCMC
- Detailed legal constraints
- > Some pictures of non-fare business to have image of business

In addition to above, again, although it is not scope of work, SAPI team presented some typical issues in Bangkok UMRT for Task team's reference.

Task team pointed out that 180/2004/ND-CP is already out of date. They mentioned it would be checked by themselves later. Task team also requested SAPI team to conduct further study on the following topics.

- Necessity of deputy directors and training center
- > Detailed explanation on financial plan
- Re-consider timing of increase of fare
- ➤ Name of O&M company
- ➤ Private investment types suitable to future UMRT in HCMC other than BOT

At the end of this seminar, Task team disclosed they would like to transfer the knowledge of PU to O&M company as much as possible. There is personnel reshuffling risk by order of HCMC. Thus they would like to establish O&M company earlier, if possible, to avoid that risk.

- 5th seminar on 27th August -

This seminar was held for final confirmation on output of whole SAPI study. In replying to Task team's requests and comments, the following topics were confirmed.

- > Organization chart with "board of general directors" and "training center".
- > Detailed explanation on financial plan.
- ➤ Increase timing of fare price. (It was confirmed as every 5 years until 2015.)
- Registration steps for establishment of O&M company. (Steps of checking MPI and PM may be skipped, because UMRT #1 project was already approved by PM.)
- Name of O&M company. (Style of "Saigon" + "mission /vision".)

In addition to above, again in replying to additional request from Task team, SAPI team presented some cases of PPP (Public Private Partnerships) in Vietnam for their reference.

Task team commented: Even if 180/2004/ND-CP is still alive, the steps of checking MPI and Prime minister are not required. Because UMRT project was already approved by GoV. According to them, all registration issues except for technical matter can be decided within provincial-level People's Committees (HCMCPC). To SAPI study, Task team commented as follows.

- > To study further whether "training center" should be established in "operation unit" or under "Board of General Directors" as independent unit.]
- ➤ There must be the alternative names of O&M company. (Style of "Ho Chi Minh City" + "mission /vision")
- A proposal to JICA for investment source to office IT system by using redundant fund should be included in final report.
- ➤ To conduct further research of the coordination in such issues as sharing of fare rate cost and the combined management between the O&M Company under MAUR and another O&M Company of BOT-based, if possible.

Appendix 1. Vietnamese Law

SAPI team recognized, as of 12th June 2009, the following laws, decisions, decrees and circulars are related to the establishment of O&M company.

<u>Table A1.1 Vietnamese Laws, Decisions, Decrees and Circulars related to</u>
<u>the establishment of O&M company</u>

Reference Number	Title	Remarks
General		
60/2005/QH11	Law on Enterprises	Provisions on the establishment,
		organization of management, and
		operations of limited liability
		companies.
38/2007/QD-TTg	Criteria for Classification of and list of	Decision the criteria for
	Enterprise with 100 per cent State Owned	classification of enterprises with
	Capital	100% State owned capital, and the
		list of such enterprises.
88/2006/ND-CP	Business Registration	Regulations on business registration
		offices; and on application files,
		order and procedures for business
		registration.
139/2007/ND-CP	Detailed guidelines for implementation	Guidelines on implementation of a
	decree providing detailed guidelines for	number of articles of the Law on
	implementation	Enterprises relating to the
		establishment, managerial
		organization and operation.
180/2004/ND-CP	Establishment, Reorganization and	Conditions, order and procedures for
	Dissolution of State Companies	establishment, reorganization and
		dissolution of State companies
Railway		
35/2005/QH 11	Railway Law	Law for railway business
61/2007/QD-BGTVT	The Regulation on types of railway business	Regulation to the types of enterprises
	enterprises required to have safety	doing business in railway sector
	certificates and conditions, order and	about certificates of safety.
	procedures for the grant of safety	
	certificates	

Reference Number	Title	Remarks						
44/2005/QD-BGTVT	The Regulation on examination for, grant,	Decision implementing article 47 of						
	and renewal and withdrawal of train-driving	Railway Law, "train drivers"						
	licenses							
109/2006/ND-CP	The implementation of a number of articles	Guide of the implementation of						
	of the Railway Law	number of articles of the Railway						
		Law.						
Tax								
130/2008/TT-BTC	Guidelines for Implementation of the Law	Guide of the implementation of law						
	on Corporate Income Tax and Decree	on corporate income tax (CIT)						
	124/2008/ND-CP "Law on Corporate	including preferential tax rates.						
	Income Tax"							
85/2007/TT-BTC	The Implementation of the Law on Tax	Guide of the implementation of law						
	Administration regarding Tax Registration	on tax administration.						
05/2008/TTLT-BKH-BTC-BCA	The guidance on the co-ordination among	Joint Circular by MPI, MoF and						
	business registries, tax offices and seal	MPS						
	registries for enterprises establishing and							
	operating under the Enterprises Law							
08/2001/TT-BTC	Additionally Guiding The Regulations on	Guide of income tax including loss						
	Enterprise Income Tax Applicable to	transfer.						
	Foreign Organizations' Branches Operating							
	in Vietnam Stipulated in the Finance							
	Ministry's							
Accounting / Finance								
03/2003/QH11	Law on Accounting	Law for accounting including article						
		of chief accountant.						
09/2009/ND-CP	The regulation on Financial Management of	Regulation for the financial						
	State Companies and Management of State	management of state companies etc						
	Capital Invested in other Enterprises	established under the law on						
		enterprises.						

NOTE:

- Laws in Technical and Environmental are not listed above, since they will be covered by GC or Contractors.

Department / Bộ phận	Unit / Đơn vi	Responsibility / Trách nhiệm	Title/ Chức danh	Legal/	Qualification / Năng lực chuyên môn		He	ead Office Fại trụ sở	/ Kë ho		in bố nhân Site ời làm việc	
Department / By prium	Cliff, Boll VI	responsionly / react time.	Title/ Office dami	Pháp lý	Education and/or Work Experience / Học vấn và/hoặc kinh nghiệm làm việc (*11)	10/ 2012	9/	12/ 7/ 2013 2014		12/		
Chairman / Chủ tịch	*NA	Acting on behalf of the company owner in exercising his/her rights and obligations. / Thay mặt Chủ Công ty thực thi quyền và nghĩa vụ của họ.	*NA/	*1	MAUR has to appoint./BQLĐSĐT phải bổ nhiệm (Must be appointed before registration process, by Oct 2012.)/ (Phải được bổ nhiệm trướ khi thực hiện quy trình đăng ký, vào tháng 10, 2012)	c 1			1		-	1
			General Director / Tổng Giám đốc	*2	MAUR has to appoint./BQLĐSĐT phải bổ nhiệm (Must be appointed before registration process, by Oct 2012.)/ (Phải được bổ nhiệm trướ khi thực hiện quy trình đăng ký, vào tháng 10, 2012)	c 1			1		- (1
Board of General Directors			Dupty General Director - Operation / P.Tổng Giám Đ ốc - Vận hành	*NA	Must possess a university degree. / Phải có bằng đại học	1			1		-	1
/ Ban Tổng Giám Đốc	*NA	Running the day-to-day business operation. / Điều hành công việc kinh doanh hàng ngày	Dupty General Director - Facilities&Rolling stocks / P.Tổng Giám Đốc - Trang thiết bị &Đầu máy toa xe	*NA	Must possess a university degree in mechanical engineering. / Phải có bằng đại học chuyển ngành kỹ thuật cơ khí	1			1		-	1
			Dupty General Director - Administration / P.Tổng Giá m Đốc - Hành chính	*NA	Must possess a university degree. / Phải có bằng đại học	1			1		-	1
Board of Supervisiors / Ban kiểm soát	*NA	Inspecting lawfulness, fiduciary and diligence of chairman of the company and director or general director. / Kiểm tra tính hợp pháp, sự ủy thác và mẫn cán của Chủ tịch công ty và Giám đốc hoặc Tổng giám đốc	Supervisor / Giám sát	*3	MAUR has to appoint./BQLĐSĐT phải chỉ định	1		1	1 1		-	1
	Subtotal /Cộng Managing Director / Giám	đốc Điều hành		*NA	Must possess a university degree. / Phải có bằng đại học	1		- 1	7			7
	Human resources	- Personnel/labor-management, planning of human resource development incl. training. / Quân lý lao động/ nhân sự, lên kế hoạch phát triển nguồn nhân lực bao gồm đào tạo:		*NA	Must possess a university degree and be familiar with Vietnamese social welfare system. / Phải có bằng đại học và hiểu biết về hệ thống phúc lợi xã hội của Việt Nam	1			1		-	1
	Nhân sự	huấn luyện - Recruitment, Wages, Training / Tuyến dụng, Tiền lương, Đào tạo - Healith walfare program / Chương trình phúc lợi y tế - Praise and Blame / Khen thưởng và Khiển trách	Staff / Nhân viên	*NA	Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng		1		1		-	1
	General services	- General affairs (such as managing official documents and seals). / Tổng vụ (như quân lý các công ván và con đầu) - Arrangement of official meeting such as Boad meeting, staleholder's meeting. / Tổ chức các cuộc họp như họp Ban Giám đốc, họp cổ đồng - Reorganization of company / Tái tổ chức công ty	Manager / Trưởng phòng	*NA	Must possess a university degree. / Phải có bằng đại học	1			1		-	1
Administration / Hành chính	Tổng vụ	- Safeguarding security and protecting official secrets / Bảo vệ an ninh và bào vệ các bí quyết chính thức - Discovering, investigating and dealing with corruption and other illegal actions by staff. / Phát hiện, điều tra và xử lý tham nhũng và các hoạt động bắt hợp pháp của nhân viên	Staff / Nhân viên	*NA	Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng		3		3		-	3
	IT management Quản lý CNTT	- Planning and maintaining of Office IT system. / Lên kế hoạch bảo dưỡng hệ thống CNTT văn phòng - Supporting the company staff on IT issues / Hỗ trợ nhân viên Công ty về c lậc vấn để liện quan đến CNTT	Manager / Trưởng phòng Staff / Nhân viên	*NA	Must possess a university degree. (IT related experience is preferable). / Phải có bằng đại học (Có kinh nghiệm về CNTT sẽ được ưu tiên) Must possess a diploma in engineering (IT related experience is preferable).	1	1		1		-	1
	Legal works	- Legal advice to other units./ Tư vấn pháp lý cho các đơn vị khác	Manager / Trưởng phòng	*NA	/ Phải có bằng thuộc lĩnh vực kỹ thuật (Có kinh nghiệm về CNTT sẽ được ưu tiên) Must possess a university degree and be familiar with the registration of company. / Phải có bằng đại học và quen thuộc với việc đăng ký kinh doanh của công ty	1		_	1	\vdash	-	1
	Pháp chế	 Preventing illegal actions by company staff /Ngăn ngừa các hoạt động phạm pháp của nhân viên công ty 	Staff / Nhân viên	*NA	Team leader must posess at least a college degree. / Trường nhóm tối thiểu phải có bằng cao đẳng Must possess a university degree or professional diploma.				-		-	
	Public relations Quan hệ công chúng	Planning, coordinating and implementing of corporate public relations / Lên kế hoạch, điều phối và thực hiện Quan hệ công chúng của công ty	Manager / Trưởng phòng Staff / Nhân viên	*NA	Phái có bằng đại học hoặc bằng cấp chuyên môn	1	1		1	\vdash		1
	Subtotal /Cộng					6	6		12	-		12
	Managing Director / Giám Revenue & expense	đốc Điều hành - Accounting management. / Quản lý kế toán	Manager / Trưởng phòng	*NA	Must possess a university degree and be familiar with Vietnamese accounting law. / Phāi có bằng đại học và hiểu biết về luật kể toán của Việt Nam (Chief accountant must be appointed or hired.) / Kể toán trưởng phải được bổ nhiệm hoặc tuyến dụng.	1	<u> </u>		1			1
	Doanh thu & Chi phí	- Tax management / Quản lý thuế - Asset management / Quản lý tài sản	Staff / Nhân viên	*NA	Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a university degree and be familiar with financial planning and HCMC		1		1		-	1
Finance / Tài chính	Finance / Tài chính	- Financial plan and insurance management / Quản lý bảo hiễm và kế hoạch tài chính - Cash Management / Quản lý tiền mặt - Budget control / Kiễm soát ngân sách	Manager / Trưởng phòng Staff / Nhân viên	*NA	budgeting system. / Phải có bằng đại học và hiểu biết về kế hoạch tài chính và hệ thống ngàn sách của TPHCM Team leader must posess at least a college degree.	1			1			1
	Procurement Mua sắm	Procuring materials and out-source services / Mua vật tư và dịch vụ bên ngoài	Manager / Trưởng phòng	*NA	/ Trường nhóm tối thiểu phải có bằng cao đẳng Must possess a university degree and be familiar with HCMC contracting system. / Phải có bằng đại học và hiểu biết về hệ thống hợp đồng của TPHCM	1			1		-	1
	Subtotal /Công	- Supplies management / Quản lý cung ứng	Staff / Nhân viên	*NA	Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng	4	2		2			7
	Managing Director / Giám	T	T	*NA	Must possess a university degree./ Phải có bằng đại học	1	_		1		-	1
	Business planning Kế hoạch kinh doanh	Managing business strategies and plan. / Quản lý kế hoạch và chiến lược kinh doanh	Manager / Trưởng phòng Staff / Nhân viên	*NA *NA	Must possess a university degree./ Phâi có bằng đại học Team leader must posses at least a college degree. / Trường nhóm tối thiểu phải có bằng cạo đẳng	1			-	\vdash	-	1
Planning / Kế hoạch	Environment management Quản lý môi trường	Planning, monitoring and investigating of environment issues/ Lên kế hoạch, giám sát và điều tra các vấn đề về môi trường	Manager / Trưởng phòng Staff / Nhân viên	*NA	Must possess a university degree and be familiar with Vietnamese Environment Law. / Phải có bằng đại học và hiều rõ Luật mỗi trường của Việt Nam Team leader must posses at least a college degree.	1			1			1
	Commercial	Planning of fare rate /Hoach định giá vé Establishment and revision of tariff structure / Thiết lập và điều chỉnh	Manager / Trưởng phòng	*NA	/ Trường nhóm tối thiểu phải có bằng cao đẳng Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cập chuyển môn	1	H		1		-	1
	Thương mại	bằng giá - Promotion Release / Thực hiện các chương trình khuyến mãi	Staff / Nhân viên	*NA	Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng		1		1		-	1
	Subtotal / Cộng				Must possess a university degree in railway facilities and have at least 03 years experience in managing railway infrastructure. / Phải có bằng đại học chuyển ngành công	4	1		5	-		5
	Managing Director / Giám			*5	experience in managing railway intrastructure. / Phai co bang dại nộc chuyển nganh công trình đường sắt và có ít nhất 03 năm kinh nghiệm trong việc quản lý cơ sở hạ tầng đ lường sắt	1			1		-	1
					uong sai		+-		1	1		1
Safety / An Toàn	Safety plan	 Developing quality assurance policies (including train operation rules) / Phát triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu) Training and supervising safety programs / Huấn luyện và giám sát các 	Manager / Trưởng phòng	*NA	Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn			1	1		-	
Safety / An Toàn	Safety plan Kế hoạch an toàn	át triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu)		*NA	Must possess a university degree or professional diploma.			1	-		-	
Safety / An Toàn	Safety plan Kế hoạch an toàn Subtotal /Cộng	ất triển các chính sách bảo đâm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối	Manager / Trường phòng		Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng	1		1 -	- 2	_	-	- 2
	Kế hoạch an toàn	ất triển các chính sách bảo đâm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành	Manager / Trưởng phòng Staff / Nhân viên	*NA	Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Team leader must possess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years.	1	-		- 2	-		2
Safety / An Toàn Training center / Trung tâm đào tạo	Kế hoạch an toàn Subtotal /Cộng	ất triển các chính sách bảo đâm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành	Manager / Trường phòng	*NA	Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted	1 1			1 - 2 1 1 2	-		1 1 2
Training center	Ké hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center	ất triển các chính sách bảo đâm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành đốc Điều hành	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng	*NA *10 *10	Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên ditto / như trên	1 1 1		1 -	1	-		1
Training center	Kế hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng Managing Director / Giám	át triển các chính sách bảo đâm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành - Training drivers./ Huấn luyện lái tàu đốc Điều hành	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng	*NA *10 *10 *10	Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên	1		1 -	1	-		1
Training center	Kế hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng	át triển các chính sách bảo đâm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành - Training drivers./ Huấn luyện lái tàu	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng	*NA *10 *10 *10 *10 *NA	Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Team leader must possess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên ditto / như trên Must possess a university degree and have at least three years experience in railway transport operation. / Phải có bảng đại học và có ít nhất ba năm kinh nghiệm trong việc vận hành giao thông đường sắt Must possess a university degree. / Phải có bằng đại học	1		1 -	1	-		1
Training center	Ké hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng Managing Director / Giám Traffic planning	lát triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành - Training drivers./ Huấn luyện lái tàu - Training drivers./ Huấn luyện lái tàu - Developing train time table (Soạn thảo thời gian biểu cho tàu) - Ridership statistics/ Thống kế lượng hành khách đi tàu	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Staff / Nhân viên	*NA *10 *10 *10 *10 *10 *NA *NA	Must possess a university degree or professional diploma. / Phâi có bằng đại học hoặc bằng cấp chuyển môn Team leader must possess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên ditto / như trên Must possess a university degree and have at least three years experience in railway transport operation. / Phải có bằng đại học và có ít nhất ba nằm kinh nghiệm trong việc vận hành giao thông đường sắt Must possess a university degree. / Phải có bằng đại học Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Must possess a professional diploma. / Phải có bằng cấp chuyển môn	1		1 -	1	-		1
Training center	Ké hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng Managing Director / Giám Traffic planning	lát triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành - Training drivers./ Huấn luyện lái tàu đốc Điều hành - Developing train time table (Soạn thảo thời gian biểu cho tàu)	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Manager / Trưởng phòng	*NA *10 *10 *10 *10 *10 *NA *NA	Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Team leader must possess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên Must possess a university degree and have at least three years experience in railway transport operation. / Phải có bằng đại học và có ít nhất ba năm kinh nghiệm trong việc vận hành giao thông đường sắt Must possess a university degree. / Phải có bằng đại học Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn	1 1 1 1 1 1		1 -	1	1 7	1 1 7 50 50	1 1 2 4 4 1 1 1 1 1 8 8
Training center	Ké hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng Managing Director / Giám Traffic planning Kế hoạch vận chuyển	lất triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành - Training drivers./ Huấn luyện lái tàu - Training drivers./ Huấn luyện lái tàu - Developing train time table (Soạn thảo thời gian biểu cho tàu) - Ridership statistics/ Thống kế lượng hành khách đi tàu - Developing drivers operation plan / Soạn thảo kế hoạch điều hành lái tàu - Managing drivers./ Quản lý lái tàu - Operating trains./ Vận hành tàu - Stabling and shunting trains at the depot / Đậu và dồn tàu tại Depot	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Manager / Trưởng phòng Deputy Manager / Phó TP Staff / Nhân viên	*10 *10 *10 *6 *NA *NA *NA	Must possess a university degree or professional diploma. / Phâi có bằng đại học hoặc bằng cấp chuyển môn Team leader must possess at least a college degree. / Trưởng nhóm tối thiểu phâi có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên ditto / như trên Must possess a university degree and have at least three years experience in railway transport operation. / Phâi có bằng đại học và có ít nhất ba năm kinh nghiệm trong việc vận hành giao thông đường sắt Must possess a university degree. / Phâi có bằng đại học Must possess a university degree or professional diploma. / Phâi có bằng đại học hoặc bằng cấp chuyển môn Must possess a professional diploma. / Phâi có bằng cấp chuyện môn Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as train assistant-drivers for 24 consecutiv months or more. / Phâi có bằng cáp hoặc chứng chỉ chuyển môn trong việc lái các phương tiện đường sắt, do các đơn vị huấn luyện cấp và đã làm lái phụ trong 24 tháng l	1 1 1 1 1 1		1 -	1	1 7		1 1 2 4 4 1 1 1 1 1 8 8
Training center / Trung tâm đào tạo	Ké hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng Managing Director / Giám Traffic planning Kế hoạch vận chuyển	lất triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành - Training drivers./ Huấn luyện lái tàu - Training drivers./ Huấn luyện lái tàu - Developing train time table (Soạn thảo thời gian biểu cho tàu) - Ridership statistics/ Thống kế lượng hành khách đi tàu - Developing drivers./ Quản lý lái tàu - Operating trains./ Vận hành tàu - Stabling and shunting trains at the depot / Đậu và dồn tàu tại Depot Handling day-to-day station business. / Quản lý kinh doanh tại ga mỗi ngày > Pasenger services (Lost & founds, guidance) / Các dịch vụ hành khách (Mất tim, hương dần > Ticketing / Phát vé	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Manager / Trưởng phòng Deputy Manager / Phó TP Staff / Nhân viên Driver / Lái tàu Manager / Trưởng phòng	*NA *10 *10 *10 *6 *NA *NA *NA *NA	Must possess a university degree or professional diploma. / Phāi có bằng đại học hoặc bằng cấp chuyển môn Team leader must posses at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên ditto / như trên Must possess a university degree and have at least three years experience in railway transport operation. / Phải có bảng đại học và có ít nhất ba nằm kinh nghiệm trong việc vận hành giao thông đường sắt Must possess a university degree. / Phải có bằng đại học Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Must possess a professional diploma. / Phải có bằng cấp chuyên môn Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as train assistant-drivers for 24 consecutiv months or more. / Phải có bằng cáp hoặc chứng chỉ chuyển môn trong việc lái các phương tiện đường sắt, do các đơn vị huấn luyện cấp và đã làm lái phụ trong 24 tháng lễn tuc hoặc hơn. Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma or certificates suitable to titles, which are granted b training establishments recognized by the MoT. / Phải có bằng cấp hoặc chứng chỉ chuyến môn phù họp với chức vụ, do các cơ sở đào tạo được Bộ GTVT công nhận cấp	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 -	1	1 7 -		1 1 2 4 4 1 1 1 1 1 8 8
Training center / Trung tâm đão tạo	Kế hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng Managing Director / Giám Traffic planning Kế hoạch vận chuyển Train operation Điều vận tàu Station business	lất triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tại nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành - Training drivers./ Huấn luyện lái tàu - Developing train time table (Soạn thảo thời gian biểu cho tàu) - Ridership statistics/ Thống kế lượng hành khách đi tàu - Developing drivers./ Quản lý lái tàu - Operating trains./ Vận hành tàu - Stabling and shunting trains at the depot / Đậu và dồn tàu tại Depot Handling day-to-day station business. / Quản lý kinh doanh tại ga mỗi ngày > Pasenger services (Lost & founds, guidance) / Các dịch vụ hành khách (Mát tim, hương dần > Ticketing / Phát vé > etc / v.v	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Deputy Manager / Phó TP Staff / Nhân viên Driver / Lái tàu Manager / Trưởng phòng Staff / Nhân viên	*NA *10 *10 *10 *6 *NA *NA *NA *NA	Must possess a university degree or professional diploma. / Phāi có bằng đại học hoặc bằng cấp chuyển môn Team leader must possess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên ditto / như trên Must possess a university degree and have at least three years experience in railway transport operation. / Phải có bảng đại học và có ít nhất ba nằm kinh nghiệm trong việc vận hành giao thông đường sắt Must possess a university degree. / Phải có bằng đại học Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Must possess a professional diploma. / Phải có bằng cấp chuyển môn Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as train assistant-drivers for 24 consecutiv months or more. / Phải có bằng cáp hoặc chứng chỉ chuyển môn trong việc lái các phương tiện đường sắt, do các đơn vị huấn luyện cấp và đã làm lái phụ trong 24 tháng lện tục hoặc hơn. Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma or certificates suitable to titles, which are granted b training establishments recognized by the MoT. / Phải có bằng cấp hoặc chứng chỉ chuyển môn phù họp với chức vụ, do các cơ sở đào tạo được Bộ GTVT công nhận cấp Must possess a professional diploma or certificates suitable to titles, which are granted b training establishments recognized by the MoT. / Phải có bằng cấp hoặc chứng chỉ chuyển môn phù họp với chức vụ, do các cơ sở đào tạo được Bộ GTVT công nhận cấp	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 -	1	5	-	1 1 1 2 4 4 4 1 1 1 1 1 1 8 8 5 0 1 1 5 5 0
Training center / Trung tâm đào tạo	Kế hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng Managing Director / Giám Traffic planning Kế hoạch vận chuyển Train operation Điều vận tàu Station business	lất triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành - Training drivers./ Huấn luyện lái tàu dốc Điều hành - Training drivers./ Huấn luyện lái tàu - Developing train time table (Soạn thảo thời gian biểu cho tàu) - Ridership statistics/ Thống kể lượng hành khách đi tàu - Developing drivers./ Quản lý lái tàu - Operating trains./ Vận hành tàu - Stabling and shunting trains at the depot / Đậu và dồn tàu tại Depot Handling day-to-day station business. / Quản lý kinh doanh tại ga mỗi ngày > Pasenger services (Lost & founds, guidance) / Các dịch vụ hành khách (Mất/ tìm, hướng dẫn > Ticketing / Phát vé > etc / v.v	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Manager / Trưởng phòng Deputy Manager / Phó TP Staff / Nhân viên Driver / Lái tàu Manager / Trưởng phòng Station master / Quản lý ga Staff / Nhân viên Manager / Trưởng phòng	*NA *10 *10 *10 *10 *NA	Must possess a university degree or professional diploma. / Phâi có bằng đại học hoặc bằng cấp chuyển môn Team leader must possess at least a college degree. / Trưởng nhóm tối thiểu phâi có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên ditto / như trên ditto / như trên Must possess a university degree and have at least three years experience in railway transport operation. / Phâi có bằng đại học và có ít nhất ba năm kinh nghiệm trong việc vận hành giao thông đường sắt Must possess a university degree or professional diploma. / Phâi có bằng đại học hoặc bằng cấp chuyển môn Must possess a university degree or professional diploma. / Phâi có bằng đại học hoặc bằng cáp chuyển môn Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phâi có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as train assistant-drivers for 24 consecutiv nonths or more. / Phâi có bằng cáp hoặc chứng chi chuyện môn trong việc lái các phương tiện đường sắt, do các dơn vị huấn guốn cáp và đã làm lái phụ trong 24 tháng lện tục hoặc hơn. Team leader must posess at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma or certificates suitable to titles, which are granted b training establishments recognized by the MôT. / Phâi có bằng cấp hoặc chứng chỉ chuyện môn phù họp với chức vụ, do các cơ sở đào tạo được Bộ GTVT công nhận cấp Must possess a professional diploma or certificates suitable to titles, which are granted b training establishments recognized by the MôT. / Phâi có bằng cấp hoặc chứng chỉ chuyện môn phù họp với chức vụ, do các cơ sở đào tạo được Bộ GTVT công nhận cấp Must possess a university degree or professional diploma. / Phâi có bằng cấp hoặc chứng chi chuyện môn phù họp với chức vụ	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2 2 -	1	5	5	1 1 2 4 4 1 1 1 1 1 8 8 5 5 0 1 1 5 1 5 1 1 1
Training center / Trung tâm đào tạo	Ké hoạch an toàn Subtotal /Cộng Managing Director / Giám Training center Trung tâm đào tạo Subtotal /Cộng Managing Director / Giám Traffic planning Ké hoạch vận chuyển Train operation Điều vận tàu Station business Kinh doanh tại ga	lất triển các chính sách bảo đảm chất lượng (bao gồm các nội quy vận hà nh tàu) - Training and supervising safety programs / Huấn luyện và giám sát các chương trình an toàn - Statistics and analysis of accidents&incidents/ Thống kê và phân tích tai nạn & các việc rắc rối - Management of operational risks / Quản lý các rủi ro trong vận hành dốc Điều hành - Training drivers./ Huấn luyện lái tàu dốc Điều hành - Developing train time table (Soạn thảo thời gian biểu cho tàu) - Ridership statistics/ Thống kế lượng hành khách đi tàu - Developing drivers operation plan / Soạn thảo kế hoạch điều hành lái tàu - Managing drivers./ Quản lý lái tàu - Operating trains./ Vận hành tàu - Stabling and shunting trains at the depot / Đậu và dồn tàu tại Depot Handling day-to-day station business. / Quản lý kinh doanh tại ga mỗi ngày > Pasenger services (Lost & founds, guidance) / Các dịch vụ hành khách (Mát/ tìm, hướng dẫn > Ticketing / Phát vé > etc / v.v - Controlling railway traffic and power / Kiếm soát giao thông đường sắt và diện	Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Staff / Nhân viên Manager / Trưởng phòng Manager / Trưởng phòng Deputy Manager / Phó TP Staff / Nhân viên Driver / Lái tầu Manager / Trưởng phòng Station master / Quân lý ga Staff / Nhân viên	*NA *10 *10 *10 *10 *NA	Must possess a university degree or professional diploma. / Phâi có bằng đại học hoặc bằng cấp chuyển môn Team leader must posses at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years. ditto / như trên ditto / như trên Must possess a university degree and have at least three years experience in railway transport operation. / Phải có bằng đại học và có ít nhất ba nằm kinh nghiệm trong việc vận hành giao thông đường sắt Must possess a university degree. / Phâi có bằng đại học Must possess a university degree or professional diploma. / Phải có bằng đại học hoặc bằng cấp chuyển môn Must possess a professional diploma. / Phải có bằng cấp chuyển môn Team leader must posses at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đầng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as train assistant-drivers for 24 consecutiv months or more. / Phải có bằng cao đẳng Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as train assistant-drivers for 24 consecutiv monts or more. / Phải có bằng cáp hoặc chứng chi chuyển nộn trong việc lái các phương tiện đường sắt, do các đơn vị huấn luyện cấp và đã làm lái phụ trong 24 tháng lễn tục hoặc hơn. Team leader must posses at least a college degree. / Trưởng nhóm tối thiểu phải có bằng cao đầng Must possess a professional diploma or certificates suitable to titles, which are granted b training establishments recognized by the MōT. / Phải có bằng cấp hoặc chứng chi chuyến môn phù hợp với chức vụ, do các cơ sở đào tạo được Bộ GTVT công nhận cấp Must possess a university degree or professional diploma. / Phải có bằng đậi học hoặc bằng cấp chuyện môn	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 -	1 1 2 4 1 1 1 1 1 1 1 1 1 1 1	5	5	1 1 1 2 4 4 4 1 1 1 1 1 1 8 8 5 0 1 1 5 5 0

					Qualification / Năng lực chuyên môn	S		ocation Plan	/ Kế hơ	ach ph	ân bố nh	nân vi	àn
D / D	11.77.15	D 1177 / T / 1 170	T::: / O! /	,				ad Office			Site		
Department / Bộ phận	Unit / Đơn vị	Responsibility / Trách nhiệm	Title/ Chức danh	Legal/ Pháp lý	Education and/or Work Experience / Học vấn và/hoặc kinh nghiệm làm việc (*11)	10/		Tại trụ sở 12/ 7/	total/		oi làm vi		Total Tổng
				ap .,				2013 2014	1 Tổng	2013	2014 Tổ	ổng	· ong
	Must possess a university degree in railway facilities and have at least three years Managing Director / Giám đốc Điều hành Must possess a university degree in railway facilities and have at least three years experience in managing railway infrastructure. / Phải có bằng đại học chuyên ngành công trình đường sắt và có ít nhất 03 năm kinh nghiệm trong việc quản lý cơ sở hạ tầng đường sắt								1			-	1
		Handling Rolling Stock / Quản lý đầu máy toa xe	Manager / Trưởng phòng	*NA	Must possess a university degree in mechanical engineering. / Phải có bằng đại học về kỹ thuật cơ khí	1			1			-	1
		> Maintenance / Bảo dưỡng > Inspection / Kiểm tra	Deputy Manager / Phó TP	*NA	Must possess a professional diploma in mechanical engineering. / Phải có bằng cấp chuyên môn về kỹ thuật cơ khí				-	2		2	2
	Rolling stocks Đầu máy toa xe	u máy toa xe	Staff / Nhân viên	*NA	No specific requirement. / Không có yêu cầu cụ thể	2		2	4		4	4	8
		vật tư tiêu hao	Worker / Công nhân	*NA	No specific requirement. / Không có yêu cầu cụ thể				-		6	6	6
		Subtotal / Cộng				3	-	2 -	- 5	2	10	12	17
		Handling Track / Xử lý Đường ray > Maintenance /Bảo dưỡng	Manager / Trưởng phòng	*NA	Must possess a university degree in civil engineering. / Phải có bằng đại học chuyên ngành kỹ thuật xây dựng dân dụng	1			1			-	1
		> Inspection /Kiểm tra > Repair /Kiểm chữa > Spare parts and consumables management / Quản lý phụ tùng và các vật tư tiểu hao > management of construction and renewal works /Quản lý các công trình	Deputy Manager / Phó TP	*NA	Must possess a professional diploma in civil engineering. / Phải có bằng cấp chuyên ngành kỹ thuật xây dựng dân dụng				-	1		1	1
			Staff / Nhân viên	*NA	No specific requirement. / Không có yêu cầu cụ thể	1		3	4		4	4	8
Ì			Worker / Công nhân	*NA	No specific requirement. / Không có yêu cầu cụ thể						12	12	12
		xây dựng và các công tác thay mới	Subtotal / Cộng			2	-	3 -	- 5	1	16	17	22
	Total (Otrostona	Handling Structure / Xử lý Kết cấu > Maintenance /Bào dưỡng > Inspection /Kiểm tra	Deputy Manager / Phó TP	*NA	Must possess a university degree in structure engineering. / Phải có bằng đại học chuyên ngành kỹ thuật kết cấu	1			1			-	1
	Track /Structure /Architecture	cture > Repair /Sửa chữa > Spare parts and consumables management / Quản lý phụ tùng và các	Staff / Nhân viên	*NA	No specific requirement. / Không có yêu cầu cụ thể			3	3			-	3
Facilities / Rolling stocks Trang thiết bị / Đầu máy toa xe	Đường ray / Công trình / Kiến trúc	vat từ liệu hao > management of construction and renewal works / Quản lý các công trình xây dựng và các công tác thay mới	Subtotal / Cộng			1	-	3 -	4	-		-	4
		Handling Architecture / Quản lý Kiến trúc > Maintenance /Bảo dưỡng > Inspection /Kiểm tra	Deputy Manager / Phó TP	*NA	Must possess a university degree in architect engineering. / Phải có bằng đại học chuyên ngành kiến trúc	1			1			-	1
		Repair /Sửa chữa Spare parts and consumables management / Quản lý phụ tùng và các vất tư tiểu hao	Staff / Nhân viên	*NA	No specific requirement. / Không có yêu cầu cụ thể			3	3			-	3
		yat từ tiểu hau > management of construction and renewal works / Quản lý các công trình xây dựng và các công tác thay mới	Subtotal / Cộng			1	-	3 -	4	-		-	4
		Subtotal / Cộng				4	-	9 -	13	1	16	17	30
		Xử lý hệ thống tín hiệu / Điện / Thông tin liên lạc /Hệ thống thu phí tự động > Maintenance /Bảo dưỡng	Manager / Trưởng phòng	*NA	Must possess a university degrees in electrical engineering. / Phải có bằng đại học chuyên ngành kỹ thuật điện	1			1			-	1
			Deputy Manager / Phó TP	*NA	Must possess a professional diploma in electrical engineering. / Phải có bằng đại học kỹ sư điện				-	3		3	3
	Electrical&Mechanical	> Inspection /Kiểm tra > Repair /Sửa chữa > Spare parts and consumables management / Quản lý phụ tùng và các	Staff / Nhân viên	*NA	No specific requirement. / Không có yêu cầu cụ thể			6	6		9	9	15
	Cơ & Điện	vật tư tiêu hao > management of construction and renewal works / Quản lý các công trình	Worker / Công nhân	*NA	No specific requirement. / Không có yêu cầu cụ thể				-		25	25	25
		xây dựng và các công tác thay mới	Subtotal / Cộng			1	-	6 -	. 7	3	34	37	44
		Maintaining Mechanical / Station E&M	Deputy Manager / Phó TP	*NA	Must possess a university degrees in mechanical engineering. / Phải có bằng đại học chuyên ngành kỹ thuật cơ khí	1			1			-	1
		Bảo dưỡng cơ khí / trang thiết bị cơ điện cho ga	Staff / Nhân viên	*NA	No specific requirement. / Không có yêu cầu cụ thể			5	5			-	5
			Subtotal / Cộng			1		5 -	6	-		-	6
		Subtotal / Cộng				2		11 -		3		37	50
	Subtotal /Cộng					10		22 -	32	6	60	66	98
	Managing Director / Giám	đốc Điều hành		*NA	Must possess a university degree and have experience of developing the business plan commercial sector./Phải có bằng đại học và có kinh nghiệm trong việc phát triển kế hoạc kinh doanh trong lĩnh vực thương mại				1			-	1
	Advertisement Quảng cáo	Managing advertisement services. / Quản lý các dịch vụ quảng cáo	Manager / Trưởng phòng	NA	Must have experience of working in commercial sector as a manager. / Phải có kinh nghiệm quản lý trong lĩnh vực thương mại với vai trò quản lý		1		1			-	1
Non-Fare Business			Staff / Nhân viên	*NA	No specific requirement. / Không có yêu cầu cụ thể Must have experience of working in retails as a manager. / Phải có kinh nghiêm trong việ	c	<u> </u>	2	2	igwdisplaylim		-	2
Kinh doanh ngoài bán vé	Shops Các cửa hiệu tại ga	Managing retailing services (incl. resturants as future options). / Quản lý cá c dịch vụ bán lẻ (Bao gồm cả nhà hàng cho kế hoạch trong tương lại)		*NA	quản lý các cửa hàng bán lẻ với vai trò quản lý		1		1			-	1
	Sac caaçu tqı ga	(Sao gom oa ma mang ono no nopon trong taong lai)	Staff / Nhân viên	*NA			1	2	2			-	2
	Rental Space Khu vực cho thuê	No specific requirement. (Manager of advertisement supervises this services in initial years.) / Không có yêu cầu cụ thể (Người quản lý việc quảng cáo giám sát dịch vụ này trong những năm đầu)				-			-	-			
			Staff / Nhân viên	*NA	No specific requirement. / Không có yêu cầu cụ thể		1	2				-	2
	Subtotal /Cộng					1				-			9
Total / Tổng						39	12	39 7	97	20	263 2	283	380

"NA: Knong ab dung
"14: Article 69 of No. 60/2005/QH11 "Law on Enterprise": For details, see the article of Law.
/ Điều 69 Luật doanh nghiệp Số 60/2005/QH11: Xem chi tiết tại điều khoản của Luật
"2: Article 70 of No. 60/2005/QH11 "Law on Enterprise": For details, see the article of Law.

/Điều 70 Luật doanh nghiệp số 60/2005/QH11 : Xem chi tiết tại điều khoản của Luật *3: Article 71 of No. 60/2005/QH11 "Law on Enterprise" : For details, see the article of Law.

3. Antale 71 of the Occobed and Law of Literaphies -1 of the Calabas, see the antale of Law.

/ Diều 71 Luật doanh nghiệp số 60/2005/OH11: Xem chi tiết tại điều khôan của Luật

*4: Article 48 of No. 03/2003/QH11*Law on Accounting*: Company shall appoint a person to act as chief accountant, if it does not do so, it must appoint a person responsible for accounting or hire a chief accountant.

/ Điều 48 Luật Kế toán số 03/2003/QH11: Công ty sẽ bổ nhiệm một cá nhân làm kế toán trưởng, nếu chưa bổ nhiệm được kế toán trưởng thì phải cử người phụ trách kế toán hoặc thuê kế toán trưởng

*5: Article 12 of Decision 61/2007/QD-BGTVT: The leader in charge of safety affairs must possess a university degree in railway facilities and have at least three years experience in managing railway infrastructure.

/ Diêu 12 cúa Quyệt định 61/2007/QD-BGTVT: The leader in charge of safety affairs must possess a university degree in railway facilities and have at least three years experience in managing railway infrastructure.

/ Diêu 12 cúa Quyệt định 61/2007/QD-BGTVT: Throng bộ phận chiu trách nhiệm vẻ vản dê an toán, phải có bằng đại học chuyện ngành kỹ thuật kết cấu hạ tầng đương sắt và có ít nhất 03 năm kinh nghiệm trong việc quản lý kết cấu hạ tầng ngành đường sắt.

* Piễu 12 của Nghị định số 109/2006/ND-CP: Người được giao trách nhiệm chính về quản lý kỹ thuật khai thác vận tài phải có bằng đại học và có ít nhất ba (03) năm kinh nghiệm về khai thác vận tài đường sắt

**7: Article 46 of Railway Law: railway personnel in direct service of train operation must possess professional diplomas or certificates suitable to their titles, which are granted by training establishments recognized by the MoT

**Dièu 46 Luật đường sắt quy định: Nhân viên đường sắt trưc tiếp phục vụ chạy tàu phải có bằng, chứng chỉ chuyện môn phù hợp với chức danh do cơ sở đão tạo được Bộ Giao thông vận tải công nhận cấp

**8: Article 47 of Railway Law: Persons granted train-driving license must fully satisfy the following conditions: b) Possessing professional diplomas, certificates in driving railway traffic means, granted by training establishments; c). Having worked as train assistant-drivers for 24 consecutive months or more.

**Piều 47 Cuá Luật đường sắt quy định: Người được cặp giấy phép lái tàu phải có đỏ các điều kiện sau đấy: b) Có bằng, chứng chỉ chuyện ngành lái phương tiến giao thông đường sắt do cơ sở đào tạo cấp; c) Đã chôi gian làm lái phụ tàu liên tục 24 tháng trở lên

**9: Article 13 of Decree 109/2006/ND-CP: Persons assigned with the prime responsibility for technical management of railway infrastructures must have a university degree and at least three (3) years experience in operation of railway infrastructures.

**Jiều 13 của Nghị định số 109/2006/ND-CP: Người được giao trách nhiệm chính về quản lý kỹ thướt the tah gồu đượng sắt phải có bằng đại nọc và có it nhất ba (03) năm kinh nghiệm về khai thác hạ tàng đường sắt

*10: Article 14 of Decision 44/2005/QD-BGTVT: Must possess a professional diploma, certificate in driving railway traffic means, granted by training establishments and having worked as a train driver for at least 3 years

Diskut 14 của Quyết định 44/2005/QD-BGTVT. Có bằng học chứng chi về phương tiện giao thông đường sắt tương ứng với loại phương tiện người tham gia sát hạch, do cơ sở đào tạo cấp; c. Đã qua thực tế công tác ít nhất 5 năm, trực tiếp làm lái tàu ít nhất 3 năm, am hiểu về phương tiện giao thông đường sắt tương ứng với loại phương tiện người tham gia sát hạch, do cơ sở đào tạo cấp; c. Đã qua thực tế công tác ít nhất 5 năm, trực tiếp làm lái tàu ít nhất 3 năm, am hiểu về phương tiện giao thông đường sắt và Quy trình, Quy phạm khai thác kỹ thuật đường sắt, Quy từ do an toàn chạy tàu

Note *5 through *10 will be clarified with MoT, if UMRT can proposes alternatives

Note: 3 through: 10 will be claimed with wid; it owner can proposes atternatives
Lru y; tiv 5 deh* 110 cân phát dược làm rõ với Bộ Giao thông Vận tát, nêu UMRT đề xuất các phương án thay thể
*11: Manager and Team leader class must possess a grade C and B certificate of English test, respectively.
/Bú vi vị trì Trưởng phông và Trưởng nhóm phát có Chứng chí C a B Tiếng Anh một cách tương ứng
*12: The number of staff listed above does not include indirect staff, such as secretaries, securities, and office boys.
/Sổ lượng nhân viên trên không bao gồm nhân viên gián tiếp như thư ký, báo vệ và nhân viên van phòng

<Sources> / <Nguồn>

Number of staffs ; "O&M Company plan - Mobilization plan" by NJPT / Số lượng nhân viên; "Kế hoạch công ty O&M - Kế hoạch huy động nhân viên" của NJPT

Appendix 3. Comparison of Structure Function with Osaka and Taipei

To confirm the Suitability and reasonableness of the proposed structure of the O&M company, the comparison of structure function with other Asian cities "Osaka and Taipei" has been conducted. Although the coverage of individual division in other Asian cities is different from O&M company, it was found that O&M contains same functions.

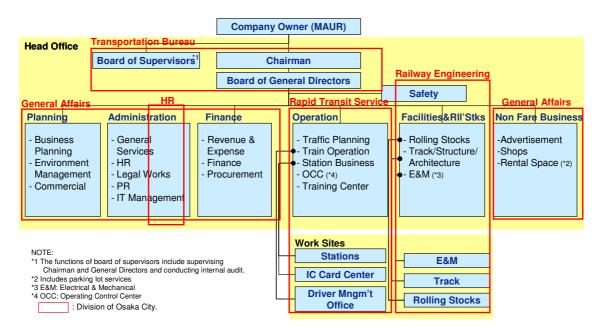


Diagram A3.1 Comparison of Structure Function with Osaka

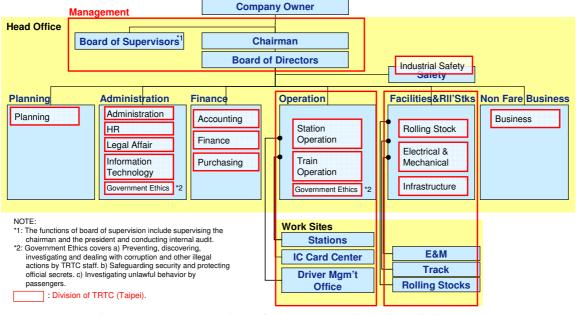


Diagram A3.2 Comparison of Structure Function with Taipei (TRTC)

Appendix 4 / Phu luc 4 Roadmap for Starting Commercial Operation / Lộ trình bắt đầu vận hành thương mại

		Activities/ Các công việc					c		n for O&M Comp n bị cho việc thà						Developm Regulation& ai theo các trình	Process quy định và	tiến				Commercial Op Vận hành thươ		
					4	5 6 7	2010 8 9 10 1	1 12 1 2	3 4 5 6	7 8 9	10 11 12	1 2 3	2012	9 10 11	12 1 2	3 4 5	2013	9 10 11 12	1 2 3	2014 4 5 6 7	8 9 10 1	1 12 1 2	2015
# Danh mục công việc	Name	Nõi dung	Description	Duration (month) That hiện	Milestone Construct Work Counter Part Môc ghi r ông tác x dựng Đơn vị cần	tion nhớ c											Completic Head Off Construc Hoàn thành xây dựng t	in of Crice Cotion De Hoài rụ sở xây	Completion of omissioning of port & EL Ea n thành công dựng Depot v	f Maint st Tea tác Cont à đ Nhà thầ	et-up tenance C am by tractor Ho u thiết lập ác	Completion of comissioning of EL West hanh công to xây dựng đoạn li cao phía Tây	f g t
				Thời hạn (tháng) (*4)	phối hợp thực hiện (*4) Milestone O&M Cor (*4) Mốc ghi r của Cty VH&BD Establishn Thiết lập B:	mpany C Thài	Inc	at earliest	aff 1			sing PU Sta	O&M Co Thành lập ci	blishment of ompany at late ong ty VH&BE taff of Head C iên chủ chốt t	chậm	Nhá Ke Fare	f of Head Office n viên tại trụ số y Staff of Non- business / Nhấ KD ngoài vé ch	Key Sta Opera Nhân việ	tion :	erating Staff àn viên h hành	Staff ân viên	Capit Kir Tăng	easing Sta bital in Comi Kind Ope ng vốn Bắt đầu hiện vật thươi
Công việc của BQLĐSĐT / (MAUR Work) Thành lập Đơn vị chuẩn bị cho công ty O&M	Establishment of Preparation Unit (PU) for O&M	Thành lập DB cho việc thành lập công ty VH&BD.	PU for setting-up O&M company to be	7 MAUR (BQLÐSE									se steps may be skipp the decision on	ped,									
Công tác chuẩn bị (Preparation Work) 0 Làm rõ thêm về Luật đường sắt	Clarification on Railway Law	Giải quyết các trở ngại về kinh nghiệm làm việc(*1)	Restraint of work experience to be settled. (*1)	8 PU (DB)	MoT (Bộ GTVT)		•					UMi	RT#1 has already bee ted.	n								++++	
Thủ tục theo quy định (Regulatory Procedures) 0 Đăng ký		Thực hiện quy trình đăng ký thành lập công ty	Performing procedures for company registration	PU (DB)								qua	ững bước này có thể vì quyết định về ĐSE	т									
11 Kiểm tra cùng với Tổ công tác 112 Xác nhận với Sở KH-ĐT và các Bộ ngành liên quan	Registration Reviewing with Task Team Confirmed by MoPI and related Ministries		z z z z z z z z z z z z z z z z z z z	3 PU (DB)	Task Team (Tổ công tác) MoPI (Bộ KH-ĐT)					+		Tuy	n 1 đã được chắc th	uan								\Box	
13 Thủ tướng chính phủ xác nhận và ra quyết định	Confirmed by MoPI and related Ministries Confirmation and Decision of Prim Minister			3 PU (DB) 2 PU (DB)	PM (Thù Tướng)																	+++	
14 Quyết định chính thức của Chủ tịch UBND TPHCM 15 Giấy chứng nhận đăng ký kinh doanh	Formal Decision from Chairman of HCMCPC Business Registration Certificate	Đăng ký với Sở KH-ĐT (*7)	Registration to DPI (*7)	2 PU (DB) 1 PU (DB)	PC (UBNDTP) DPI (Sở KH-ĐT)								•									! 	
16 Giấy chứng nhận đăng ký thuế 117 Điều chỉnh hồ sơ đăng ký kinh doanh (lần 1)	Tax Registration Certificate	Đăng ký với Sở KH-ĐT (*7) Cập mã số thuế(*6) Thay đổi trụ sở chính của công ty trong hồ sơ.	Tax Code to be issued. (*6) Change in Head quater location to be filed.	0.5 PU (DB) 1 O&M(VH&BD	HCMC (TPHCM)										\dashv								
18 Điều chính hô sơ đăng ký kinh doanh (lân 2)	Changes in the business registration file (2nd)	Điều chỉnh vốn pháp định trong hồ sơ.	Change in Capital to be filed.	1 O&M(VH&BD	DPI (Sở KH-ĐT)																		
10 Hồ sơ đăng ký 21 Điều lệ công ty (Bản thảo)	Documentation for Registration Charter of Company (Draft)	Quyết định hệ thống lương đối với Giám đốc, v.v	Salary system for Director etc to be decided.	5 PU (DB)	MAUR (BQLÐSÐT)						•												
22 Điều lệ công ty (Bản chính thức) 23 Giấy chứng nhận vốn pháp định	Charter of Company (Final) Legal Capital Certificate	Điều chỉnh điều lệ công ty (Nếu có) Vốn phải được các cơ quan thẩm quyền xác nhận. (*5)	Charter of Company to be revised, if any. Capital to be certified by authorized body. (*5)	3 PU (DB) 4 PU (DB)	- Authorized (Cấp có thẩm c	auvěn)																	
24 Các tài liệu khác	Other Documents	Chuẩn bị hồ sơ đăng ký	Documents for registration to be prepared.	4 PU (DB)	MAUR (BQLÐSÐT)	quyen)																	
Giấy phép lái tàu Chuẩn bị kế hoạch liên quan	Driver Licenses	Chuẩn hị liế hoạch cần thiết để thị lấu hằng lái tàu.	Related Plan to be prepared for acquiring driver	3 O&M(VH&BD	0			1111															
2 Thi	Preparation of related plan Examination	Chuẩn bị kế hoạch cần thiết để thi lấy bằng lái tàu Tổ chức thi lấy bằng lái tàu	licenses. Examination for Driver Licenses to be Applied.	3 O&M(VH&BD	·										-								
Vai trò, tầm nhìn và chiến lược kinh doanh (Mission, V	ision and Business Strategy									•••••				•							•••••		
Vai trò và tầm nhìn	Mission and Vision	Phải xác định vai trò và tâm nhìn của công ty	Mission and Vision to be defined. Business strategy should be further developed for	1 PU (DB)	MAUR (BQLÐSÐT)		- 								+					+++		++++	
Chiến lược kinh doanh	Business Strategy	Lập chiến lược kinh doanh để tiến tới vận hành thương mại	their commercial operation.	4 PU (DB)																		\perp	
Kế hoạch kinh doanh (Business Plan) Uập kế hoạch kinh doanh của công ty	Development of company business plan	Điều chỉnh "sơ đồ tổ chức và phân bổ nhân sự" và "Kế hoạch tài	Revision of "organization chart and staff	6 PU (DB)	MAUR (BQLÐSÐT)			+														++++	
0 Lập kế hoạch kinh doanh ngoài vé của công ty (1)	Development of non-fare business plan (1)	chính" để bắt đầu vận hành thương mại. Quản lý chuẩn bị kế hoạch bản thảo	allocation" and "Financial Plan" for starting Draft plan to be prepared by management	11 PU (DB)	-							- 1								-		+	
0 Lập kế hoạch kinh doanh ngoài vé của công ty (2)	Development of non-fare business plan (2)	Triển khai	Brushed-up	O&M(VH&BD)													1.9	1			\bot	
Back Office, Ban an toàn và O&M	Back Office, Safety and O&M											i i											
111 Chuẩn bị bản thảo 112 Hoàn thiện	Draft Preparation Finalization	Lập bản thảo các quy định Hoàn thiện các quy định	Regulation to be drafted. Regulation to be finalized.	7 PU (DB) 3 O&M(VH&BD) -										-				1	1 1 1 1		++++	
Hoạt động kinh doanh ngoài vé	Non-fare Business	Thực hiện các quy định về hoạt động kinh doanh ngoài vé	Regulation of Non-Fare Business to be developed.	2 O&M(VH&BD	ý -																	\perp	
Tiến trình kinh doanh và hướng dẫn thực hiện (Busine 0 Tiến trình kinh doanh (ngoài kinh doanh ngoài vé)	Business processes (other than Non-fare business	3)																				\pm	
I Chuẩn bị bản thảo	Draft Preparation	Chuẩn bị bản thảo về tiền trình kinh doanh và các hướng dẫn	Draft business process&manuals to be prepared.	6 O&M(VH&BD IT Vender	0) -												1			1 111		<u>i </u>	
12 Hợp nhất các đặc tính kỹ thuật của hệ thống CNTT	Incorporation of Office IT Systems Specification	Tiến trình kinh doanh và hướng dẫn vận hành do các nhà cung cấp CNTT lập.	Business process&manuals to be further developed by IT vendors.	3 (Nhà cung cấp thiết bị CNTT)	O&M(VH&BD)																†	4	.
0 Tiến trình KD của các hoạt động kinh doanh ngoài vé	Business processes of Non-Fare Business	Công ty O&M triển khai kế hoạch kinh doanh và hướng dẫn thực	Business process&manuals to be developed by	2 O&M(VH&BD	0 -																		
Hệ thống CNTT văn phòng (Office IT Systems)		hiện	O&M.		<u>′-</u>									-								+	,
0 Chuẩn bị Gói thầu	Preparation for Bid Package	Chuẩn bị gói thầu để mời thầu	Bid Package for tender to be prepared.	5 O&M(VH&BD) - IT Vender											•						\perp	
Đấu thầu/Đánh giá thầu	Tendering/Evaluation	Đấu thầu và đánh giá hồ sơ chào thầu	Tendering and Evaluation of Proposal.	3 O&M(VH&BD	(Nhà cung cấp																		.
Thiết kế, thiết lập cấu hình và đưa vào sử dụng	Design, Configuration, Commissioning	Thiết kế, thiết lập cấu hình và đưa vào sử dụng	Design, Configuration and Commissioning.	IT Vender 18 (Nhà cung cấp thiết bị CNTT)	thiết bị CNTT) O&M(VH&BD)																•		
O Đào tạo	Training	Đào tạo cho người sử dụng và người quản lý hệ thống	Training for Users and System Administrators.	IT Vender (Nhà cung cấp thiết bị CNTT)	O&M(VH&BD)																		
Tân trang cho các hoạt động kinh doanh ngoài vé (Re-	furbishment for Non-fare business)				Vendere										\perp	\perp							
Công việc mua sắm và tân trang	Procurement and Re-furbishment work	Ký hợp đồng với "các nhà cung cấp và những người bán hàng" v trang bị các thiết bị đường sắt cho việc kinh doanh ngoài vé.	refurbishing railway facilities for non-fare business	10 O&M(VH&BD	na													e required for of training ma					
Dào tạo	Training	Thuyết trình về hoạt động kinh doanh ngoài vé	Lecture and Role-Play for non-fare business.	2 Người bán hàng	O&M(VH&BD)	\perp									\perp	\perp	by NJPT (*2					$\downarrow \downarrow \downarrow \downarrow$	
Tập huấn cho nhân viên O&M (O&M training) (*3) Nhân viên vận hành	Operating Staff	(Lái tàu, nhân viên điều độ và nhân sự vận hành nhà ga và depot	(Drivers, OCC dispatcher and station&depot														NJPT cần 6	tháng để chu	ẩn bị			+++	,+++
11 Lớp tập huấn cho nhân sự chủ chốt	Class Room training for Key Staff	NJPT sẽ mở lớp tập huấn	operation staff) Class Room Training is provided by NJPT	5 NJPT	O&M(VH&BD)	-								+	+	+	tài liệu tập l	ulán/đào tạo.	(*2)	1 1 1		+	
12 Lớp tập huấn cho nhân viên	Class Room training for Rey Staff Class Room training for Staff	Các nhân sự chủ chốt đã được tập huẩn mở lớp tập huẩn cho nh	Trained Key Staff provides Class Room training	4 NJPT	O&M(VH&BD)										\neg							<u> </u>	
13 Tập huấn công việc tại nơi làm việc	On the Job training at Work Site	lân viên Bổ trí tập huần công việc sau khi xây dựng xong dự án	for Staff. On the Job training is provided after construction	9 NJPT	O&M(VH&BD)																		
Nhân viên bảo dưỡng	Maintenance Staff	(Đường ray, thiết bị điện và đầu máy toa xe)	(Tracks, Electrical and Rolling Stocks) Training in Japan is provided prior to construction				_ i								\perp								
21 Tập huấn tại Nhật	Training in Japan	Bố trí tập huấn tại Nhật trước khi xây dựng xong dự án	completion.	2 Contractor (Nhà thầu)	O&M(VH&BD)		i								\perp								
722 Tập huấn công việc tại nơi làm việc	On the Job training at Work Site	Bố trí tập huấn công việc sau khi xây dựng xong dự án	On the Job training is provided after construction completion.	10 Contractor (Nhà thầu)	O&M(VH&BD)																		
Oác đợt tập huấn khác liên quan đến vận hành	Other training related to operation	Các đợt tập huấn khác liên quan đến vận hành (ngoại trừ vệ sinh		4 Contractor (Nhà thầu)	O&M(VH&BD)																		
	The state of the s	Haur	maini			1 1 1 1	1 1 1							1 1 1					1 1 1		1 1 1 1	. 1 1 /	

NOTE/ GHI CHÚ

- (*1): The following restraints of work experience are stated in Railway Law. / Durôt đây là những trở ngại về kinh nghiệm được nêu trong Luật đường sắt.

 Article 46 of Railway Law: railway personnel in direct service of train operation must possess professional diplomas or certificates suitable to their titles, which are granted by training establishments recognized by the MoT.

 Điều 46 của Luật đường sắt: Nhân viên đường sắt trực tiếp phục vụ chạy tàu phái có bằng hoặc chững chi chuyến môn phù hợp với chức danh do cơ sở đào tạo được Bộ giao thông vận tài công nhận cấp.

 Article 47 of Railway Law: Persons granted train-driving license must fully satisfy the following conditions: b) Possessing professional diplomas, certificates in driving railway traffic means, granted by training establishments; c) Having worked as train assistant-drivers for 24 consecutive months or more.

 Điều 47 của Luật đương sắt: Người được cấp giấy phép lái tàu phải có đủ các điều kiện sau đây: b) có bằng cấp, chứng chi chuyên nghành lái phương tiên giao thông đường sắt do cơ sở đào tạo cấp; c) Đã có thời gian lâm phụ lái tàu liên tục 24 tháng trở lên.

 Article 12 of Decree 109/2006/ND-CP: Persons assigned with the prime responsibility for technical management of transport operation must have a university degree and <u>at least three (3) years experience in railway transport operation.</u>

 Điều 12 của Nghị định 109/2006/ND-CP: Người được giao chịu trách nhiệm chính về quản lý kỹ thượk khai thác vớa hái quống sắt.

- Article 13 of Decree 109/2006/ND-CP: Persons assigned with the prime responsibility for technical management of railway infrastructures must have a university degree and at least three (3) years experience in operation of railway infrastructures.
 Điều 13 của Nghị định 109/2006/ND-CP: Người được giao chịu trách nhiệm chính về quản lý kỹ thuật kết cấu hạ tầng đường sắt phải có trình độ đại học và có ít nhất ba (3) năm kinh nghiệm về khai thác kết cấu hạ tầng đường sắt.
- Article 12 of Decision 61/2007/QD-BGTVT: The leader in charge of safety affairs must possess a <u>university degree in railway facilities</u> and have <u>at least three (3) years experience in managing railway infrastructure</u>.

 Điều 12 của Quyết định 61/2007/QD-BGTVT: Lãnh đạo doanh nghiệp phụ trách an toàn phải có trình độ đại học về chuyển nghành công trình đường sắt và có ít nhất ba (3) năm kinh nghiệm quản lý kết cấu hạ tầng đường sắt.

 ("2): Business Process and Manuals for Q&M will be prepared by NJPT to meet the training time line.

 Tiến trình kinh doanh và cẩm nang hướng dẫn thực hiện cho công ty Q&M sẽ do NJPT thực hiện để phù hợp với thời gian đào tạo/tập huẩn

 ("3): Q&M training Time Schedule is based on NJPT plan as of 5 June 2009. For the details, please refer to NJPT plan.

 Kể hoạch đào tạo cho nhân viên Q&M dựa trên bản kế hoạch của NJPT lập ngày 05/06/2009. Để biết thêm chi tiết, vui lòng xem bản kế hoạch của NJPT.

- (*4) : PU: Preparation Unit under MAUR, O&M: O&M company will be established as one-LLC by MAUR, PM: Prime Minister, PC: Ho Chi Minh City People Committee, VNRA: Vietnam Railway Administration : BCB: Ban chuẩn bị trực thuộc Ban QLĐSĐT, O&M: Công ty vận hành và bảo đường sẽ được Ban QLĐSĐT thành lập theo loại hình công ty TNHH một thành viên, TT: Thủ tướng, UBNDTP: Úyban nhân dân thành phố, VNRA: Cục đường sắt Việt Nam
- (*5): Pursuant to Article 7 of Decree 139/2007/ND-CP : Theo Điều 7 của Nghị định 139/2007/ND-CP

- (*6): Pursuant to Circular 85/2007/TT-BTC : Theo thông tu số 85/2007/TT-BTC (*7): Pursuant to Decree 139/2007/ND-CP : Theo Nghị định số 139/2007/ND-CP

- - Các hoạt động cần tuyển/chỉ định nhân viên
- : Các hoạt động yêu cầu hợp tác kĩ thuật

Appendix 5. Documents for Evaluation and Registration

For the establishment of state company, SAPI understands, MAUR should prepare the documents for evaluation and registration as per table A5.1 through A5.3.

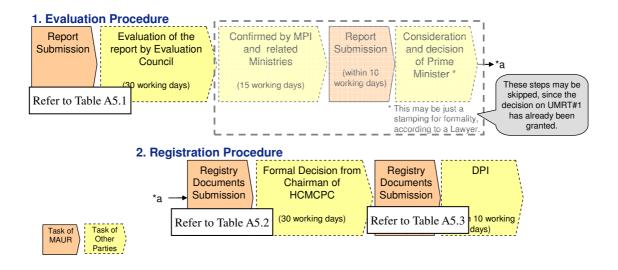


Table A5.1 Contents of Evaluation of Schemes for Establishment of State Company

No.	Title	Remarks
1	The necessity of the establishment of State companies	It is stated by Decision 38/2007/QD-TTg.
2	The socio-economic efficiency and conformity of such	Master plan of UMRT itself was already approved
	establishment with the branch, domain and regional	by Prime Minister.
	economic development planning and strategies	
3	The lists of products and/or services to be provided by	Main service is public transportation means.
	the companies; the market situation, market demand	Non-fare business (*1) is served for increasing
	and prospect for each type of product and/or service to	passenger's satisfaction.
	be provided by the companies; the consumption	
	possibility and competitiveness of their products	(*1) advertisement, space rental, kiosk and
	and/or services	parking lots
4	The technological level; capability of supplying labor,	UMRT plan itself was already approved by
	raw materials, materials and energy, and other	НСМСРС.
	necessary conditions for the companies to operate after	
	their establishment	
5	Charter capital and solutions to create capital and	The draft version of charter capital and solutions to
	capital refunding plan	create capital are in this report. The preparation
		unit must develop it based on;
		1) the actual salary level,

		2) the economic condition at that stage and
		3) the result of clarification on legal constraints with
		МоТ.
		Capital refunding plan: Rough dividend plan is in
		the financial plan prepared by SAPI. PU or
		MAUR should develop it based on the dividend
		ratio agreed with HCMCPC.
6	Suitability and reasonableness of the proposed	The structure of the O&M company will be in SAPI
	structure of the O&M company	report.
		PU or MAUR should develop it based on the result
		of clarification on legal constraints with MoT.
7	Impacts on the environment and solutions to protect	Information will be provided by General Contractor
	the environment	(NJPT) and/or Contractor, and incorporated into the
		report.

NOTE: Specified in Article 8 of 180/2004/ND-CP

Table A5.2 Contents for a Decision on the Establishment of a Sate Company

No.	Content	Remarks
1	The name of the company, including the Vietnamese full	The idea for the Vietnamese full name, the
	name, the foreign-language name and abbreviated name	foreign-language name and abbreviated name is in
	(if any)	SAPI report.
2	The form of organization of the company	Refer to the content (#6) in the table A5.1
3	The address of the company's head-office	At the 1 st registration, the head office may not be
		available. MAUR should prepare tentative
		head-office for a mean while.
4	The production and/or business lines	Refer to the content (#3) in the table A5.1.
5	The charter capital	Refer to the content (#5) in the table A5.1
6	The managerial organization of the company	Refer to the content (#3) in the table A5.1
		The appointment of the chairman; or the decision
		on appointment of, or signing of contracts with,
		the director of the company, for companies
		without the Management Board.
7	The name(s) and address(es) of the company's	There is no plan to have branches and
	branch(es) and/or representative office(s) (if any)	representative offices.

8	The names and addresses of head-offices of the member	There is no plan to have member companies.
	companies (for State corporations)	

NOTE: Specified in Article 11 of 180/2004/ND-CP

<u>Table A5.3 Application Dossier Submission to DPI</u>

No.	Content	Remarks
1	Application for business registration	the standard form issued by the Ministry of
1	Application for business registration	Planning and Investment
2	Draft company charter signed by the owner and by the	Refer to the table A5.4
	legal representative of the company	
3	Decision on establishment	It will be obtained at the previous step.
4	List of authorized representatives	the standard form issued by the Ministry of
	(in the case of an one member limited liability company	Planning and Investment
	with a management structure organized in accordance	
	with article 67.3 on the Law on Enterprises)	
5	Valid copy of the identification card or passport of the	-
	authorized representative.	
6	Power of attorney from the owner to the authorized	-
	representative of the owner	
	(in the case where the owner of the company is an	
	organization.)	
7	Confirmation from the authorized body of the legal	As stated in article 4 of 180/2004/ND-CP, state
	capital	companies are required to have minimum level.
	(in the case of companies conducting lines of business	
	with legal capital requirements.)	
8	Valid copy of the practicing certificate of the director	-
	(general director) and any other individual stipulated in	
	article 4.13 of the Law on Enterprises.	
	(in the case of a company conducting lines of business	
	requiring a practicing certificate.)	

NOTE: Specified in Article 16 of 88/2006/ND-CP

Authorized representatives: individuals who is authorized in writing by the institutional members of the limited liability company to exercise rights and obligations in pursuant to Law on Enterprise.

Table A5.4 Contents of Charter of Company

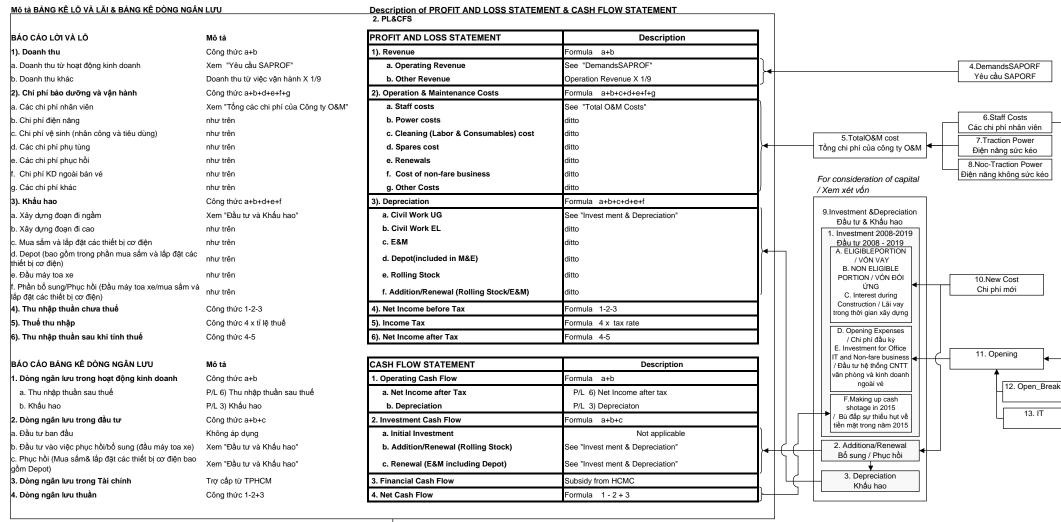
No.	Content	Remarks
1	The company's name, address of head office, branches	Refer to the content (#7) in the table A5.2.
	and/or representative offices (if any)	
2	List of business activities	Refer to the content (#3) in the table A5.1.
3	Charter capital; method of increasing and decreasing	Refer to the content (#5) in the table A5.1.
	charter capital	
4	Full name, permanent address, nationality and other	The member should be decided by HCMCPC.
	basic identifications of a member	
5	Proportion of capital contribution and value of such	It should be developed by PU or MAUR based on
	proportion made by a member	the financial plan drafted by SAPI Team.
6	Rights and obligations of a member of limited liability	It should be developed by PU or MAUR.
	companies	
7	Organizational and management structure	Refer to Appendix 2 and 3 in this report.
8	Legal representative	It should be decided by MAUR.
9	Formality for adoption of decisions of the company;	It should be decided by MAUR.
	principles applied to the settlement of internal disputes	
10	Ground and methods for calculating salary, allowance	It should be decided by MAUR.
	and bonus of directors or general directors	
11	Circumstances when a member may request the	It should be decided by MAUR.
	company to buy back his/her proportion of capital	
	contribution	
12	Principles for distribution of after-tax profit and	It should be decided by HCMCPC and/or
	resolution of loss occurred in the course of business	MAUR in accordance with 09/2009/ND-CP.
13	Cases of dissolution, procedures of dissolution and	It should be decided by MAUR.
	liquidation formalities for the company's assets	
14	Procedures for amendment and supplementation of the	It should be decided by MAUR.
	company charter	
15	Full name and signatures of the legal representative, the	They should be appointed by MAUR.
	company owner, the member or authorized	
	representatives	
16	Other agreements made by members in compliance with	It should be decided by MAUR.
	laws	

NOTE: Specified in Article 22 of 60/2005/QH11 "Law on Enterprises"

Financial Plan for HCMC UMRT Line No.1

September 15th, 2009

Chỉnh sửa ngày 15 tháng 9 năm 2009 SAPI team



For consideration of subsidy

/Xem xét trơ cấp

3. CFS for Subsidy

<Assumption> <Dư tính> <=lf you change this yellow cell, you can simulate / Nếu thay đổi ô màu vàng này thì có thể mô phỏng được [0] Revenue (0) Tỉ lê lam phát - Phần trăm giá vé miễn giảm dành cho những người được - percentage of ticket price exemption and reduction for 4.5% social-policy beneficiaries hưởng chính sách phúc lợi xã hội 10% - Discount rate for SF card - Tỉ lê chiết khẩu dành cho thẻ SF Avarage trip - Trung bình chuyến đi [1] Staff costs [1] Các chi phí nhân viên Chairman General Manager Dupty General Manager and Engineer / Skilled Worker Unskilled worker/ clerical Deputy Manager Semi-skilled worker Office Worker Manager Supervisors /Công nhân lành nghề/ Kỹ Nhân viên văn phòng/ Cô / Quản lý / Phó TP / Công nhân bậc 4/7 / Nhân viên văn phòng / Chủ tịch, Lương Tổng GĐ, Pi SU ng nhân phổ thông ó Tổng GĐ và các Giám sát (a) Monthly Directory Salary in 2008 [US \$1 (a) Lương trực tiếp hàng tháng năm 2008 bằng USD (b) Social & Benefits cost markup rate (b) Tỉ lệ chi phí phúc lợi & xã hội (c) Monthly Staff cost (Direct Salary + Social benefits cost) (c) Chi phí nhân viên hàng tháng (Lương trực tiếp + Chi phí 2,400 1,200 780 600 420 240 480 in 2008 price [US\$] = (a) * (1+(b)) phúc lợi & xã hội) theo giá năm 2008 = (a)* (1+(b)) [2] Chi phí điện năng [2] Power costs Tariff in 2008 Bảng giá năm 2008 Tariff / Bảng giá VND/kw Assumed period / Thời gian dự tính Peak rate / Cao điểm 06:00-19:00 Off-peak rate / Giờ bình thường 895 19:00-24:00 Midnight rate / Thấp điểm 00:01-06:00 [3] Spares cost [3] Chi phí phu tùng 2030 2015 2020 - Tỉ lê chi phí phụ tùng dựa vào chi phí Xây dựng - Spares cost ratio against to Construction cost - Construction cost total (Base cost for JBIC financing) - Tổng chi phí xây dựng (Chi phí cơ sở cho JBIC giải ngân) 1,426,962,898 For the details: See "9.Investment&Depreciation" - Total Trains incl Spare & Maintenance - Tổng số tàu bao gồm chi phí Bảo dưỡng và Phụ tùng `Xem chi tiết tai: "9.Đầu tư và chiết khấu" [4] Chi phí KD ngoài bán vé [4] Cost of non-fare business 60% of revenue / của Doanh thu * Costs of non-fare business include staff cost and cost of goods purchased. / Chi phí kinh doanh ngoài vé bao g ồm chi phí nhân viên và chi phí mua hàng hóa [5] Other Costs Ratio [5] Tỉ lê các chi phí khác **Other costs" includes insurance cost, utility cost (such as electric power and water for office), outsourcing fee (such as security, cleaning and secretary services). /*Các chi phí khác* bao g mm chi phí bảo hiểm, chi phí công tr ình tiện ích (ví dụ như cung cấp điện và nước) và các chi phí thuê mướn ngoài (như bảo vệ, các dịch vụ vệ sinh và thư kỷ). [6] Additional/Renewal Investments - Trung tu đầu máy toa xe of original cost inflated in overhaul year / Chi phí g ốc bị lạm phát trong năm duy tu Intermediate overhaul of rolling stock - Intermediate overhaul of E&M - Trung tu các thiết bị điện cơ of original cost inflated in overhaul year / Chi phí g ốc bị lạm phát trong năm duy tu [7] Dividend [7] Cổ tức [8] Foreign Currency Rate [8] Tỉ lệ ngoại hối Yen/USD Yen/VND VND/USD [9] Economic Growth Rates (9) Tỷ lệ tăng trưởng kinh tế 2015 - 2020 2021 - 2030 2031 - 2040 2041 - 2050 - Economic growth rate per year - Vietnam Tỷ lệ tăng trưởng kinh tế mỗi năm - Economic growth rate from 2008 to 2015 = (1+ (a))^(2015-2 - Tỷ lê tăng trưởng kinh tế từ 2008 đến 2015 = (1+ (a))^(2015^-2008) 40.71% 45.92% 50.59% 54.35% - Escalation rate - staff cost Tỉ lê trượt - Các chi phí nhân viên - Economic growth rate per year - Japan - Tỷ lệ tăng trưởng kinh tế mỗi năm - Economic growth rates: Japan Center for Economic Research, Changing Demographics in Asia (January 2007) / T ỷ lệ tăng trưởng kinh tế: Trung tâm nghi ên cứu kinh tế Nhật Bản, Thay đổi nhân khẩu học tại châu Á (tháng 1 năm 2007)

- Fluctuation of exchange rates: JETRO homepage / M ức dao động tỷ giá hối đoái: trang chủ JETRO

^{*} For long term estimation, the economic growth is considered as a major factor affecting costs. The rate of the economic growth in Japan is applied to renewal and additional purchasing of E&M and rolling stocks, because they will be imported from Japan. The rate in Vietnam is applied for other items. To consider the fluctuation of exchange rate between Vietnam and Japan, the average annual change in exchange rate, in last 5 years, 1%, is added to Japanese economic growth rates. / Theo dánh giá dài h an, sy tâng trưởng kinh thế được xem là yếu tố chính ảnh hưởng chi phi. Tỷ lệ tâng trưởng kinh thể ở rướng kinh thể được xem là yếu tố chính ảnh hưởng chi phi. Tỷ lệ tâng trưởng kinh thể ở Việt Nam sẽ được thệm vào tỷ lệ tâng trưởng kinh tế Nhật Bản được thêm vào tỷ lệ tâng trưởng kinh tế Nhật Bản

			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
(in US\$ Million	(Bằng Triệu USD)		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
1. Revenue *1	1. Doanh thu		11.7	35.7	59.4	65.1	71.7	101.3	112.9	114.3	116.2	117.6	143.0	152.6	175.8	184.3	210.9	259.0	269.2	279.5	289.2	298.5	305.9	312.0	316.8	318.4	320.0	321.6	321.8	325.0	327.5	330.1	330.1	330.1	330.1	330.1
a. Operating Revenue	a. Doanh thu từ hoạt động kinh doanh		10.5	32.1	53.5	58.6	64.5	91.1	101.6	102.9	104.5	105.8	128.7	137.3	158.2	165.9	189.9	233.1	242.2	251.5	260.3	268.7	275.3	280.8	285.1	286.6	288.0	289.4	289.6	292.5	294.8	297.1	297.1	297.1	297.1	297.1
b. Other Revenue (= a. / 9)	b. Doanh thu khác (= a./9)		1.2	3.6	5.9	6.5	7.2	10.1	11.3	11.4	11.6	11.8	14.3	15.3	17.6	18.4	21.1	25.9	26.9	27.9	28.9	29.9	30.6	31.2	31.7	31.8	32.0	32.2	32.2	32.5	32.8	33.0	33.0	33.0	33.0	33.0
2. Operation & Maintenance Costs	2. Chi phí bảo dưỡng và vận hành		16.1	19.0	22.1	24.1	26.3	36.7	46.1	51.8	53.0	56.8	62.2	69.0	72.6	77.7	84.1	100.0	98.5	102.9	107.5	116.0	117.1	122.0	127.2	145.2	137.9	143.7	152.4	163.4	164.1	170.3	176.7	200.8	190.4	197.7
a. Staff costs	a. Các chi phí nhân viên		2.8	2.9	3.0	3.0	3.1	3.1	3.3	3.4	3.5	3.5	3.6	3.7	3.8	3.8	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.0	5.2	5.3	5.4	5.5	5.6	5.7
b. Power costs	b. Chi phí điện năng		9.0	10.0	11.1	12.4	13.7	15.1	16.4	17.2	18.0	18.8	19.6	20.5	21.5	22.5	23.5	24.6	25.5	26.4	27.3	28.3	29.2	30.2	31.3	32.4	33.5	34.6	38.3	39.3	40.4	41.5	42.7	43.8	45.0	46.3
c. Cleaning (Labor&Consumables) cost	c. Chi phí vệ sinh (Nhân công và hao mòn)		0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
d. Spares cost *2	d. Các chi phí phụ tùng *2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Mainor maintenace costs (yearly)	- Chi phí bảo dưỡng - nhỏ (hàng năm)		0.0	0.0	0.0	0.0	0.0	5.2	11.2	13.2	15.4	17.6	20.1	22.6	25.4	28.3	31.4	34.7	38.8	41.1	43.5	46.2	48.9	51.9	55.0	58.4	61.9	65.7	69.2	73.0	77.0	81.2	85.6	90.3	95.3	100.5
- Medium maintenance costs (every 4 years			0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.1	0.0	0.0	0.0	2.9	0.0	0.0	0.0	3.8	0.0	0.0	0.0	4.5	0.0	0.0	0.0	5.3	0.0	0.0	0.0	6.1	0.0	0.0
- Major maintenance costs (every 8 years)	- Chi phí bảo dưỡng - lớn (08 năm/lần)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0
f. Cost of non-fare business		000/													40.5		40.7	45.5	40.4	40.0		47.0	40.4	40.7	40.0	40.4	40.0	40.0	40.0	40.5	40.7	40.0	40.0	40.0	40.0	40.0
(60% of b. "other revenue")	(60% của doanh thu khác)	60%	0.7	2.1	3.6	3.9	4.3	6.1	6.8	6.9	7.0	7.1	8.6	9.2	10.5	11.1	12.7	15.5	16.1	16.8	17.4	17.9	18.4	18.7	19.0	19.1	19.2	19.3	19.3	19.5	19.7	19.8	19.8	19.8	19.8	19.8
g. Other Costs	g. Čác chi phí khác	<u> </u>	3.6	3.9	4.3	4.7	5.1	7.1	8.2	8.7	9.1	9.6	10.1	10.7	11.2	11.8	12.5	13.1	13.8	14.2	14.8	15.3	15.8	16.4	17.0	17.6	18.3	18.9	20.3	20.9	21.5	22.2	22.9	23.5	24.2	25.0
3. Depreciation	3. Khâu hao	"1"=on, "0"=off	59.3	118.6	118.6	119.3	119.3	127.9	121.0	121.0	122.2	122.2	137.4	109.2	109.2	109.2	109.2	124.0	124.0	124.0	127.8	127.8	131.7	113.7	114.6	113.4	113.4	95.7	95.7	95.7	95.7	95.7	155.5	155.5	157.6	153.1
a. Civil Work UG (Under ground))	a. Xây dựng đoạn đi ngầm	1	4.8	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
b. Civil Work EL (Elevated)	b. Xây dựng đoạn đi cao	1	16.5	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. E&M	c. Mua sắm và lắp đặt các thiết bị cơ điện	1	31.2	62.5	62.5	62.5	62.5	55.0	47.4	47.4	47.4	47.4	28.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Depot(included in E&M)	d. Depot (bao gồm trong phần mua sắm và lắp đặt	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a. Depot(included in Eawl)	các thiết bị cơ điện)	'	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Rolling Stock	e. Đầu máy toa xe	1	5.9	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. IT	f. CNTT	1	0.8	1.7	1.7	1.7	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Addition/Renewal	g. Phần bổ sung/Phục hồi (Đầu máy toa xe/mua	4	0.0	0.0	0.0	0.7	0.7	47.0	40.0	40.0	00.4	00.4	540	540	540	540	540	04.0	04.0	04.0	05.4	05.4	405.5	4040	4040	400.7	400.7	00.0	00.0	00.0	00.0	00.0	4.45.0	4.45.0	4.47.0	4 40 4
(Rolling Stock/E&M) 4. Net Income before Tax	sắm và lắp đặt các thiết bị cơ điện)	1	0.0	0.0	0.0	0.7	0.7	17.6	19.2	19.2	20.4	20.4	54.8	54.8	54.8	54.8	54.8	81.3	81.3	81.3	85.1	85.1	105.5	104.0	104.9	103.7	103.7	86.0	86.0	86.0	86.0	86.0	145.8	145.8	147.9	143.4
	4. Thu nhập thuần chưa thuề		-63.7	-101.9	-81.3	-78.3	-73.9	-63.3	-54.2	-58.5	-59.1	-61.5	-56.6	-25.7	-6.0	-2.6	17.6	35.1	46.7	52.6	54.0	54.7	57.2	76.3	75.0	59.9	68.7	82.2	73.7	65.9	67.8	64.1	-2.1	-26.2	-17.9	-20.7
5. Income Tax	5. Thuế Thu nhập		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	6.7	6.8	7.1	9.5	9.4	7.5	8.6	20.6	18.4	16.5	16.9	16.0	0.0	0.0	0.0	0.0
6. Net Income after Tax	6. Thu nhập thuần sau thuế		-63.7	-101.9	-81.3	-78.3	-73.9	-63.3	-54.2	-58.5	-59.1	-61.5	-56.6	-25.7	-6.0	-2.6	17.6	35.1	46.7	50.3	47.2	47.9	50.0	66.8	65.6	52.4	60.1	61.7	55.3	49.4	50.8	48.1	-2.1	-26.2	-17.9	-20.7

<= If you change this yellow cell, you can simulate / Mou thay đổi ô màu vàng này thì có ttể mô phòng được

(in US\$ N	Million) (Bằng Triệu USD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
. Operating Cash Flow	1. Dòng ngân lưu trong hoạt động kinh doanh	-4.4	16.7	37.3	41.0	45.4	64.6	66.8	62.5	63.1	60.8	80.8	83.5	103.2	106.6	126.8	159.0	170.6	174.2	175.0	175.7	181.7	180.4	180.2	165.8	173.5	157.3	151.0	145.1	146.5	143.8	153.4	129.4	139.7
a. Net Income after Tax	 Thu nhập thuần sau thuế 	-63.7	-101.9	-81.3	-78.3	-73.9	-63.3	-54.2	-58.5	-59.1	-61.5	-56.6	-25.7	-6.0	-2.6	17.6	35.1	46.7	50.3	47.2	47.9	50.0	66.8	65.6	52.4	60.1	61.7	55.3	49.4	50.8	48.1	-2.1	-26.2	-17.9
b. Depreciation	b. Khấu hao	59.3	118.6	118.6	119.3	119.3	127.9	121.0	121.0	122.2	122.2	137.4	109.2	109.2	109.2	109.2	124.0	124.0	124.0	127.8	127.8	131.7	113.7	114.6	113.4	113.4	95.7	95.7	95.7	95.7	95.7	155.5	155.5	157.6
Investment Cash Flow	2. Dòng ngân lưu trong đầu tư	0.0	0.0	0.0	-21.5	0.0	-84.6	-46.0	0.0	-35.7	0.0	-419.5	0.0	0.0	0.0	0.0	-275.7	0.0	0.0	-95.1	0.0	-630.5	0.0	-13.8	0.0	0.0	-122.1	0.0	0.0	0.0	0.0 -	1364.1	0.0	-31.0
a. Initial Investment	a. Đầu tư ban đầu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
b. Addition/Renewal (Rolling Stock)	b. Đầu tư vào việc phục hồi/bổ sung (đầu máy toa xe)	0.0	0.0	0.0	-21.5	0.0	0.0	-46.0	0.0	-35.7	0.0	0.0	0.0	0.0	0.0	0.0	-73.6	0.0	0.0	-95.1	0.0	-18.0	0.0	-13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-302.2	0.0	-31.0
a Danawal (ESM including Danat)	 c. Phục hồi (Mua sắm và lắp đặt các thiết bị cơ điện bao gồm 	0.0	0.0	0.0	0.0	0.0	046	0.0	0.0	0.0	0.0	440 E	0.0	0.0	0.0	0.0	-202 1	0.0	0.0	0.0	0.0	C40 F	0.0	0.0	0.0	0.0	100.1	0.0	0.0	0.0	0.0 -	1061.9	0.0	0.0
c. Renewal (E&M including Depot)	Depot)	0.0	0.0	0.0	0.0	0.0	-84.6	0.0	0.0	0.0	0.0	-419.5	0.0	0.0	0.0	0.0	-202.1	0.0	0.0	0.0	0.0	-612.5	0.0	0.0	0.0	0.0	-122.1	0.0	0.0	0.0	0.0 -	1061.9	0.0	0.0
Financial Cash Flow	3. Dòng ngân lưu trong Tài chính	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a. Subsidy from HCMC	a. Tiền trợ cấp từ TPHCM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Cash Flow	4. Dòng ngân lưu thuần	-4.4	16.7	37.3	19.5	45.4	-20.1	20.9	62.5	27.4	60.8	-338.7	83.5	103.2	106.6	126.8	-116.7	170.6	174.2	80.0	175.7	-448.8	180.4	166.4	165.8	173.5	35.2	151.0	145.1	146.5	143.8 -	1210.7	129.4	108.7
Cumulative Cash Flow	5. Dòng ngân lưu lũy tích -	-4.4	12.2	49.6	69 1	114.5	94.4	115.3	177.8	205.2	265.9	-72.7	10.8	114.0	220.6	342.2	214.9	371.6	530.7	596.5	757.8	294.0	454.4	601.0	751 1	906.5	923.2	1057.6	1187.9	1319.1	1448.5	237.8	367.2	475.9

			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Dividend	Cổ tức	30%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	10.5	14.0	15.1	14.2	14.4	15.0	20.0	19.7	15.7	18.0	18.5	16.6	14.8	15.3	14.4	0.0	0.0	0.0	0.0

Deferred Tax Calculation	Tính toán Số thuế được trả chậm																																		
(Loss carryforward)	Khoản lỗ mang sang	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Net Income before Tax	Thu nhập thuần chưa thuế	-63.7	-101.9	-81.3	-78.3	-73.9	-63.3	-54.2	-58.5	-59.1	-61.5	-56.6	-25.7	-6.0	-2.6	17.6	35.1	46.7	52.6	54.0	54.7	57.2	76.3	75.0	59.9	68.7	82.2	73.7	65.9	67.8	64.1	-2.1	-26.2	-17.9	-20.7
-5	-5	0.0	0.0	0.0	0.0	0.0	63.7	101.9	81.3	78.3	73.9	63.3	54.2	58.5	59.1	61.5	56.6	25.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-4	-4	0.0	0.0	0.0	0.0	63.7	101.9	81.3	78.3	73.9	63.3	54.2	58.5	59.1	61.5	56.6	25.7	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-3	-3	0.0	0.0	0.0	63.7	101.9	81.3	78.3	73.9	63.3	54.2	58.5	59.1	61.5	56.6	25.7	6.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
-2	-2	0.0	0.0	63.7	101.9	81.3	78.3	73.9	63.3	54.2	58.5	59.1	61.5	56.6	25.7	6.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	26.2
-1	- 1	0.0	63.7	101.9	81.3	78.3	73.9	63.3	54.2	58.5	59.1	61.5	56.6	25.7	6.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	26.2	17.9
Subject Year	Năm tính	63.7	101.9	81.3	78.3	73.9	63.3	54.2	58.5	59.1	61.5	56.6	25.7	6.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	26.2	17.9	20.7
Income for Taxation	Thu nhập tính thuế	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.3	54.0	54.7	57.2	76.3	75.0	59.9	68.7	82.2	73.7	65.9	67.8	64.1	0.0	0.0	0.0	0.0
Tax Amount	Tổng số thuế	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	6.7	6.8	7.1	9.5	9.4	7.5	8.6	20.6	18.4	16.5	16.9	16.0	0.0	0.0	0.0	0.0
Income Tax rate	Tỉ lệ thuế thu nhập	0	0	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	25%	25%	25%	25%	25%	25%	25%	25%
*Pursuant to the Circular 130/2008/TT-BTC	Theo thông tư Số 130/2008/TT-BTC			Tax rate 10 10% thuế d						nent										0% of Tax i0% tổng s						lishment ng ày thàn	ıh lập								

<Source> / <Nguồn>
All information is from " Preliminary Financial analysis for HCMC UMRT Line No.1"by NJPT
/ Tất cả thông tin trên được lấy từ "Phân tích tài chính ban đầu cho dự án Xây dựng tuyến ĐSĐT TPHCM (Tuyến 1) của NJPT

CASH FLOW STATEMENT	BẢNG KẾ DÒNG NGÂN LƯ

(in US\$ Million)) (Bằng Triệu l	JSD) 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	204
I. Revenue	1. Doanh thu	11.7	35.7	59.4	65.1	71.7	101.3	112.9	114.3	116.2	117.6	143.0	152.6	175.8	184.3	210.9	259.0	269.2	279.5	289.2	298.5	305.9	312.0	316.8	318.4	320.0	321.6	321.8	325.0	327.5	330.1	330.1	330.1	330.1	330
a. Operating Revenue 11,12	a. Doanh thu từ hoạt động kinh doanh *1, *2	10.5	32.1	53.5	58.6	64.5	91.1	101.6	102.9	104.5	105.8	128.7	137.3	158.2	165.9	189.9	233.1	242.2	251.5	260.3	268.7	275.3	280.8	285.1	286.6	288.0	289.4	289.6	292.5	294.8	297.1	297.1	297.1	297.1	297
b. Other Revenue (= a. / 9)	b. Doanh thu khác (= a./9)	1.2	3.6	5.9	6.5	7.2	10.1	11.3	11.4	11.6	11.8	14.3	15.3	17.6	18.4	21.1	25.9	26.9	27.9	28.9	29.9	30.6	31.2	31.7	31.8	32.0	32.2	32.2	32.5	32.8	33.0	33.0	33.0	33.0	33
2. Operation & Maintenance Costs *3	2. Chi phí bảo dưỡng và vận hành ^{'3}	16.1	19.0	22.1	45.6	26.3	121.3	92.1	51.8	88.8	56.8	481.7	69.0	72.6	77.7	84.1	375.7	98.5	102.9	202.5	116.0	747.6	122.0	141.1	145.2	137.9	265.9	152.4	163.4	164.1	170.3	1540.8	200.8	221.4	197
a. Staff costs *4	a. Các chi phí nhân viên *4	2.8	2.9	3.0	3.0	3.1	3.1	3.3	3.4	3.5	3.5	3.6	3.7	3.8	3.8	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.0	5.2	5.3	5.4	5.5	5.6	5
b. Power costs	b. Chi phí điện năng	9.0	10.0	11.1	12.4	13.7	15.1	16.4	17.2	18.0	18.8	19.6	20.5	21.5	22.5	23.5	24.6	25.5	26.4	27.3	28.3	29.2	30.2	31.3	32.4	33.5	34.6	38.3	39.3	40.4	41.5	42.7	43.8	45.0	46
c. Cleaning (Labor&Consumables) costs	c. Chi phí vệ sinh (Nhân công và hao mòn)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	(
d. Mainor maintenace costs (yearly)	d. Chi phí bảo dưỡng - nhỏ (hàng năm)	0.0	0.0	0.0	0.0	0.0	5.2	11.2	13.2	15.4	17.6	20.1	22.6	25.4	28.3	31.4	34.7	38.8	41.1	43.5	46.2	48.9	51.9	55.0	58.4	61.9	65.7	69.2	73.0	77.0	81.2	85.6	90.3	95.3	100
e. Medium maintenance costs (Every 4 years) - *5	e. Chi phí bảo dưỡng - trung bình (04 năm/lần) - *5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	2.1	0.0	0.0	0.0	2.9	0.0	0.0	0.0	3.8	0.0	0.0	0.0	4.5	0.0	0.0	0.0	5.3	0.0	0.0	0.0	6.1	0.0	- 1
f. Major maintenance costs (Every 8 years)	f. Chi phí bảo dưỡng - lớn (08 năm/lần)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	0.0	(
g. Additional/Renewal (Rolling Stock, E&M Depot) ^{*6}	 g. Phần bổ sung/Phục hồi (Đầu máy toa xe/ thiết bị cơ điện cho Depot) 	0.0	0.0	0.0	21.5	0.0	84.6	46.0	0.0	35.7	0.0	419.5	0.0	0.0	0.0	0.0	275.7	0.0	0.0	95.1	0.0	630.5	0.0	13.8	0.0	0.0	122.1	0.0	0.0	0.0	0.0	1364.1	0.0	31.0	(
h. Costs of non-fare business (60% of other revenue) 17	h. Chi phí KD ngoài bán vé (60% của doanh thu kh	ác) 0.7	2.1	3.6	3.9	4.3	6.1	6.8	6.9	7.0	7.1	8.6	9.2	10.5	11.1	12.7	15.5	16.1	16.8	17.4	17.9	18.4	18.7	19.0	19.1	19.2	19.3	19.3	19.5	19.7	19.8	19.8	19.8	19.8	19
i. Other Costs ^{'8}	i. Các chi phí khác ^{*8}	3.6	3.9	4.3	4.7	5.1	7.1	8.2	8.7	9.1	9.6	10.1	10.7	11.2	11.8	12.5	13.1	13.8	14.2	14.8	15.3	15.8	16.4	17.0	17.6	18.3	18.9	20.3	20.9	21.5	22.2	22.9	23.5	24.2	25
. Net Cash Flow before tax (1-2) *9	3. Dòng ngân lưu thuần chưa thuế (1-2) 19	-4.4	16.7	37.3	19.5	45.4	-20.1	20.9	62.5	27.4	60.8	-338.7	83.5	103.2	106.6	126.8	-116.7	170.6	176.5	86.7	182.5	-441.7	190.0	175.7	173.2	182.1	55.7	169.4	161.6	163.5	159.8	-1210.7	129.4	108.7	132

3. Net Cash Flow before tax (1-2)*
3. Doing ngắn lưu thuận chưa thuế (1-2)*
4.4 16.7 37.3 19.5 45.4 20.1 20.9 62.5 27.4 60.8 338.7 83.5 105.2 106.6 126.8 116.7 170.6 176.5 86.7 182.5 44.1.7 190.0 175.7 173.2 182.1 55.7 169.4 161.6 163.5 159.8 121.0 15.7 152.0 15.7 169.4 161.6 163.5 159.8 121.0 15.7 152.0 159.4 161.0 159.4 161.0 159.4 161.0 159.4 161.0 159.4 161.0 169.4 161

Operation Revenue Caluculation with demands in SAPROF / Tính doanh thu từ hoạt động kinh doanh theo yêu cầu trong SAPROF

		···
<ass< th=""><th>sumption> / <dự tính=""></dự></th><th><= If you change this yellow cell, you can simulate / Nếu thay đổi ô màu vàng này thì có thể mô phỏng được</th></ass<>	sumption> / <dự tính=""></dự>	<= If you change this yellow cell, you can simulate / Nếu thay đổi ô màu vàng này thì có thể mô phỏng được
(a)	5.0%	Economic Growth Rate (2006-2020) / Tỷ lệ tăng trưởng kinh tế (2006-2020)
	3.7%	Economic Growth Rate (2021-2030) / Tỷ lệ tăng trưởng kinh tế (2021-2030)
	3.2%	Economic Growth Rate (2031-2040) / Tỷ lệ tăng trưởng kinh tế (2031-2040)
	2.5%	Economic Growth Rate (2041-) / Tỷ lệ tăng trưởng kinh tế (2041-)
(b)	16,154 VND=1US	\$ Foreign Currency rate / Tỉ lệ ngoại hối
(c)	4.5%	percentage of ticket price exemption and reduction for social-policy beneficiaries (here it is assumed as Free charge.) "Article 21 109/2006/ND-CP" / Phần trăm giá vé miễn giảm dành cho những người được hưởng chính sách phúc lợi xã hội (giả định Miễn phí.) "Điều 21 - 109/2006/ND-CP"
(d)	10%	Discount rate for SF card / Tỉ lệ chiết khấu dành cho thẻ SF
(e)	9 km	Avarage trip / Trung bình chuyến đi
(f)	1	Ridership factor for sensitivity Analysis / Yếu tố Lượng hành khách trong Phân tích độ nhạy

Rate of ridership increase per year / Ti lệ hành khách tăng một năm
Year / Năm Rate / Ti lê

5.7%

1.5%

2020-2030

2031-2043

_					007 100 10 20 0119		,						2001 2040	1.070
	[1]	[2]	[3]	[3]'	[4]	[5]		[6]	[7]	[8]	[9]	[10]	[11]	[12]
	#	year / Năm	Rate in 2 / Ti lệ nă		/ Tỷ lệ tăng	BaseRate after Escalation (*1) / Tỉ lệ cơ bản sau khi tính toán trượt giá (*1)			of passengers ành khách	Average Trip / Trung bình chuyến đi	average fare / Phí trung bình	Operation Revenue / Doanh thu vận hành	Ratio for SF Card User / Tỉ lệ dành cho người sử dụng thể SF	Discout Rate for SF Card User / Tỉ lệ chiết khấu dành cho người sử dụng thể SF
		,	VND	VND	(%)	VND	000per	sons / day / 000	người / ngày	km	US\$	Mil.US\$	(%)	(%)
			Base Rate / Tỉ lệ cơ bản	Km Rate / Tỉ lệ km	{1+(a)}^[1]-1	[3]*{1+[4]}	Base / cơ bản	After applying factor / Sau khi áp dụng chỉ tiêu	After applying ticket price exemption / Sau khi áp dụng miễn vé [6]*{1- (c)}		{[9]*[3]'*(1+[4])+[5]} / (b)	[9]*{[11]*(1-[12])+{1- [11]/100}}*[9]*300days *1000person/10^6		
1	0	2015	5,000	500	0.0%	5,000	66	66	63	9.0			50.00	10%
	1	2016	7,000	700	0.0%	7,000	143	143	137	9.0			47.11	10%
_	2	2017	7,000	700	10.3%	7,000	237	237	227	9.0			44.40	10%
L	3	2018	7,000	700	15.8%	7,000	259	259	248	9.0			41.83	10%
. -	4	2019	7,000	700	21.6%	7,000	285	285	272	9.0			39.42	10%
1_	5	2020 2021	7,000	700 700	27.6% 32.4%	8,934 8,934	314 350	314 350	300 334	9.0 9.0			37.14 35.00	10% 10%
F	b	2021	7,000 7,000	700	32.4% 37.2%	8,934 8,934	350	350	334	9.0			35.00 32.87	10%
F	7	2022	7,000	700	42.3%	8,934 8,934	358	358	338	9.0			32.87	10%
-	0	2024	7,000	700	47.6%	8,934	362	362	346	9.0			29.00	10%
1	10	2025	7,000	700	53.1%	10,714	366	366	350	9.0			27.24	10%
`F	11	2026	7,000	700	58.7%	10,714	390	390	373	9.0			25.59	10%
-	12	2027	7,000	700	64.6%	10,714	449	449	429	9.0			24.04	10%
	13	2028	7,000	700	70.7%	10,714	470	470	449	9.0			22.58	10%
	14	2029	7,000	700	77.0%	10,714	537	537	513	9.0	1.3	189.9	21.21	10%
1	15	2030	7,000	700	83.5%	10,714	549	549	525	9.0			19.92	10%
	16	2031	7,000	700	90.3%	10,714	570	570	545	9.0			18.71	10%
L	17	2032	7,000	700	97.4%	10,714	591	591	565	9.0			17.57	10%
	18	2033	7,000	700	104.7%	10,714	611	611	584	9.0			16.51	10%
L	19	2034	7,000	700	112.3%	10,714	630	630	602	9.0			15.50	10%
F	20	2035	7,000	700	120.1%	10,714	645	645	616	9.0			14.56	10%
F	21	2036	7,000	700	128.2%	10,714	658	658 667	628	9.0 9.0			13.68	10%
F	22 23	2037 2038	7,000 7,000	700 700	136.7% 145.5%	10,714 10,714	667 670	670	637 640	9.0			12.85 12.07	10% 10%
F	23	2038	7,000	700	154.5%	10,714	673	673	643	9.0			12.07	10%
H	25	2040	7,000	700	163.9%	10,714	676	676	645	9.0			10.65	10%
H	26	2041	7,000	700	170.5%	10,714	676	676	645	9.0			10.00	10%
F	27	2042	7,000	700	177.3%	10,714	682	682	652	9.0			10.00	10%
F	28	2043	7,000	700	184.2%	10,714	688	688	657	9.0			10.00	10%
Ţ	29	2044	7,000	700	191.4%	10,714	693	693	662	9.0	1.5	297.1	10.00	10%
Ţ	30	2045	7,000	700	198.6%	10,714	693	693	662	9.0			10.00	10%
	31	2046	7,000	700	206.1%	10,714	693	693	662	9.0			10.00	10%
	32	2047	7,000	700	213.8%	10,714	693	693	662	9.0			10.00	10%
	33	2048	7,000	700	221.6%	10,714	693	693	662	9.0	1.5	297.1	10.00	10%

NOTE

<Source> / <Nguồn>

- " Preliminary Financial analysis for HCMC UMRT Line No.1" prepared by NJPT / "Phân tích tài chính ban đầu cho Dự án Xây dựng tuyến đường sắt đô thị TPHCM Tuyến 1" của NJPT
- [3] [3]' [6] : from Working Paper 36 prepared by NJPT / từ tờ trình làm việc số 36 do ban CVC thực hiện
- (a) from "Japan Center for Economic Research (JCER), Changing Demographics in Asia (January 2007)". / น้ Trung tâm nghiên cứu kinh tế Nhật Bản, Thay đổi nhân khẩu học tại châu Á (tháng 1 năm 2007)

^{*1:} Fare increase by economic growth is considered every 5 years until 2025 to compensate the replacement of E&M. / Cân ntắc tăng giá vé theo sự tăng trưởng kinh tế cứ 5 năm 1 lần cho tới năm 2025 để bù lại sự thay thế của E&M

< Total O&M costs >	< Tổng các chi phí của Công ty O&N
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		2015	2021	2031	Description / Mô tả
Cleaning (Labor & Consumables) cost	Chi phí vệ sinh (Nhân công và Tiêu dùng)	117,636	122,912	133,464	(Stations(6 x 2000 + 5 x 3000 + 5000 + 10000 +4000) + Total trains x No.of car/train x 60) x 6
					(Ga(6 x 2000 + 5 x 3000 + 5000 + 10000 +4000) + Tổng số tàu x Số toa x 60) x 6
Spares cost	Chi phí về phụ tùng	3,210,667	6,421,333	9,632,000	Spares cost ratio X Construction cost / Ti lệ chi phí phụ tùng x Chi phí xây dựng
Renewals	Chi phí phục hồi	0	3,771,298	15,357,619	2,000,000 with escalation in 2020 / 5,000,000 with escalation in 2030
					2,000,000 kèm trượt giá năm 2020 / 5,000,000 k èm trượt giá năm 2030

-Sources / -Nguồns
All information comes from "Preliminary Financial analysis for HCMC UMRT Line No.1" and "O&M company organization" prepared by NJPT
Tắt cả các thông tin được lấy từ "Phân tích tài chính ban đầu cho Dự án Xây dựng đường sắt đổ thị TPHCM Tuyến 1 & "Tổ chức Công ty O&M" của NJPT

I Allocation without Escalation	Phân bổ hàng năm không tính trượt giá				Open/O&M	O&M	O&M	O&M	O&M	O&M	O&M (M&O M&O	O&M	O&M O8	M O&M	O&M O	am oam	O&M	O&M	80 M&C	M O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	08
	(Unit:US\$)	Đơn vị: USD	age increasing		1 2015	2 2016	3 2017	4 2018	5 2019	6 2020	7	8 9 022 2023	10 2024	11 1 2025 20	2 13	14 1		17	18	19 2 1033 20	21	22 2036	23 2037	24 2038	25 2039	26 2040	27 2041	28 2042	29 2043	30 2044	31 2045	32 2046	33 2047	3
osts	Các chi phí nhân viên	ratio /Ti lệ	(2020-2030) tăng bình quân 2020-2030)																															
agement rations stenance sfer to " 6. Staff costs	Quản lý Vặn hành Bảo đưỡng Sub-Total Xem phần "6. Các chỉ phí nhân viêr	Cộng n		8.79	570,667 1,716,136 508,638 2,795,441	570,667 1,716,136 508,638 2,795,441	1,716,136 554,953	554,953	1,716,136 554,953	554,953	1,716,136 1,7 561,569 5	61,569 561,56	5 1,716,136 5 561,569	1,716,136 1,71 561,569 56	1,569 561,569	680,665 66 1,716,136 1,71 561,569 56 2,958,371 2,95	31,569 561,56	36 1,716,136 59 561,569	1,716,136 1, 561,569	16,136 1,71 661,569 56	,569 561,569	1,716,136 561,569	1,716,136 561,569	561,569	561,569	561,569	1,716,136 561,569	561,569	561,569	1,716,136 561,569	1,716,136 561,569	1,716,136 561,569	561,56	36 1,71 69 56
costs ion traction afer to * 7. Traction Power * afer to * 8. Non-Traction Power *	Các chi phí điện năng Có sửc kéo Không sức kéo Sub-Total Xem phân "7. Điện năng sức kéo Xem phân "8. Điện năng kức kéo	Cộng	1.8% 0.0%		6 2,002,531 6,962,782 8,965,313	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782 6.9	62.782 6.962.78	6.962.782	6.962.782 6.96	2.782 6.962.782	6,197,060 6,30 6,962,782 6,96 13,159,842 13,26	2.782 6.962.78	32 6.962.782	6.962.782 6.	62.782 6.96	.782 6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.782	6.962.78	82 6.9
ng (Labor & Consumables) cost	Chi phí vệ sinh (Nhân công & tiêu dùng)	1	0.8%	0.69	6 117,636	118,515	119,394	120,274	121,153	122,032	122,912	23,967 125,02	126,077	127,133 12	3,188 129,243	130,298 13	31,353 132,4	133,464	133,743	34,023 13	,304 134,58	134,866	135,149	135,432	135,715	135,999	136,284	136,569	136,855	137,141	137,428	137,716	138,00)4
s cost or u, Major ontractor will take care of maintenan	Chi phí phụ tùng nhỏ trung bình , lớn nce for first 5 years. / Nhà th ầu số phụ trách công tác bảo	dưỡng	4.1%		6 2,812,366 6 398,301	3,281,093 464,684	3,749,821 531,068									7,593,388 7,87 1,075,412 1,11																		
als	Các chi phí phục hồi		15.1%	0.09	6 -	-		-	-		3,771,298 4,9	29,930 6,088,56	7,247,194	8,405,826 9,56	4,459 10,723,091	11,881,723 13,04	10,355 14,198,98	15,357,619	15,943,580 16,	51,898 17,18	,426 17,839,050	18,519,688	19,226,296	19,959,865	20,721,422	21,512,036	22,332,815	23,184,911	24,069,517	24,987,876	25,941,274	26,931,048	27,958,58	37 29
																									0.400.000								0.000.00	
Costs (30%) TOTAL	Các chi phí khác (30%) TÔNG CỘNG				6 4,526,717 6 19,615,774	4,859,189 21,056,484						99,677 6,828,930 61,865 35,680,593				7,475,193 7,60 44,274,227 45,99																		
TOTAL I Allocation with Escalation	TÔNG CỘNG Phần bổ hàng nằm có tính trượt giá	Provit-MUSD	- Fe	100.0%	Open/O&M	21,056,484 O&M 1	22,571,380 O&M 2	24,012,090 O&M 3		26,893,509 3: O&M 5	32,243,139 33,6 O&M (61,865 35,680,59:	2 37,399,319 3	9,118,046 40,83 O&M O8 10 1	6,773 42,555,500 M O&M 1 12	44,274,227 45,98 O&M O 13 1	8.M O&M	08M 16	50,187,355 50, O&M 17	08,218 51,775	,865 52,605,198 W O&M 20	53,463,145 O&M 21	54,348,684 5 O&M 22	O&M 23	56,206,594 5	O&M 25	59,550,879 O&M 26	08.M 27		62,792,060 O&M 29		65,134,857 O&M 31	08.M 32	24 6
TOTAL TOTAL I Allocation with Escalation	TÔNG CỘNG	Đơn vị: M USĐ	Es		Open/O&M	21,056,484 O&M	22,571,380 O&M 2 2017 0.6 1.8 0.6	O&M 3 2018 0.6 1.8 0.6	08M 4 2019 0.6 1.9 0.6		32,243,139 33,6 O&M (61,865 35,680,59;	O&M 9 2024 3 0.8 3 0.8 7 0.7	9,118,046 40,83	6,773 42,555,500 M O&M 1 12	0&M O 13 1 2028 20 0.7	8M O8M 15 2030 0.9 0.2 3 2 2.3 0.7 0.7	O&M 16 2031	50,187,355 50, O&M 17	068,218 51,773	,865 52,605,198 W O&M 20	O&M 21 2036 1.0 2.6 0.9	O&M 22 2037	55,262,819 O&M	56,206,594 S	57,181,094 O&M	59,550,879 O&M	60,596,596 O&M	61,676,570 O&M	O&M 29 2044 1.2 3.0 1.0	O&M 30 2045 1.2 3.1 1.0	O&M 31 2046 1.3 3.2 1.0	O&M 32 2047	24 6
TOTAL I Allocation with Escalation osts agement rations	TÔNG CỘNG Phân bố hàng năm có tính trượt giá (Unit:Million US\$) Các chi phí nhân viên Quân lý Vận hành Bảo dưỡng	Đơn vị: M USD Cộng	Es	100.0%	Open/O&M 0 4 2015 6 1.7 6 0.6 1.7 6 0.5	21,056,484 O&M 1 2016 0.6 1.8 0.5	22,571,380 O&M 2 2017 0.6 1.8 0.6 3.0 5.0% 3.5 7.7	24,012,090 O&M 3 2018 0.6 1.8 0.6 3.0	25,452,799 O&M 4 2019 0.6 1.9 0.6 3.1	26,893,509 3: O&M 5 2020 0.6 1.9 0.6	O&M 6 2021 :	08.M O&M 7 8 0022 2023 0.8 0.2 0.6 0.6 0.6	O&M 9 2024 3 0.8 3 0.7 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	9,118,046 40,83 O&M O& 10 1 2025 20 0.8 2.1 0.7 3.6 3.70% 9.0 10.7	M O&M 1 12 26 2027 0.8 0.9 2.1 2.2 0.7 0.7	0&M O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8M O8M 15 2030 0.9 0.2 3 2 2.3 0.7 0.7	O&M 16 2031 19 0.9 32 2.4 8.8 0.8 4.1	O&M 17 2032 1.0 2.4 0.8	D&M O8 18 1:0033 20:00.8 4.2	M O8M 2035 1.0 1.1 2.5 2.1 0.8 0.3 4.3 4.4	O&M 21 2036 0.9 4.5	O&M 22 2037 1.1 2.7 0.9	O&M 23 2038 1.1 2.7 0.9	O&M 24 2039 1.1 2.8 0.9	O&M 25 2040 1.1 2.8 0.9	O&M 26 2041 1.1 2.9 0.9 5.0	O&M 27 2042 1.2 2.9 1.0	O&M 28 2043 1.2 3.0 1.0	O&M 29 2044 1.2 3.0 1.0 5.3	O&M 30 2045 1.2 3.1 1.0 5.4	O&M 31 2046 1.3 3.2 1.0 5.5	O&M 32 2047 1. 3. 1. 5.	1.3 3.2 1.1 5.6
Allocation with Escalation Sits gement tions nance oosts on	TÔNG CỘNG Phân bố hàng năm có tính trượt giấ (Unit:Million US\$) Các chi phí nhân viên Quản lý Vận hành Bảo dưỡng Sub-Total Các chi phí điện năng Có sức kéo Không sức kéo	Cộng	Es	100.0% calation / Truot gi 2.0% 2.0%	Open/OSM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21,056,484 O&M 1 2016 0.6 1.8 0.5 2.9	22,571,380 O&M 2 2017 0.6 1.8 0.6 3.0 5.0% 3.5 7.7	24,012,090 O&M 3 2018 0.6 1.8 0.6 3.0	25,452,799 O&M 4 2019 0.6 1.9 0.6 3.1	O&M 5 2020 0.6 1.9 0.6 3.1	O&M 0 6 2021 2 0.8 1.9 0.6 3.3	NAM OAM 7 8 002 2023 0.8 0.6 2.0 2.0 3.4 3.1 7.6 8.8 9.6 9.6 9.6	O&M 9 2024 3 0 0 2 2 1 7 0 7 5 3.5 18.8	9,118,046 40,83 O&M O& 10 1 2025 20 0.8 2.1 0.7 3.6 3.70% 9.0 10.7	M O&M 1 12 2027 0.8 0.9 2.1 2.2 0.7 3.7 3.8	0&M O 13 1 2028 20 0.7 3.8	8M O&M 14, 711,61 15, 2030 0.9 0.7 2.3 2.0.7 0.7 0.3.9 4 11.2 111.2 111.2 111.2 3.15 23.5 24	O&M 16 2031 19 0.9 13 2.4 1.8 0.8 1.2.4 1.8 12.4	O&M 17 2032 1.0 2.4 0.8 4.1	D&M O8 18 1:0033 20:00.8 4.2	M O&M 20 4 2035 1.0 1.1 2.5 2.4 3 4.3 4.4 14.5 15.6	08M 21 2036 1.0 2.6 0.9 4.5	O&M 22 2037 1.1 2.7 0.9 4.6	O&M 23 2038 1.1 2.7 0.9 4.7	O&M 24 2039 1.1 2.8 0.9 4.8	O&M 25 2040 1.1 2.8 0.9 4.9	O&M 26 2041 1.1 2.9 0.9 5.0	O&M 27 2042 1.2 2.9 1.0 5.0	O&M 28 2043 1.2 3.0 1.0 5.2	08M 29 2044 1.2 3.0 1.0 5.3	08M 30 2045 1.2 3.1 1.0 5.4 50%	O&M 31 2046 1.3 3.2 1.0 5.5	O&M 32 2047 1 5 24 20 45	1.3 3.2 1.1 5.6
Allocation with Escalation Data Sagement ations tenance costs ion tracion tr	Phân bố hàng năm có tính trượt giấ (Unit:Million US\$) Các chi phí nhân viên Quản lý Vận hành Bảo dưỡng Sub-Total Các chi phí điện năng Có sức kéo Không sức kéo	Cộng	Es	100.0% calation / Truot gi 2.0% 2.0%	Open/O&M 0 is 2015 6 0.6 6 1.7 2.8	21,056,484 O&M 1 2016 0.6 0.8 0.5 2.9	22,571,380 O&M 2 2017 0.6 1.8 0.6 3.0 5.0% 7.7 11.1 0.1	24,012,090 O&M 3 2018 0.6 1.8 0.6 3.0 4.3 8.1 12.4	25,452,799 O&M 4 2019 0.6 0.9 0.6 3.1	26,893,509 3 C&M 5 2020 0.6 1.9 0.6 3.1	O&M (6 2021 : 0.8 1.9 0.6 3.3	08M O8M 7 8 2022 0.8 0.6 2.0 2.1 0.6 0.6 3.4 3.1 7.6 8.9 9.6 9.1 17.2 18.0	O&M 9 2024 3 0.8 2.1 7 0.7 5 3.5 18.8 2 0.2 0.2 0.3 9.5 9.1 0.0	9,118,046 40,83 O&M O& 10 1 2025 20 0.8 2.1 0.7 3.6 3.70% 9.0 10.7 19.6 0.2	M O&M 1 12 2027 0.8 0.9 2.1 2.2 3.3 3.8 9.5 10.0 9.5 12.0 20.5 21.5	O&M O 13 1 2028 20 0.7 3.8 10.6 11.9 22.5 0.2 13.0 1.4	8M O8M 4 15 299 2030 0.2 3 2 24 0.2 0.2 0.2 0.2 0.1 13.9 15.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.	O&M 16 2031 19 0.9 3.3 2.4 4.8 0.8 0.4 4.1	0.8M 17 2032 1.0 2.4 0.8 4.1	D&M O8 18 1.0 20 1.3 14.0 27.3 14.0 27.3 14.9 17.4 1.9	M O&M 20 4 2035 1.0 1.1 2.5 2.5 2.4 3 4.4 3 14.4 14.5 15.4 28.3 29.2	O&M 21 2036	O&M 22 2037 1.1 2.7 0.9 4.6	O&M 23 2038 1.1 2.7 0.9 4.7	O&M 24 2039 1.1 2.8 0.9 4.8	O&M 25 2040 1.1 2.8 0.9 4.9	O&M 26 2041 1.1.2.9 0.9 5.0 20.3 17.9 38.3 0.4 24.1	08M 27 2042 1.2 2.9 1.0 5.0	08M 28 2043 12 3.0 1.0 5.2 21.5 18.9 40.4	O&M 29 2044 1.2 3.0 1.0 5.3 2.2 19.3 41.5 5.4 26.8 3.0	O&M 30 2045 1.2 3.1 1.0 5.4 22.8 42.7 0.4 27.8 3.1	O&M 31 2046 1.3 3.2 1.0 5.5 23.5 20.3 43.8 0.4	O&M 32 2047 1: 3: 5:0 24: 20: 45: 5: 0 0: 29: 3: 3: 3: 3: 3: 3: 3: 3: 3: 3: 3: 3: 3:	1.3 3.2 1.1 5.6 4.2 9.8 3.3
Allocation with Escalation sts gement ations enance costs on g (Labor & Consumables) cost cost or u, Major	Phân bổ hàng năm có tính truợt giá (Unit:Million US\$) Các chi phí nhân viên Quân lý Vân hành Bào dưỡng Sub-Total Câc chi phí điện năng Cổ sức kảo Không sức kảo Sub-Total Chi phí vệ sinh (Nhân công & tiêu dùng) Chi phí phụ tùng nhỏ trung bình , lớn	Cộng	Es	100.0% calation / Truot gi 2.0% 2.0%	Open/O&M 0 2015 0.6 1.7 0.5 2.8	21,056,484 O&M 1 2016 0.6 1.8 0.5 2.9 2.7 7.3 10.0 0.1	22,571,380 O&M 2 2017 0.6 1.8 0.6 3.0 5.0% 7.7 11.1 0.1	24,012,090 O&M 3 2018 0.6 1.8 0.6 3.0 4.3 8.1 12.4 0.1	25,452,799 O&M 4 2019 0.6 1.9 0.6 3.1 5.2 8.5 13.7 0.1	26,893,509 3. O&M 5 2020 0.6 1.9 0.6 3.1 0.2 8.9 15.1 0.2 5.2 0.7	O&M 6 6 2021 :	D&M O&M 8 7022 2023 0.8 0.2 0.6 0.3 3.4 3: 7.6 8.9 17.2 18.1 0.2 0.2	O&M 9 2024 3 0.8 0 2.1 7 0.7 5 3.5 0 18.8 2 0.2 0.2 0.3 9.5 1.0 7 10.6	9,118,046 40,83 O&M O& 10 1 2025 20 0.8 2.1 0.7 3.6 9.0 10.7 19.6 0.2 10.3 1.1 11.4	M O&M 12286 2027 0.8 0.9 2.1 2.2 20.7 3.7 3.8 9.5 10.0 11.1 11.5 20.5 21.5 0.2 0.2 12.1 12.1 12.0 12.1 13.1	O&M O 13 1 2028 20 0.7 3.8 10.6 11.9 22.5 0.2 13.0 1.4	8M O8M 4 15 299 2030 0.2 3 2 24 0.2 0.2 0.2 0.2 0.1 13.9 15.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.	O&M 16 2031 19 0.9 3.3 2.4 4.1 12.4 1.8 13.2 2.5 12 0.3 1.6 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8	0&M 17 2032 1.0 2.4 0.8 4.1 12.8 13.6 26.4 0.3	D&M O8 18 1.0 20 1.3 14.0 27.3 14.0 27.3 17.4 1.9	M O&M 20 2035 11.2 20 22.3 29.2 0.3 0.3 0.1 18.1 18.8 12.2 2.2 2.2 2.2 2.4 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	O&M 21 2036 1.0 0.9 4.5 20% 0.3 0.3 19.7 2.2 21.9	O&M 22 2037 1.1 2.7 0.9 4.5 15.3 15.9 31.3 0.3 20.6 2.3	O&M 23 2038 1.1 2.7 0.9 4.7 15.9 16.4 32.4 0.3	O&M 24 2039 1.1 2.8 0.9 4.8 16.5 17.0 33.5 0.3	O&M 25 2040 1.1 2.8 0.9 4.9 17.1 17.5 34.6 0.3 23.3 2.6	O&M 26 2041 1.1 2.9 0.9 5.0 20.3 17.9 38.3 0.4 24.1 2.7	O&M 27 2042 1.2 2.9 1.0 5.0 20.9 18.4 39.3 0.4 25.0 2.8	O&M 28 2043 1.0 5.2 1.5 18.9 40.4 25.9 2.9	O&M 29 2044 1.2 3.0 1.0 5.3 2.2 19.3 41.5 5.4 26.8 3.0	O&M 30 2045 1.2 3.1 1.0 5.4 50% 22.8 19.8 42.7 0.4 27.8 3.1 30.9	O&M 31 2046 1.3 3.2 1.0 5.5 23.5 20.3 43.8 0.4	O&M 32 2047 1. 3. 1. 5. 45. 0. 29. 3. 3. 3.	1.3 3.2 1.1 5.6 4.2 0.8 5.0 0.4

The state The	O&M Company Organization / 1				н	Allocation			ân bố nhân viên Site i nơi làm việc		Monthly Salary (incl. Social&Benefit)		Salary	until O	pening / Lươ		alary Calculati ến kỳ đầu	on / Tính	toán lương		After Oper	ning /Sa	au kỳ đầu		
The section	Department / Bộ phận	Unit / Đơn vị	Title						05/ total 2014 / tổng		Lương hàng thá ng(Bao gồm phúc lợi xã hội)		2012	:	2013	:	2014		2015	2	2017		2021		2041
Segregation of the segregation o	Chairman / Chủ tịch		NA NA	1	_	1	6	1	7	1				_											
Section 1.	Board of General Directors			1								3	7,200	12		12		12				1	2,400	1	2,400
# Professor 19	/ Ban Tong Giam Đoc		Deputy General Director / P Tổng Giám Đốc	-	_		3			1		-	,,,,,	-				_			-		-	1	7,200 2,400
The column	Board of Supervisors / Ban kiểm soát	NA	Supervisor / Giám sát				1 1			1		-	0	0	0		14,400		28,800	1	2,400			1	2,400
## 19 1		Subtotal /Cộng		6	-	-	1 7	-		7	2,400		0	72	0	-	0		0	-			2,400	8	2,400
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See the section of th	Training center	Training center	Manager / Trưởng phòng	1			1			1	780		2,340	12	9,360	12	9,360	12	9,360	1	780	1	780		780
This is the continue of the	/ Trung tam dao tạo		Staff / Nhân viên	2	-		- 4	-			420		0	26	840 0		10,080		10,080		840		840		840
# Allows manages (males) (male			m đốc Điều hành	1						1	1,200	3	3,600	12	14,400	12	14,400	12	14,400	1	1,200	1	1,200	1	1,200
Separate programme and			Manager / Trưởng phòng	1			1		-	1	780	3	2,340	12	9,360	12	9,360	12	9,360	1	780	1	780	1	780
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Manager / Truding phong 1							- 4 - 13	1	16 17						0		0		0						
Staff Nhân viên				1			1			1			2,340	12						-					780
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Managing Director / Giám dốc Điều hành 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			· •	2	-	11	- 13		***************************************	50		6	0	38	0	600	0	600	0	50	0	50	0	50	
Color Colo			m đốc Điều hành			22		6	60 66	98 1	1,200			_	0 14,400		14,400		14,400		1,200		1,200	_	1,20
Ann-Fare Box Revenue Shops Manager / Trưởng phòng 1 1 1 1 1 780 0 0 4 3,120 12 9,360 1 780		Advertisement	Manager / Trưởng phòng		1		4		-	1	780	0	0	4		12	9,360	12	9,360	1	780	1	780	1	78
Câc cửa hiệu tại ga Staff / Nhân viên 2 2 2 - 2 480 0 0 0 0 0 0 12 5,760 24 11,520 2 960	Non-Fare Box Revenue	-		1	1		2 2		-	1			0	4	3,120					+				1	78
Staff / Nhân viên Staff	Doanh thu ngoài vé	/ Các cửa hiệu tại ga	Staff / Nhân viên				2 2		-	2	480		0	0	0	12		24			960	2	960	2	96
Total / Tổng							2 2			2			0	0	0		5,760		11,520	1 2		2		2	78 96
Escalation / Truryt giá 0.020 1.104 1.126 1.149 1.	Total / Tổng	Subtotal /Cộng						- 00	263 202			-	125.640		0 555 500		1 709 200		2.422.000		2 482 200		2 575 440		2 575 44
Management / Quân lý 88,679 412,904 523,801 570,667 581,419 680,665 680,665 Operation / Vận hành 19,278 99,963 1,101,049 1,716,136 1,716,136 1,716,136 1,716,136 1,716,136 1,716,136 561,569	<sourece> / <ngu ồn=""></ngu></sourece>				12	39	7 97	20	203 283	380	Escalation / Trượ			3/5		3,203		4,560		_		408		408	2,575,44 1.14
Maintenance / Bào dưỡng 20,196 101,620 400,351 508,638 554,953 561,569 561,569			nhăn viên; "Kê hoạch công ty O&M - Kế hoạch huy động nhâr	vêin"																					680,665
																							_		1,716,136 561,569
												.9													

Traction Power cost / Chi phí Điện năng sức kéo	2015	2021	2031	2041	Description / Formula Mô tả/ Công thức
in VND	22,989,527,629	62,406,763,673	74,888,116,407	90,489,807,326	Electricity Required(kw) x Electricity Price ([1]x[7]+[2]x[8]+[3]x[9])
in USD	1,423,161	3,863,276	4,635,931	5,601,750	Electricity Required(kW) x Electricity Frice ([1]x[7]+[2]x[0]+[3]x[9])
	-			-	Lượng điện được yêu cầu (kw) x Giá điện ([1]x[7]+[2]x[8]+[3]x[9])

	201	15	20	121	20:	31	20-	41
Hour commencing / Giờ bắt đầu	(*1) Trains Operating / Vận hành tàu	(*2) Electricity Required (kw) / Lượng điện yê u cầu	(*1) Trains Operating / Vận hành tàu	(*2) Electricity Required (kw) / Lượng điện y êu cầu	(*1) Trains Operating / Vận hành tà u	(*2) Electricity Required (kw) / Lượng điện yêu cầu	(*1) Trains Operating / Vận hành tà u	(*2) Electricity Required (kw) / Lượng đ iện yêu cầu
No. of cars / train	3			6	6		6	
05:00	7.5	1,771	10	4,722	12.0	5,667	14.5	6,847
06:00	12.0	2,833	16	7,555	19.2	9,066	23.2	10,955
07:00	15.0	3,542	20	9,444	24.0	11,333	29	13,694
08:00	15.0	3,542	20	9,444	24.0	11,333	29	13,694
09:00	12.0	2,833	16	7,555	19.2	9,066	23.2	10,955
10:00	10.5	2,479	14	6,611	16.8	7,933	20.3	9,586
11:00	9.0	2,125	12	5,667	14.4	6,800	17.4	8,216
12:00	7.5	1,771	10	4,722	12.0	5,667	14.5	6,847
13:00	6.0	1,417	8	3,778	9.6	4,533	11.6	5,478
14:00	4.5	1,062	6	2,833	7.2	3,400	8.7	4,108
15:00	4.5	1,062	6	2,833	7.2	3,400	8.7	4,108
16:00	6.0	1,417	8	3,778	9.6	4,533	11.6	5,478
17:00	9.0	2,125	12	5,667	14.4	6,800	17.4	8,216
18:00	12.2	2,869	18	8,500	21.6	10,200	26.1	12,325
19:00	12.2	2,869	18	8,500	21.6	10,200	26.1	12,325
20:00	9.0	2,125	12	5,667	14.4	6,800	17.4	8,216
21:00	7.5	1,771	10	4,722	12.0	5,667	14.5	6,847
22:00	6.0	1,417	8	3,778	9.6	4,533	11.6	5,478
23:00	3.0	708	4	1,889	4.8	2,267	5.8	2,739
•								
Sub total/ Cộng 06:00-19:00	123.2	29,076.3	166.0	78,386.7	199.2	94,064.0	240.7	113,661
Sub total / Cộng 19:00-24:00	37.7	8,889.3	52.0	24,554.9	62.4	29,465.8	75.4	35,605
Sub total/ Cộng 00:01-06:00	7.5	1,770.8	10.0	4,722.1	12.0	5,666.5	14.5	6,847
Daily Total/ Tổng hàng ngày = [1] + [2] + [3]	168.3		228.0		273.6		330.6	
Route Length/ Chiều dài tuyến đường (km)	19.7		1			1		

	Tariff in 2008 / Bảng giá năm 2008	VND/kw	Assumed period / Thời gian dự tính
[7]	Peak rate/ Cao điểm	1,775	06:00-19:00
[8]	Off-peak rate / Giờ bình thường	895	19:00-24:00
[9]	Midnight rate / Thấp điểm	505	00:01-06:00

[6] Track Length / Chiều dài đường sắt(km) = [5] x 2

<Source> / <Nguồn>
All information is from " Preliminary Financial analysis for HCMC UMRT Line No.1" by NJPT / T ất cả thông tin trên được lấy từ "Kế hoạch tài chính ban đầu cho dự án xây dựng tuyến đường sắt đô thị TPHCM, Tuyến 1" của NJPT

< Traction power consumption > / <Lượng tiêu thụ điện năng sức kéo>

		Base kw/car km (kw cơ bản/ km toa xe)	factor)	Motor Factor / Yếu tố đ ộng cơ	tốc độ	Station Start-Stop factor / Thông số khởi h ành - kết thúc tại ga	Factor / Thông số đ ường ray thứ 3		Tunnel Factor / Thông số đ ường hầm	Total Correctio n Factor / Thông số sửa chữa tổng	(kw/car.km) / Lượng tiêu thụ điện n ăng sức kéo cho hệ	
Old MTR		2.46	0	0	0	0	0	0	0	1	2.46	i
PB System	Estimate	2.35	+Ve	+Ve	+Ve	+Ve	0	+Ve	+Ve	0.85	2.00	(*:

+Ve = beneficial (reduces power consumption) / = Lợi nhuận (Trừ lượng tiêu thụ điện năng)

< Verification of above Traction power consumption (*3) > / <Xác minh lượng tiêu thụ điện năng nói trên (*3)>

Estimation by train operation simulator "Notchman" / Ước tính lượng điện năng tiêu thụ bằng thiết bị "Notchman" ghi lại hoạt động của tàu

The result of total power consumption of 3 car train-set between Benh Than and Suoi Tien Terminal is as follows . / Kết quả tiêu thụ điện năng tổng thể của 3 hệ thống tàu giữa Bến Thành và Suối Tiên như sau

Ratio of traction / Tí lệ sức kéo	5%	15%	40%	Average
UP / Lên	68.4	105	176.1	116.5
Down / Xuồng	103.9	153.4	194.2	150.5
Total / Tổng	172.3	258.4	370.3	267
Kw/car/km / kw/toa/km	1.5	2.2	3.1	2.3

Non-Traction power cost / Chi phí điện năng không sức kéo	2015	2021	2031-	Description
in 2008VND / Bằng VND	79,934,391,815	79,934,391,815	79,934,391,815	Purchased Eletricity x Weighted average electricity price
in USD / Bằng USD	4,948,319	4,948,319	4,948,319	([3]x[4])

Lượng điện được yêu cầu (kw) x Giá điện ([1]x[7]+[2]x[8]+[3]x[9])

				[1]	[2]	[3]
					= [1] X 25%	=[1]-[2]
Station No. / Số ga	Tên ga	Station Name	Type / Loại	Electricity / Lượng điện (MWh/year)	From Regenerative Braking / Từ sự phanh ho àn nhiệt	Purchased Electricity / Lượng đ iện mua (MWh/year)
1	Bến Thành	Ben Thanh	U/G I/C (L2)	7,687	1,922	5,765
2	Nhà hát thành phố	Opera House	U/G I/C (L4)	7,585	1,896	5,689
3	Ba Son	Ba Son	U/G	7,609	1,902	5,707
4	Công viên Văn Thánh	Van Thanh Park	EL	3,220	805	2,415
5	Tân Cảng	Tan Cang	EL	4,061	1,015	3,046
6	Thảo Điền	Thao Dien	EL	3,220	805	2,415
7	Metro An Phú	An Phu Meetro	EL	2,636	659	1,977
8	Rạch Chiếc	Rach Chiec	EL	3,220	805	2,415
9	Phước Long	Phuoc Long	EL	3,220	805	2,415
10	Bình Thái	Binh Thai	EL	3,220	805	2,415
11	Thủ Đức	Thu Duc	EL	3,220	805	
12	High Tech	High Tech	EL	3,220	805	,
13	Suối Tiên	Suoi Tien Park	EL	3,220	805	
14		Suoi Tien Car Park	EL	3,027	757	2,270
Depot			-	8,505		8,505
	Cộng (Ga)	Sub Total (Stations)		58,365	14,591	43,774
	Cộng (Depot)	Sub Total (Depot)		8,505	0	8,505
	Tổng cộng	Total		66,870		52,279

[VND/kWh]

[4] Weighted average electricity price (2008 prices) / Giá điện bình quân (giá năm 2008)	2015	2021	2031-
Stations / Ga	1,477	1,477	1,477
Depot	1,799	1,799	1,799

<Sourece> / <Nguồn>

All information is from " Preliminary Financial analysis for HCMC UMRT Line No.1"by NJPT.

/ Tất cả thông tin được lấy từ "Phân tích tài chính cơ bản cho dự án xây dựng đường sắt đô thị TPHCM Tuyến 1" của NJPT

1. Investment (2008-2019)	1. Đầu tư (2008 - 2019)		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
A. ELIGIBLE PORTION	A. VÔN VAY													
I) Procurement/Construction		1,932.2	-	-	-	471.2	667.6	556.1	176.7	16.4	16.9	8.8	9.1	9.4
PACKAGE 1: Civil (Underground)	GÓI 1: Xây dựng đọan đi ngầm	358.0	-	-	-	93.1	150.4	107.4	7.2			,	-	
PACKAGE 2: Civil (Elevated)	GÓI 2: Xây dựng doạn đi cao	486.5	-	-	-	126.5	204.3	146.0	9.7	٠		,	-	-
PACKAGE 3: E&M, Rolling Stock,	GÓI 3: Mua sắm và lắp đặt các thiết bị													
Track Work, Maintenance	cơ điện, toa xe, đầu máy toa xe và hợp	582.4		-	-	151.4	139.8	139.8	110.7	11.6	11.6	5.8	5.8	5.8
Track Work, Maintenance	đồng bảo dưỡng												1 '	
Base cost for JBIC financing	Chi phí cơ sở cho JBIC giải ngân	1,427.0	-	-	-	371.0	494.5	393.1	127.5	11.6	11.6	5.8	5.8	5.8
Forecasted Amount of Risk	Dự phòng rủi ro	214.0	-	-	-	55.7	74.2	59.0	19.1	1.7	1.7	0.9	0.9	0.9
Price escalation	Tî lệ trượt giá	291.2	-	-	-	44.5	99.0	104.0	30.0	3.0	3.6	2.1	2.4	2.7
II) Consulting services	II) Dịch vụ tư vấn	77.1	-	23.1	7.9	8.8	8.8	8.8	9.8	2.3	1.5	1.5	1.5	3.0
Base cost	Chi phí cơ bản	70.1	-	21.0	7.2	8.0	8.0	8.0	8.9	2.1	1.4	1.4	1.4	2.7
Physical contingency	Dự phòng phí	7.0	-	2.1	0.7	0.8	0.8	0.8	0.9	0.2	0.1	0.1	0.1	0.3
Total (I+II)	Tổng (I+II)	2,009.3	-	23.1	7.9	480.0	676.4	564.9	186.5	18.7	18.5	10.3	10.6	12.5
B. NON ELIGIBLE PORTION	B. VÔN ĐỚI ỨNG													
- Land Association	 a. Chi phí bồi thường giải phóng mặt 	86.9		21.7	21.7	21.7	21.7							
a. Land Acquisition	bằng	86.9	-	21.7	21.7	21.7	21.7	-	-	-	-	-		_
Base cost	Chi phí cơ bản	86.9	-	21.7	21.7	21.7	21.7	-	-	-	-	-	-	-
Price escalation	Tî lệ trượt giá	-	-	-	-	-	-	-	-	-	-	-	-	-
Physical contingency	Dự phòng phí	-	-	-	-	-	-	-	-	-	-	-	-	-
b.Administration cost	Chi phí quản lý dự án	72.0	-	0.2	0.1	18.6	24.8	19.7	6.5	0.6	0.6	0.3	0.3	0.3
c. VAT	c. Thuế giá trị gia tăng	149.7	-	2.1	0.7	37.9	50.2	40.1	13.6	1.4	1.3	0.7	0.7	0.9
d. Import tax	d. Thuế nhập khẩu	-	-	-	-	-	-	-	-	-	-	-	-	-
Total (a+b+c+d)	Tổng (a+b+c+d)	308.7	-	24.0	22.5	78.3	96.8	59.9	20.1	2.0	1.9	1.0	1.0	1.2
Total (A+B)	Tổng (A+B)	2,318.0		47.1	30.5	558.3	773.2	624.7	206.6	20.7	20.4	11.3	11.6	13.6
C. Interest during Construction	C. Lãi vay trong thời gian xây dựng	62.3		0.1	0.1	2.0	4.8	7.0	7.8	7.9	8.0	8.1	8.2	8.3
TOTAL (A+B+C)	TÔNG ((A+B+C)	2,380.3	-	47.2	30.6	560.3	778.0	631.8	214.4	28.6	28.4	19.4	19.8	21.9
check	Kiém tra	2.380.3	IDIC	2.071.68						•				
		,,,,,,	JBIC	2,071.00									\blacksquare	
D. Opening Expenses	D. Chi phí đầu kỳ	4.5					8.0	0.6	2.5	0.5				
E. Investment for Office IT and Non-fare	 E. Đầu tư hệ thống CNTT văn phòng và 	8.5						0.0	8.4					
ousiness	kinh doanh ngoài vé	6.5						0.0	0.4				<u> </u>	
E Making up and abstage in 2015	F. Bù đấp sự thiếu hụt về tiền mặt	4.4								4.4				
F. Making up cash shotage in 2015	trong năm 2015													
Total (D+E+F)	Tổng (D+E+F)	17.4	-	-	-	-	0.8	0.7	10.9	5.0	-	-	-	-
TOTAL (A+B+C+D+E+F)	TÔNG CÔNG (A+B+C+D+E+F)	2.397.7	-	47.2	30.6	560.3	778.8	632.4	225.3	33.6	28.4	19.4	19.8	21.9

F Make-up for the cash shortage in 2015 / Bồ sung cho lượng tiền mặt thiếu hụt trong năm the 2015. *1 Capitalized in the form of assets other than cash. The actual value of fixed assets needs to be calculated in accordance with Vietnamese accounting law after construction is completed. / Góp vôn bằng tài sản cổ định hơn là tiên mặt. Giá trị thực tế của các thiết bị cổ định cần phải được tính toán theo Luật kể toán Việt Nam sau khi dụ án hoàn thành.

MAUR

/ BQLĐSĐT,...

O&M Company

Fixed Assets

/ Tài sản cố định (2.262) Cash / Tiền mặt

(18)

These are needed to be prepared by HCMCPC /UBNDTP can chuản

bị khoản này

(US\$ Million)

(Triệu USD)

Capital

(2.280)

A B C // Công ty VH&BD

Capital in Kind

DEF

Capital in Cash /ốn góp bằng tiền (18)

/ Vốn góp *1 (2.262)

*2 Capitalized in cash / Góp vốn bằng tiền

D Opening expense / Chi phí thành lập

JICA

Loan

/Vốn vay

States

/ Chính phủ

A Eligible portion (before 2015) / Phần vốn vay (trước năm 2015) B Non eligible portion (before 2015) / Phần vốn đối ứng (trước năm 2015)

C Interest in construction (before 2015) / Lãi vay khi thi công trước (trước 2015)

HCMCPC

/ UBND TP

HCMC's budget

E Investment for Office IT and Non-fare business / Đầu tư hệ thống CNTT văn phòng và kinh doanh ngoài vé

			Economic growth ra	ate / Tỷ lê tặng	trưởng kinh tế :	1.00	1.02	1.05	1.07 1.1	6 0 1.13	7 1.15	1.17	1.20	1.22	1.25	12 13 1.28 1.3	14 30 1.33	15 1.36	16 1.39	17 1.41	1.43	19 1.45	20 1.48	21 1.50	1.52	23 2 1.55 1	24 2 1.57 1	1.60 1.0	62 1.64	28 1 1.66	29 5 1.67	30 31 1.69 1.	1 32 .71 1.72
Additional/Renewal (2017-2047)	2. Phục hồi/bổ sung (2017-2047)	Original Cost / Chi phí gốc	1	2	3 4	5	6	7	8 9	10	11	12		14		16 17	18	19	20	21	22	23	24	25			28 2			32	33	34 35	
		For Renew / Phục hỗi																															
olling Stock	Đầu máy toa xe	177.0 30							21.5		46.0		35.7						73.6			95.1		18.0		13.8						302	2.2
olling Stock &M	Thiết bị cơ điện	549.5	-		-		-	-	-	- 84.6	-	-	-	-	419.5	-			202.1	-	-	-	-	612.5	-	-	-	- 122	2.1	-		- 1,061	1.9 -
E&M (5 vr)	Thiết bị cơ điện (5 năm)	75.2 5								84.6					93.9				104.2					112.8				122	2.1			128	8.4
E&M (10 vr)	Thiết bị cơ điện (10 năm)	188.1 10			1										235.03			1 1			1			282.307			\neg		_			321.2	216
E&M (15 yr)	Thiết bị cơ điện (15 năm)	- 15			1							-						1 1	-		1					-	\neg		_				-
E&M (20 vr)	Thiết bị cơ điện (20 năm)	144.9 20			1										90.5			1 1			1			217.4			\neg		_			371	1.1
E&M (30 vr)	Thiết bị cơ điện (30 năm)	141.3 30	* S	Starting from	July 2015														97.9		1						-					241	1.2
Depreciation	3. Khấu hạo		/ 6	Bắt đầu từ th	náng 7 năm 2015																												
1 Original Assets (incl.	3.1 Các tài sản gốc (Bao gồm cả dự pi	h For Dep. /	/ L	Dai dad id ii	iang / nam 2015													+ +		1							-	_	_				_
ontingency&Escalation)	òng và trượt giá)	khấu hạo			1	→				1	1						1											1				1	
-Civil Work UG	Xây dựng đoạn đi ngầm	484.8 50	25.9%	-	1	4.8	9.7	9.7	9.7 9.	7 9.7	9.7	9.7	9.7	9.7	9.7	9.7 9	.7 9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	97 0	9.7 9.7	97	7 97	9.7	9.7 9.7
-Civil Work EL	Xây dựng đoạn đi cao	658.8 20	35.2% check /	Kiểm tra	 		32.9	32.9	32.9 32.				32.9		32.9		.9 32.9			32.9					U.1	U.,	-	J., J	- 3.7	3.7	3.7	<u> </u>	3.7
-E&M	Thiết bị cơ điện	549.5	29.4% 549.		 	31.2			62.5 62	5 55.0			47.4	47.4		- OZ.O	.0 02.0	32.3	02.0	52.5	32.3	JZ.J	JZ.J	. 5.5			-+						
E&M (5 yr)	Thiết bị cơ điện (5 năm)	75.2 5	23.470 343.		 	7.5	02.0	15.0	15.0 15.0	0 00.0		77.4	71.7	77.4	20.2		- 	+ +		 	1						\rightarrow		The state of	old boson b		16 50	(<u>112 - </u>
E&M (10 yr)	Thiết bị cơ điện (3 năm)	188.1 10	 	_	+		18.8	10.0	18.8 18.			18.8	18.8	18.8	0.4			+		+	H						-		It sho	uld have t	be counted	d for 50years. /	Nen
E&M (15 vr)	Thiết bị cơ điện (10 năm)	100.1	 	_	+	9.4	10.0	10.0	10.0 10.	0 10.0	10.0	10.0	10.0	10.0	9.4			+		+	H						-		tính k'	hoảng thò	ời gian là 5	0 năm	<u> </u>
	Thiết bị cơ điện (15 năm)	144.9 10	 	_	+	7.2	14.5	115	14.5 14.	5 14.5	14.5	14.5	115	14.5	0.4		-	+ - +		+	H						-			-			
E&M (20 yr)			ļ <u> </u>					14.5		11.0	11.0	1 1.0	14.5				_	+		1							-						
E&M (30 yr)	Thiết bị cơ điện (30 năm)	141.3 10	0.504			7.1		14.1	14.1 14.					14.1						1							-						
-Rolling Stock	Đầu máy toa xe	177.0 15	9.5%			5.9		11.8	11.8 11.	8 11.8		11.8	11.8	11.8	11.8	11.8 11	.8 11.8	11.8									-						
-Office IT System	Hệ thống IT văn phòng	8.5 5				0.8		1./	1.7 1.	0.0				/																			
Total	Tổng	1,870.1	100.0%			90.5	181.1 18	81.1	181.1 181.	1 165.2	149.3	149.3	149.3	149,8	110.9	54.4 54	.4 54.4	54.4	42.6	42.6	42.6	42.6	42.6	26.2	9.7	9.7	9.7	9.7	9.7	9.7	7 9.7	9.7	
.2 Additional/Renewal Rolling tockFacilities	3.2 Bổ sung/Phục hổi trang thiết bị đầu	ı máy toa xe		6 mont	hs should have be	counted to ke	ep total depre	eciation pe	eriod./ Nên tín	h 6 tháng đ	l ể giữ tổng t	hời gian kh	hấu hao] -/																		1	
Rolling Stock	Đầu máy toa xe	20.0 2018							0.7 0.	7 0.7	0.7	0.7	0.7	0.7	0.7	0.7 0	.7 0.7	0.7	0.7	0.7	0.7												
-		40.0 2021									1.5	1.5	1.5	1.5	1.5	1.5	.5 1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5									
		29.8 2023			1								1.2	1.2	1.2	1.2 1	.2 1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	\neg		_				_
Intermediate overhau	ul 1 Trung tu lần	1 73.6 2030			1													1 1	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9 4	.9 4.º	4.9	9 4.9	4.9	_
		59.4 2033																		1	1	4.0	4.0	4.0	4.0	4.0	4.0	4.0 4	1.0 4.0	4.0) 4.0	4.0 4	4.0 4.0
Intermediate overhau	ul 2 Trung tu lần		t t	1	1 – I	1 1				1	i i							1 1				0.6		0.6	0.6	0.6	0.6	0.6	16 07	0.6			0.6 0.6
Intermediate overhau			t t	1	1 – I	1 1				1	i i							1 1				0.0	0.0	1.2	0.0	0.0	1.2	1.2 1	2 1	1.2		0.0	1.2 1.2
Intermediate overhau			t t	1	1 – I	1 1				1	i i							1 1									1.1-	0.9	0.9 0.9				0.9 0.9
Renewal of 2015 rolling sto		5 302.2 2045	 	-	 	+ -				+	1							1		 	1			-		0.0		0.0	.0.0	0.3	0.0		0.1 20.1
Intermediate overhau			 	-	 	+ -				+	1							1		 	1			-			-		-		1		20.1
intermediate overnac	Trung tu lan	Renewal / Phục hỗi Depreciation/Khấu hao																1 1									\top		+-				1
E&M (5 vr)	Thiết bị cơ điện (5 năm)	/ Priuc noi	 	_	 	+				16.9	16.9	16.9	16.9	16.9	18.8	18.8 18	.8 18.8	18.8	20.8	20.8	20.8	20.0	20.8	22.6	22.6	22.6	22.6	22.6 24	1.4 24.4	24.4	1 24.4	24.4 25	5.7 25.7
E&M (10 vr)	Thiết bị cơ điện (5 năm)	188.1 10	 			+				16.9	16.9	10.9	10.3	10.9			.5 23.5		23.5		23.5			28.2	28.2			28.2 28			2 28.2		
E&M (10 yr)	Thiết bị cơ điện (15 năm)	100.1 10	 			+				+	 			-+	23.3	23.3 23	.5 23.5	23.5	23.5	23.5	23.5	23.5	23.5	20.2	20.2	20.2	.0.2 2	20.2 20	.∠ 20.2	20.2	20.2	20.2 32	32.1
		144.9 10	 		 	+				+	 			-+	0.1	0.1	1 91	0.1	91	0.1	0.1	- 0.1	- 0.1	24.7	24.7	21 7 2	21.7 2	- 04	7 2	7 24 7	7 24 7	21.7	71 371
E&M (20 yr)	Thiết bị cơ điện (20 năm)		ļ	_	 					-					9.1	9.1 9	.т 9.1	9.1	0.1	0.1	9.1	9.1	9.1	21./				21.7 21	1.7 21.7	21.7	7 21.7	21.7 37	
E&M (30 yr)	Thiết bị cơ điện (30 năm)	141.3 10	 		 	4					ļ								9.8		0.0	9.8		9.8			9.8	9.8	+	4	4	24	4.1 24.1
Intermediate overha		10	 			1					l								9.8		0.0	0.0	9.8	9.8		9.8		9.8					
Total	Tông	549.5		1	1 1	-	-	-	0.7	7 17.6	19.2	19.2	20.4	20.4	54.8	54.8 54	.8 54.8	54.8	81.3	I 81.3	81.3	85.1	85.1	105.5	104.0	104.9 I 10	03.7	03.7	6.0	86.0	86.0	86.0 145	5.8 145.8

Depot equipment is included in E&M / Thiết bị Depot bao gồm trong Mua sắm và lắp đặt các thiệt bị cơ điện

Breakdown for PACKAGE 4 (For the details: See "10. New Cost") Du tinh chi phi cho GÓI THẦU SÓ 4 (Xem chi tiết tại "10. Chi phí mới")

LC (VND) Total (JPY) Total (US\$ Mil) 405.8 71.2 57.6 25.8 104.5 27.2 55.5 14.3 3.0 5.9 5.7 1. E&M Track Works 1. Thiết bị cơ điện I. I niet tọi cơ điện
Công trình đường sắt
Hệ thống tin hiệu trên chính tuyến
Hệ thống viễn thông
Tram điện & SACADA, PDS
Hệ thống cung cấp nguồn điện sức kéo (OCS)
Hệ thống thụ phí
Cửa chấn ka ca 17.5% 14.2% 6.3% 25.7% 6.7% 13.7% 3.5% 0.7% 1.5% 1.4% 8.7% 71.2 Track Works
Signalling System
Telecommunication System
Power Supply & SCADA, PDS
Traction Power Supply (OCS)
AFC
Platform Screen Door
Facility SCADA
Signage
Training Facility
Depot and Workshop Equipment 57.6 25.8 104.5 9,355,834,540 248,221,178,462 10,969,272,200 2,175,212,220 105,297,464,615 2,859,645,740 5,274,982,209 85,339,732,431 5,829,690,469 27.2 55.5 riệ niong tíu pịn Cửa chấn ke ga Tiện ích SCADA Biển chỉ dẫn Tiện ích cho công tác đào tạo và huấn luyện Thiết bị nhà xưởng và depot 5247.942.099 69.3897.34491 56.6256904691
287.094.540 4,188.572.308 314.100.260
585.982.760 8,707.427.077 622.581.036
547.511.200 8,178.307.892 600,870.200
3,210.838.120 74.282.843.077 3,893.474.600 14.3 3.0 5.9 5.7 138.9 55.5 405.8 Rolling Stock Đầu máv toa xe 130.7 13,662,024,120 9,980,307,692 13,726,896,120

<Source> / <Nguồn>
All information other than D,C,F in Investments 2008-2019 is from * Preliminary Financial analysis for HCMC UMRT Line No.1*by NJPT / T ất cả thông tin ngoại trừ D,C,F trong Các kế hoạch đầu tư 2008-2019 được trích từ *Phân tích tài chính ban đầu* cho dự án Metro TPHCM của NJPT D,E,F in Investments 2008-2019 are estimated by SAPI team/ D,E,F trong phần Đầu tư được dự báo bởi SAPI

ΔΝΝΙΙΔΙ	RUDGET	SCHEDULE

FC & Total: Mil. Yen LC: Mil. Dong 2.4% per Year / một năm 7.6% per Year / một năm

LC	.C:	7.6% P	er rear/ mou	nam																																				
Items / Hạng	ng mục chi phí	ļ	Total FC	/ Tổng	Equivalent /	Tổng quy đối Í C	FC 1	07 .C Tot	tal I	2008 FC LC	Total	I FC	2009 I.C.	Total	FC LC	010 Total		2011 FC LC	Total	FC	2012 LC	Total	2013 FC LC	Total	FC.	2014 LC Total	FC	2015	Total	FC	2016	otal	FC 2	017 LC Total	FC	2018 LC	Total	FC	2019 LC	Total
A. ELIGIBLE PORTION / VÓN VAY		1																																						
	Chi phí xây lấp, mua sẩm	(1)	91,541	17,129,648	202,884	31,212,905	0	0	0	0	0	0	0 0	0	22,959 4,07	9,605 4	9,477	26,740 6,670,757	70,100	23,943	5,299,205	58,387	13,025 850,438	18,553	1,341	58,167 1,	719 1,37	3 62,588	1,780	703	33,672	922	720	36,231	955 73	7 38,985	990	0	0	0
PACKAGE 1 : Civil (Underground)	GÓI 1: Xây dựng đọan đi ngắm	(2)	11,179	4,063,613	37,593	5,783,524	0			for "Calculating				0	2,907 1,050	5,539	9,774	4,695 1,706,717	15,789	3,354	1,219,084	11,278	224 81,272	752	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0	0
PACKAGE 2 : Civil (elevated and depot)	0010. V4. d d d	(3)	11,490	6,091,617	51,085	7,859,238	0			schedule. / Bán n" Không phu tì			Tính to	0 0	2,987 1,58	3,820 13	3,282	4,826 2,558,479	21,456	3,447	1,827,485	15,326	230 121,832	1,022	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0	0
PACKAGE 3 : E&M, track works, rolling stock, maintenance	GÓI 3: Mua sắm và lắp đặt d	ih (a)	50,561	1,629,576	61,153	9,408,177	0	0	0	0	0	0	0 0	0	13,146 42	3,690 15	5,900	12,135 391,098	14,677	12,135	391,098	14,677	9,607 309,619	11,619	1,011	32,592 1,2	223 1,01	1 32,592	1,223	506	16,296	612	506	16,296	612 50	6 16,296	612	0	0	0
Base cost for JBIC financing	Chi phí cơ sở cho JBIC giải	(5) =(2)+(3)+(4)	73,230	11,784,805	149,831	23,050,939	0	0	0	0	0	0	0 0	0	19,040 3,06	4,049 3	8,956	21,656 4,656,295	51,921	18,935	3,437,667	41,280	10,060 512,724	13,393	1,011	32,592 1,3	223 1,01	1 32,592	1,223	506	16,296	612	506	16,296	612 50	6 16,296	612	0	0	0
Forecasted Amount for Risk	Dự phòng rủi ro	(6)	10,984	1,767,721	22,475	3,457,641	0	0	0	0	0	0	0 0	0	2,856 45	9,607	5,843	3,248 698,444	7,788	2,840	515,650	6,192	1,509 76,909	2,009	152	4,889	183 15	2 4,889	183	76	2,444	92	76	2,444	92 7	6 2,444	92	0	0	0
Price escalation	Tî lệ trượt giá	(7) for (5)+(6)	7,327	3,577,122	30,578	4,704,325	0	0	0	0	0	0	0 0	0	1,064 55	5,948	4,677	1,836 1,316,018	10,391	2,167	1,345,888	10,915	1,457 260,806	3,152	178	20,687	312 21	0 25,107	373	121	14,932	219	138	17,491	252 15	6 20,245	287	0	0	0
II) Consulting services (fix price)	Dịch vụ tư vấn (giá cố định)	(0).(0)	6,223	288,299	8,097	1,245,721	0	0	0	1,835 90	694 2,	,425 66	32 26,266	833	688 3	6,418	924	688 36,418	924	688	36,418	924	745 43,205	1,026	181	10,083	247 14	7 1,759	159	147	1,759	159	147	1,759	159 29	5 3,518	317	0	0	0
Base cost	Chi phí cơ bản	(9)	5.657	262.090	7.361	1.132.473	0	0	0	1.668 82	449 2.	2.204 60	02 23.879	757	625 3	3.108	840	625 33.108	840	625	33.108	840	677 39.278	933	165	9.166	224 13	4 1.599	144	134	1.599	144	134	1.599	144 26	8 3.196	289	0	0	0
Physical contingency	Dự phòng phí	(10)	566	26,209	736	113.247	0	0		167 0	245	220 6	50 2.388	76	62	3.311	04	69 2 244	94	62	3 311	94	69 2.02	02	10	017	22 4	2 160	14	12	160	14	12	160	14 2	7 220	20			
		(.0)		17,417,947	-	32,458,626	0		0	1,835 90	694 2	.425 66		833	23,647 4,11		0,401	27,428 6,707,175	71,025	24 630	5,335,624	59,312	13,770 893,644	19.579	1,522	68,250 1,	965 1,52	0 64,347	1 938	850	35,431	1,081	867	37,990 1,	114 1,03	2 42.503	1.308	-		
Fotal A: (I +II)	Tổng A: (I +II)		37,704	11,411,541	210,561	32,430,020	•	٠	4	1,033 30	034 2,	,425 00	20,200	033	23,047 4,11	0,024	0,401	27,420 0,707,173	71,023	24,030	3,333,024	35,312	13,770 693,044	15,575	1,022	00,230 1,	1,02	0 04,347	1,530	630	30,431	1,001	007	37,550 1,	114 1,03	42,303	1,300	ئے		
a Land Acquisition	Chi phí bồi thường giải phó	(11)		1,404,065	9 126	1,404,065				351.	016 2	282	351.016	2 282	35	1.016	2.282	351.016	2.282								0		0						0		0			0
b Administration and others cost	ng mặt bằng Chi phí quản lý dự án và cá	ic (12)		1,163,872		1,163,872				0 3		22	0 1.165				1 056	0 400.689	2,604		318.833	2.072	0 104.455	670		9.753	62	0 9.630	62		4.926	22		4.926	22	0 5.148	22			1 0
	chi phi khác	=(13)+(14) (13)		, ,		ļ	•			0 3	351		1,100	, ,			1,000		2,004			2,012			-	-,	03	-,				32		4,020	32		. 33		ļ ⁹	
Administration Cost	Chi phí quản lý dự án	=5% of (5)	0	1,152,547	7,492	1,152,547	0	0	0	0	0	0	0 0	0	0 29	9,662	1,948	0 399,396	2,596	0	317,540	2,064	0 103,020	670	0	9,408	61	0 9,408	61	0	4,704	31	0	4,704	31	0 4,704	31	0	0	0
Contingency remain of Consulting Service	Phí dự phòng còn lại của dịch vụ tư vấn	(14)	0	11,325	74	11,325	0	0	0	0 3	391	22	0 1,165	5 8	0	1,293	8	0 1,293	8	0	1,293	8	0 1,438	9	0	345	2	0 222	1	0	222	1	0	222	1	0 444	3	0	o	0
c VAT	Thuế giá trị gia tăng	(15)	0	2,418,341	15,719	2,418,341			0	0 33	911	220	0 11,649	76	0 61	2,254	3,980	0 811,722	5,276	0	648,009	4,212	0 220,388	1,433	0	22,266	145	0 21,036	137	0	11,628	76	0	11,628	76	0 13,848	90	0	L	. 0
Total B: (a+b+c)	Tổng B: (a+b+c)		0	4,986,278	32,411	4,986,278	0	0	0	0 388	318 2,	,524	0 363,830	2,365	0 1,26	4,226	8,217	0 1,563,428	10,162	0	966,842	6,284	0 324,843	2,111	0	32,019	208	0 30,667	199	0	16,554	108	0	16,554	108	0 18,996	123	0	0	0
Total: (A+B)	Tổng: (A+B)		97,764	22,404,225	243,392	37,444,904	0	0	0	1,835 479	012 4,	,949 66	390,097	3,198	23,647 5,38	0,250 5	8,619	27,428 8,270,603	81,187	24,630	6,302,465	65,596	13,770 1,218,487	21,691	1,522	100,269 2,	174 1,52	95,013	2,138	850	51,985	1,188	867	54,544 1,	222 1,03	2 61,499	1,431	0	0	0
C. Bank interest during construction	C. Lãi ngân hàng trong thời	gian xây dựng	6,545	0	6,545	1,006,894	0	0	0	10	0	10 1	13 (13	215	0	215	500 0	500	739	0	739	820	820	831	0	831 84	2 0	842	850	0	850	858	0	858 86	7 (867	0	0	0
Grand Total : (A+B+C)	Tổng cộng: (A+B+C)		104,309	22,404,225	249,937	38,451,798	0	0	0	1,845 479	012 4,	,958 67	75 390,097	3,211	23,862 5,38	0,250 5	8,833	27,928 8,270,603	81,687	25,369	6,302,465	66,335	14,591 1,218,487	22,511	2,353	100,269 3,	005 2,36	3 95,013	2,980	1,700	51,985	2,038	1,725	54,544 2,	080 1,89	61,499	2,298	0	0	0

99, of the Construction portion / Phân xây dyng
10% of the expenditure in foreign currency and local currency of civil works and installation / Chi tiêu tâng ngoại tệ và nội tệ của các công trình và xây lấp dân dụng
0.129676 Ti lệ trượt giá Ti lệ trượt giá Ti lệ trượt giá

Lâi vay trong thời gian xây dụng Ti lệ tài chính Ti lệ lài đối với khoán vay bằng YEN Phần bố tạm thời Nơ tại thời điểm cuối kỳ Lâi trong thời gian xây dụng

845,983,024 71,524,476,474 1,930,651,588
 Tang / Giám
 126,583
 17,387,727

 Tang / Giám
 197%
 2,380
 2,434,323,381 50,615,992,739 60,050,786,393 20,399,364,919 2,796,810,315 2,780,890,918 1,972,012,574 2,174,585,344 TEDI-S / IR Increase / Decrease

Estimate cost for Package 3	Năm cơ sở Se	Sep. 2008		otal: Mil.Yen	FC	C & Tổng, Tri	iêu YEN	his sheet is t			he amount	of Asset" on	y. It does	7																																
Exchange Rates		ND: 0.00650	LC: Mil.	Dong	LC	C: ttriệu đồng	n	ot depend or	time sche	ule.																																				
PriceEscalation:	Tî lệ trượt giá FC:	LC:				/	/	Bản này chỉ	được sử d	ing đề "Tíi	nh toán sô l	ượng tài sản	" Không																																	
Physical Contingency VAT		7.6% 15%					pl	hụ thuộc vào	o kể hoạch																																					
Items	Hạng mục chi phí	To	otal / Tổng	. F	Equivale	ent		2008			20	08		20	109			2010			2011			2012			2013			2014			2015			2016		T	2017			2018			2019	
		FC	LC	F	FC	LC	FC	LC	Total	FC	L	C Te	otal F	FC L	.C Tot	al F	C	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	⊿ FC	LC	Total	FC	LC	Total
ELIGIBLE PORTION	VÓN VAY																																													
1 Procurement / Construction	Chi phí xây lấp, mua sẩm																																													
Rolling Stock	Đầu máy toa xe	13,6	662	9,980	13,727	2,111,830 1,149,812																																								
Track Works	Công trình đường sắt	5,1	159 35	6,138	7,474	1,149,812																																								
Signalling System	Hệ thống tín hiệu trên chính tuyến	6,0	040		6,044	929,909																																								
Telecommunication System	Hệ thống viễn thông		0 41	6,218		416,218																																								
Power Supply & SACADA, PDS	Tram điện & SACADA, PDS	9,3	356 24	6,218 8,221	10,969	1,687,580																																1								
Traction Power Supply (OCS)	Hệ thống cung cấp nguồn đ iện sức kéo (OCS)	2,1				439,945																																								
AFC	Hệ thống thu phí	5,2	275 8	5,340	5,830	896,875																																								
Platform Screen Door	Cửa chắn ke ga	1,2	269 3	85,340 85,335	1,499	896,875 230,543																																								
Facility SCADA	Tiện ích SCADA	2	287	4,169 8,707	314	48,323 95,782																																								
Signage	Biến chỉ dẫn	5	566	8,707	623	95,782																																								
Training Facility	Tiện ích cho công tác đào tạo và huấn luyên	5	548	8,178	601	92,411																																								
Depot and Workshop Equipment	Thiết bị nhà xưởng và depot	3,2	211 7	74,283 77,511	3,693	568,227																																								
Maintenance fee	Chi phí bảo dưỡng	3,0	011 27	7,511	4,815	740,722																																								
Base cost for JBIC financing	Chi phí cơ sở cho JBIC giải ngân	50,5	561 1,62	9,576	61,153	9,408,177	0		0	0	0	0	0	0	0	0	13,146	423,690	15,900	12,135		14,677	12,135	,	14,67				,619 1,0	111 32,59	2 1,22	1,011	32,59	2 1,2	23	506 16,2	96 612	2 5	606 16,2	296	612 5	506 16,2		612	0	0 1
2 Physical contingency	Dự phòng phí	7,5	584 24	4,43ь			0		0	0	0	0	0	0	0	0	1,972	63,553	2,385	1,820	58,665	2,202	1,820	0 58,665	2,20)2 1,44	11 46,44	13 1	,743	52 4,88	9 18	152	4,88	9 1	83	76 2,4		2 .	76 2,4	444	92	76 2,4		92	0	0 r
3 Price escalation	Dự phòng trượt giá	5,3	346 59 491 2,47	6,487	9,223	1,418,989	0	(0	0	0	0	0	0	0	0	734	76,875	1,234	1,029	110,537	1,748	1,389	9 153,120	2,38	1,44 34 1,39 32 12,43	157,49		2,415	78 20,68	7 31:	210	25,10	7 3	73	121 14,9	32 219	3 1	17,4	491	252 1	156 20,2	245	287	0	0 0
Sub total	Cộng	63,4	491 2,47	0,499	79,550 1	12,238,393	0		0	0	0	0	0	0	0	0	15,852	564,118	19,519	14,984	560,300	18,626	15,343	3 602,883	19,20	52 12,43	8 513,55	55 15	5,777 1,3	41 58,16	7 1,71	1,373	62,58	8 1,7	80	703 33,6	72 922	2 7	20 36,2	231	955 7	737 38,9	985	990	0	0
II NON ELIGIBLE PORTION	VÓN ĐÓI ỨNG																																													
Value add tax	Thuế giá trị gia tặng		0 94	0,818	6,115	940,818	0		0	0	0	0	0	0	0	0	0	244,613	1,590	0	225,796	1,468	3	0 225,796	1,46	38	0 178,75	55 1	1,162	0 18,81	6 12	2 (18,81	6 1	22	0 9,4	08 61	1	0 9,4	408	61	0 9.4	108	61	0	0
Value add tax Total: (I +II) III Interest during construction Grand Total: (I+II+III)	Tống: (I+II)	63,4	491 3,41 333	1,316	85,665 1	13,179,210	0		0	0	0	0	0	0	0	0	15,852	808,731	21,109	14,984	786,096	20,093	15,343	3 828,679	20,73	30 12,43	8 692,31	11 16	5,938 1,3	41 76,98	3 1,84	1,373	81,40	4 1,9	02	703 43,0	30 983	5 7	20 45,6	639 1	,016 7	737 48,3	393 1,	052	0	0 0
III Interest during construction	Tiền lãi trong thời gian xây	2,3	333 824 3.41		2,333 87,998 1	13 538 101	0			0	0	0	0			0	/8	808 731	/8	153	786 096	153	231	1 0 4 828.679	2	31 29 30 12.73	15		295	103	0 30	311		0 3	11	316	0 316	3 3	521		321 3	526	0	326	0	0 (
Grand Lotal : (I+II+III)	Tổng cộng: (I+II+III)	1 65,8	024 3,41	1,310]	01,998 1	13,536,101	0		ul .	U	υĮ	U	U	U	υį	U	15,930	000,731	21,187	15,137	100,096	20,246	15,5/4	4 628,679	20,9	ouj 12,73	13 692,31	17	,∠33 1,t	143 /6,98	ار 2,14	1,684	81,40	4 2,2	13] 1,	19 43,0	1,295	4 1,04	141 45,0	039 1	,33/ 1,0	/03 48,7	93 1,	2/01		<u> </u>
Price Escalation Price Escale	Dự phòng trượt giá																																													
Price Escale	Dự phòng trượt giá						1	1	1		1	1		1.024	1.076	1.0	48576	1.157776		1.07374182	1.24576698			3 1.34044527		1.1258999	1.4423191	11		15 1.5519353			1.6698824		1.20892	82 1.796793	51	1.237940	04 1.933349	982		506 2.08028			421 2.2383860	
d Price Escal	Dự phòng trượt giá						0)		0	0		0.024	0.076	0.0	48576	0.157776		0.07374182	0.24576698		0.09951163	3 0.34044527		0.1258999	1 0.4423191	11	0.15292	15 0.5519353	6	0.18059162	0.6698824	5	0.20892	82 0.796793	51	0.237940	0.933349	982	0.26765	506 1.08028	344	0.298074	421 1.2383860	J2
Loan interest during const. Financing rate Interest rate for YEN loan	Lãi vay trong thời gian xây dựng Tĩ lệ tài chính Lỗi vay đổi với khoặn vay bằng YEN	100.	.0%																																											
Temporaly allocation	Lãi vay đối với khoản vay bằng YEN Phân bố tạm thời				79.550						0		0	0		0	19.519		19.519	18,626		18,626	19,262	2	19,26	32 15.77	7	15	5,777 1,7	19	1,71	1,780)	1,78	80	922	922	2 9	955		955 ′	990		990	0	
Debt at the end of term	Nơ tại thời điểm cuối kỳ										0		-	0			19,519		0,0.0	38,223		,	57,638		,_	73,64	15		75,6		.,	77,741		-,	78,	973		80,24	45		81,5	556		81.8	482	-
Interest during const	Tiền lãi trong thời gian xây dựng										ō			ő			78			153			231	1		29	95		70,0	103		311			70,	316			321		01,5	326		81,8	328	
	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5																			100			20			A-0						- 01														

«Source» / «Nguồn»
- * Preliminary Financial analysis for HCMC UMRT Line No.1* prepared by NJPT / "Phân tích tài chính ban đầu cho Dự án Xây dựng tuyến đường sắt đó thị TPHCM Tuyến 1* của NJPT

Item / Hạng mục tính phí	Total / Tổng	2012 *1	2013	2014	2015 *2	Description / Mô tả
D Opening Expenses / Các chi phí đầu kỳ	4.488	0.848	0.632	2.463	0.544	
D.1 Office Furniture and equipment for staff / Thiết bị và đồ dùng văn phòng cho nhân viên	0.706	0.706	-	-	•	See "12 Open_Break" / Xem "12 Open_Break"
D.2 Advertisement cost / Chi phí quảng cáo	0.964	•	1	0.420	0.544	See "12 Open_Break" / Xem "12 Open_Break"
D.3 Staff cost / Chi phí nhân viên	2.776	0.136	0.614	2.025	-	See "6.Staff Costs" / Xem "6. Staff Costs"
D.4 Utility cost for head office / Chi phí tiện ích cho trụ sở	0.042	0.006	0.018	0.018	-	Such as Electricity, Water, Security, Cleaning and High-Speed Internet. / Ví dụ như điện, nước, bảo vệ, vệ sinh và Internet tốc độ cao. See "12.Opening_Break" / Xem "12.Opening_Break"
E / Đầu tư hệ thống CNTT văn phòng và kinh doanh ngoài vé	8.462	0.000	0.033	8.429	0.000	
E.1 Investment for Non-fare business / Đầu tư CNTT	4.702	-	0.033	4.669	-	See "13 IT" / Xem "13 IT"
E.2 Investment for Non-fare business / Đầu tư Doanh thu ngoài vé	3.760	-	-	3.760	-	> Installing "advertisement holder and utility for rental space" / Trang bị "giá treo bảng quảng cáo và công trình tiện ích cho khu vực cho thuê" > Furnishing parking lots and shops at medimum stations / Trang bị cho các bãi đỗ xe và cửa hàng tại các nhà ga trung bình (11) x 0.2MUSD + large stations / Các nhà ga lớn (3) x 0.4MUSD + No of railway cars / Số lượng toa xe (36) x 0.01MUSD

NOTE / GHI CHÚ

/ Dự toán chi phí cơ bản dựa trên kinh nghiệm của Nhóm SAPI; không bao gồm chi phí phát triển (Thiết kế quy trình kinh doanh, Thiết kế hệ thống, Cấu hình và đưa vào sử dụng) và huấn luyện. Dự toán chi phí chi tiết sẽ do Đơn vị Chuẩn bị thực hiện.

^{*1 :} Only 3months after establishment of company (from Oct. to Dec.) / Chỉ 3 tháng sau khi thành lập công ty (từ tháng 10 đến tháng 12)

^{*2 :} Only 6months before starting commercial operation (from Januarly to June) / Chỉ 6 tháng trước khi bắt đầu vận hành thương mại (từ tháng 01 đến tháng 06)

^{*3:} It is rough cost estimation based on SAPI Team's experience and developing (Business process Design, System Design, Configuration and Commissioning), and training costs are excluded. The detailed cost estimation shall be conducted by the preparation unit (PU).

Item 1.1	Mục 1.1	@PMU1 / Tại văn phòi [VND]		Unit Rate / đơn giá USD/m2	USD
		[a]	[b] = [a]*[C]/[D]	[c] = [b]/[A]	$[d] = [c]^*[B]$
Office Furniture and equipment	Trang thiết bị và đồ đạc trong văn phòng	4,330,000,000	268,048	231.08	706,180
NOTE	GHI CHÚ:			Total/ Tổng	706,180

^{*1:} Actual initial set-up cost in PMU Office / Chi phí thực ban đầu để thiết lập văn phòng BQLDA

Item 1.2 Advertisement cost	Mục 1.2 Chi phí quảng cáo	Unit Rate / Đơn giá *1	Times *2	•	/ Rate ang năm
item 1.2 Auvertisement cost	Muc 1.2 On prii quang cao	[M VND]	2	[M VND]	[M USD]
		[a]	[b]	[c] = [a] x [b]	[d] = [c]*[C]/[D]
July to December in 2014	Tháng 7 đến tháng 12 năm 2014	-	-	-	0.42
Channel HTV7 (15"): 12:00-12:05 weekday	Kênh HTV7 (15"): 12:00-12:05 mỗi ngày	18	132	2,376	0.15
Channel HTV7 (15"): after 19:45-20:00 weekday	Kênh HTV7 (15") : sau 19:45-20:00 mỗi ngày	24	132	3,168	0.20
Pamphlets for Distribution (20% of above TV advertisement fee)	Phát tờ rơi (20% chi phí quảng cáo trên TV ở trên)	-	-		0.07
January to March in 2015	Tháng 01 đến tháng 03 năm 2015	-	-		0.20
Channel HTV7 (15"): 12:00-12:05 weekday	Kênh HTV7 (15"): 12:00-12:05 mỗi ngày	18	66	1,188	0.07
Channel HTV7 (15"): after 19:45-20:00 weekday	Kênh HTV7 (15") : sau 19:45-20:00 mỗi ngày	24	66	1,584	0.10
Pamphlets for Distribution (20% of above TV advertisement fee)	Phát tờ rơi (20% chi phí quảng cáo trên TV ở trên)	-	-		0.03
April to June in 2015	Tháng 4 đến tháng 6 năm 2015	-	-		0.34
Channel HTV7 (30"): 12:00-12:05 weekday	Kênh HTV7 (15"): 12:00-12:05 mỗi ngày	30	66	1,980	0.12
Channel HTV7 (30"): after 19:45-20:00 weekday	Kênh HTV7 (15") : sau 19:45-20:00 mỗi ngày	40	66	2,640	0.16
Pamphlets for Distribution (20% of above TV advertisement fee)	Phát tờ rơi (20% chi phí quảng cáo trên TV ở trên)	-	-	-	0.06
NOTE:	GHI CHÚ:	•		Total / Tổng	0.76

^{*1:} From HTV7 homepage

^{*1:} trang chủ HTV7 *2: Thứ 2 đến thứ 6 mỗi tuần

Item 1.5 Utility cost for head office	Mục 1.5 Chi phí tiện ích cho trụ sở	@PMU1 (/ Tại văn ph [VND]		Unit Rate / đơn giá USD/m2	USD
		[a]	[b] = [a]*[C]/[D]	[c] = [b]/[A]	$[d] = [c]^*[B]$
Monthly Expenses (Electricity, Water)	Các chi phí hàng tháng (Điện, nước)	37,000,000	2,290	2.00	6112.00
Monthly Expenses (Security and Ceaning)	Các chi phí hàng tháng (Bảo vệ và vệ sinh)	46,000,000	2,848	2.46	7518.00
Monthly Expenses (High-Speed Internet)	Các chi phí hàng tháng (Internet tốc độ cao)	29,000,000	1,795	1.55	4737.00
NOTE	GHI CHÚ:			Total / Tổng	18,367
*1: Monthly average in Year 2008.	*1: Trung bình mỗi tháng trong năm 2008		_		<u>.</u>

^{*1:} Monthly average in Year 2008.

Conditions

Các điều kiện

001101110110					
Floor Space of PMU1 Office Building	Không gian làm việc của Tòa nhà văn phòng PMU1	[A]		1,160m2	
Floor Space of O&M Company's Office (Head office)	Không gain làm việc của Văn phòng của Công ty O&M (trụ sở)	[B]		3,056m2	
Exchange Rate	Tỉ giá	[C]	105.00Yen/USD	[D]	0.0065Yen/VND

^{*2:} Monday to Friday per week

Description/ Mô tả	Unit/ Đơn vị	Quantity/ Số lượng	Unit Price / đơn giá	Amount / Tổng	2013	2014	Note/ Ghi chú
1 Hardware / Phần cứng				1,945,000	33,000	1,912,000	
1.1 ERP servers/ Máy chủ ERP	Set/ Bộ	1	600,000	600,000		600,000	(Quad core 2.66GHz 2CPU, 24GBMemory) X 3 (Quad core 2.66GHz 2CPU, 18GBMemory) X 3 (Quad core 2.66GHz 2CPU, 8GBMemory) X 2 (Quad core 2.66GHz 2CPU, 4GBMemory) X 2 Including first year's maintenance fee / Bao gồm chi phí sửa chữa của năm đầu tiên
1.2 Other servers + Disc Storage / Máy chủ khác và lưu trữ bằng đ⊺a	Set/ Bộ	1	400,000	400,000		400,000	Other Servers (Quad core 2.66GHz 2CPU, 4GBMemory) X 3 Storage Rack X 1, 8TB Disc , SAN Switch X 2 Including first year's maintenance fee / Bao gồm chi phí sửa chữa của năm đầu tiên
1.3 ERP server related network devices / Máy chủ ERP liên quan đến các thiết bị mạng	Set/ Bộ	1	20,000	20,000		20,000	
1.4 Configration fee (Severs , OS and ERP set up) / Giá cấu hình (Các máy chủ và thiết lập OS, ERP)	man-month	35	20,000	700,000		700,000	
1.5 PC + MS office/ Máy tính và MS Office	Unit/ Đơn vị	120	1,500	180,000	30,000	150,000	Celeron 1.66GHz CPU, 2GB Memory, 250GB HDD
1.6 Printer&Copy machine/ Máy in & máy photo	Unit/ Đơn vị	30	1,500	45,000	3,000	42,000	
2 Software / Phần mềm				1,973,000	0	1,973,000	
2.1 ERP Software/ Phần mềm ERP							
2.1.1 For Development user/ Cho người sử dụng cấp độ triển khai phần mềm	Unit/ Đơn vị	10	7,500	75,000		75,000	
2.1.2 For Professional End user/ Cho người sử dụng chuyên nghiệp	Unit/ Đơn vị	376	4,250	1,598,000		1,598,000	
2.2 System management tools/ Công cụ quản lý hệ thống	Set/ Bộ	1	300,000	300,000	<u> </u>	300,000	
3 Annual maintenance fee for S/W and H/W / Phí bảo dưỡng hằng năm cho phần ci	ứng và phần m	èm		783,600	0	783,600	(1. Hardware + 2. Software) * 20% (1. Phần cứng + 2. Phần mềm) * 20%
	Total / Tổng			4,701,600	33,000	4,668,600	= (1+2+3)

Above estimation is based on SAPI's experienses of similar office IT system implementation projects

/ Dự toán ở trên dược dựa trên kinh nghiệm của SAPI về các dự án thực hiện hệ thống CNTT văn ph òng tương tự

Hardware configration, contents of software and each cost will be different, since it depends on company's situation and negotiation with vendors.

/ Cấu hình phần cứng, danh mục phần mềm v à chi phí từng phần sẽ khác nhau, dựa trên tình hình công ty và việc thương lượng với nhà cung cấp

Preparation unit should define its detail business requirement and request venders to provide detailed cost estimation of Office IT systems.

/ Vì thế đơn vị chuẩn bị cần xác định yêu cầu kinh doanh chi tiết để yêu cầu các nhà cung cấp đạt được mức dự toán chính xác các khoản chi phí thực hiện hệ thống CNTT văn ph òng

Besides above costs, O&M company should consider developing (Business process Design, System Design, Configuration and Commissioning) and training cost for Office IT system.

/ Ngoài các chi phí nên trên, Công ty VH&BD cần xem xét chi phí phát triển (Thiết kế quy trình kinh doanh, Thiết kế hệ thống, Cấu hình và đưa vào sử dụng) và huấn luyện cho Hệ thống CNTT văn phòng

Appendix 7. Example of Company Regulations

Each division of O&M company should have its business rules and procedures described in detail. As a whole, those set becomes the company's regulations. Table A7.1 shows "Regulation of Osaka Municipal Transportation Bureau" for reference purpose.

Table A7.1 Outline of Regulation of Osaka Municipal Transportation Bureau

Title	No of Pages
Part 1 General Provisions	
Act regarding the establishment of the Traffic Business in the city (Act 60, 28th 12, 1966)	2
Act regarding the abolishment of public facilities and exclusive utilization (Act 9, 19th 3, 1964)	2
Part 2 Business Handling	
Section 1 <office and="" rules=""></office>	
Rule on the roles of Deputy Mayor	2
Regulation on business duties of Transportation Bureau	28
Regulation on establishment of Director of Mass Traffic, etc	4
Regulation on the offices/centers of Transportation Bureau	2
Regulation on business duties of Training Center of Transportation Bureau	2
Regulation on business duties of Vehicle Management Office of Transportation Bureau	4
Regulation on business duties of Construction Management Office of Transportation Bureau	0.4
Regulation on business duties of Power Management Office of Transportation Bureau	0.4
Regulation on business duties of XXXX Construction Office of Transportation Bureau	1.2
Regulation on business duties of XXXX Construction Office of Transportation Bureau	2
Regulation on changes and locations of Sales Offices of Transportation Bureau	3
Section 2 <city congress=""> (Skipped)</city>	
Section 3 < Decisions and Charges>	
Act regarding exclusive decision items of Mayor	2
Rule on charges of Chief of Transportation Bureau	0.3
Regulation on exclusive decisions of secretary at Osaka City	7.7
Regulation on appointments of a deputy for Chief of Transportation Bureau	1
Regulation on authorities of Transportation Bureau	12
Section 4 <official and="" certificates="" seals=""></official>	
Regulation on official seals, etc. of Transportation Bureau	4
Regulation on issues of a certificate for business duty riding for Transportation Bureau	1
Section 5 < Documents, Public Relations and Statistic>	
Act on how to publicize	1
Regulation on how to publicize for Transportation Bureau	1
Regulation on publication of Transportation Bureau Information	1
Regulation on publication of official announcement of Transportation Bureau	1.2
Act on Free Access to Information	4.8
Act on official document archives	1
Regulation on official document management at Transportation Bureau	5.3
Regulation on recording, etc. of requests regarding work execution by Transportation Bureau personne	
Act on Protection of Personal Information	1
Outline of Management of Protection of Personal Information at Transportation Bureau	74
Regulation on use of information and communication technologies for administrative procedures Transportation Bureau	
Regulation on management of information technologies at Transportation Bureau	4

	No of Pages
Regulation on protection and management of data processed at Transportation Bureau	40
Regulation on forms at Transportation Bureau	11
Regulation on treatment of forms in automation works at Transportation Bureau	2
Regulation on management of hearings and public relations at Transportation Bureau	2
Regulation on statistic of business performance of Transportation Bureau	2
Section 6 <others> (Skipped)</others>	
Part 3 Human Resources	
Section 1 <appointment and="" status=""></appointment>	
Paragraph 1 Appointment	43
Paragraph 2 Status	21
Paragraph 3 Retirement	6
Section 2 <office regulations=""></office>	
Paragraph 1 General Rules	103
Paragraph 2 Duties	59
Paragraph 3 Trainings	17
Paragraph 4 Commendation and Reprimand	17
Paragraph 5 Safety and Health	16
Part 4 Salary	
Section 1 <salary and="" benefits=""></salary>	107
Section 2 <travel expenses=""></travel>	27
Section 3 <compensation accidents="" for=""></compensation>	23
Section 4 <retiring allowance="" and="" payment=""></retiring>	47
Section 5 <dress code=""></dress>	1
Part 5 Welfare	
Section 1 <official housing=""></official>	19
Section 2 <union></union>	59
Section 3 <scholarship></scholarship>	3
Section 4 <allowance children="" family="" for=""></allowance>	14
Part 6 Finance	
Section 1 <financial management=""></financial>	25
Section 2 <accounting></accounting>	72
Part 7 Transportation	
Section 1 <general rules=""></general>	63
Section 2 <transit on="" roads=""></transit>	65
Section 3 <mass and="" light="" rail="" rapid="" transit=""></mass>	89
Section 4 <driving></driving>	69
Part 8 Construction	49
Appendix Labor Agreement	

Appendix 8. Company Name

While the most of MRT companies in Asia own the name composing of "city" and/or "railway", Manila and Kuala Lumpur (KL) present their mission through company name. Manila and KL seem to hold their original position.

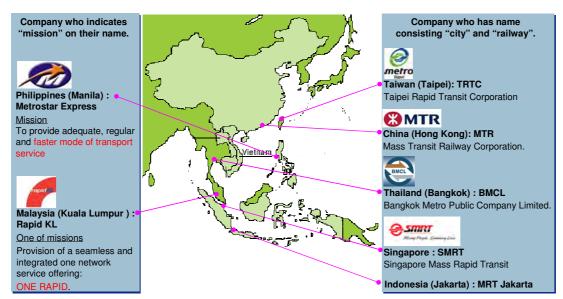


Diagram A8.1 Name of MRT Companies in Other Asian Cities

The name of company owned by HCMC generally has "Saigon" + "Business Line".



Diagram A8.2 Name of Companies owned by HCMC

SAPI Team would like to recommend the style of city name "Saigon" + "company mission/vision" or "Ho Chi Minh" + "company mission/vision" as shown in Diagram A8.3. In addition, some more ideas for company name are described in Diagram A8.4.

Company Mission

Since UMRT in HCMC is introduced along with the strategy in HOUTRANS, Mission and Vision of O&M company should follow the objective of HOUTRANS.

One of Objectives in HOUTRANS

- Promotion and development of attractive public transport.

Mission of O&M company (assumption)

- Provide attractive public transport to city people.

Vision of O&M company (assumption)

- To be an exclusive transport network service provider in HCMC. (O&M company will provide as a transport network, not only line #1 but also other lines and feeder buses.)



City Name "Saigon"



■Nominated Name of O&M Company

- Saigon Transport Network Services (STNS)
- * Saigon Urban Network of Transportation (SUNT)
- Saigon Urban Network Services of transportation (SUNS)

Diagram A8.3 O&M Company in HCMC

Mission: Contribute to the environmental protection in HCMC

To be a Ecology-Friendly Railway Line Vision:

- > Green Line
- > Green Earth Railway

Fastest transportation.

Mission: Providing mobility and accessibility to urban services

Vision: To be a fastest service provider

- > Star Line Railway (*)
- > Rail Star (*)
- > High Speed connect
- > Ho Chi Minh Express
 - *: Considering Vietnamese national flag.

Railway Corporation.

Saigon Urban Railway Corporation Saigon Urban Railway Transportation

Diagram A8.4 Other Ideas for Company Name

Discussed and Confirmed Points in Seminars.

		1st on-s	ite work	2nd on	-site work	3rd on-site work	
TOR		1st Seminar	2nd Seminar	3rd Seminar	4th Seminar	5th Seminar	After on-site work
		12-May	12-Jun	13-Jul	24-Jul	27-Aug	
		This was confirmed that it should be "Providing Safe					
Role of the O&M Organiza	ation	and Reliable UMRT Operation" to full fill project	-	-	-	-	-
		objective.					
			This was confirmed that it should be "One-member				
	Type	_	limited liability company" based on regulations of the	_	-	_	_
Scheme of the O&M	. , , ,		Vietnamese Law of Enterprise.				
Organization			It was confirmed that there is little possibility to offer				
	Possibility of equitization	-	IPO in the future, because of legal constraint.	-	-	-	-
	equilization						
			Although some members of Task team had opinion "assets must be retained in HCMC", there is no				
			other party in HCMC who can maintain assets. Thus				
Asset Ownership		-	it was concluded "transferring all assets and	-	-	-	-
			equipment of urban railway to O&M Company".				
			This was confirmed that the type of one O&M	Although the issue of future lines is out of SAPI	In replying to Task team's request about BOT, some	In reniving to Task team's request, some cases of	SAPI team submitted study report to
				team's scope, some concession cases from other	typical issues in Bangkok UMRT were presented for		separately from final report.
			is most suitable.	countries were presented for Task team's reference.		-> Task team requested SAPI team to conduct	
			Apost from the charge conclusion. Took toom	-> Task team requested SAPI team to conduct further study of BOT scheme.	-> Task team recognized that BOT seems inefficient for HCMC. Then they requested SAPI team to	further research of the coordination in such issues as sharing of fare rate cost and the combined	
Scope of the Organization	- Railway Lines		Apart from the above conclusion, Task team concerned BOT scheme for other UMRT lines and	lattier study of BOT scheme.	conduct further study for other types.	management between the O&M Company under	
	•		requested SAPI team to study "conditions to be		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	MAUR and another O&M Company of BOT-based, if	
			defined to appeal for investments and the conditions			possible.	
			for the coordination of management, operation with MAUR's O&M Company".				
			WACH'S ONW Company.				
			It was confirmed that O&M company will manage	In replying to Task team 's request, SAPI team	Some pictures of non-fare business (4 types) were		
	Deilwey feeility		"advertisement, rental space, shops and parking	explained 10% of total revenue could be target of	reviewed to form business image in Task team.		
	Railway facility related	-	lots" as their non-fare business. Task team requested SAPI team to study how much revenue	O&M company's non-fare business. (10% is average of other Asian countries' non-fare revenue.)		-	-
	10.0.00		can be expected from those 4 types non-fare	-> Task team understand that 10% is feasible target			
			business.				
			In replying to Task team's request, SAPI explained	Property development: Task team agreed that it			
		property development and feeder bus services by O&M organization.	that successful cases of property development and bus services in other Asian cities and did not	should be applied to the remaining metro lines only, not to the metro line No. 1. But they requested SAP			
Scope of the Organization		oum organization	recommend them due to following reason.	Team to research the specific implementation			
- Non-fare Business			- Property development : time constraint	possibility of a typical metro line and estimate the			
	Property		- Bus services : DoT is best position to manage this.				
	development			revenue> SAPI team replied it is not their scope of work.	-	-	-
	Feeder bus services			2 G. W. Frederick Topinou II to Hot with scoope of Work.			
				Feeder bus: Task team commented DoT will			
				manage feeder bus services with subsidy from HCMC. But they would like to transfer it to O&M			
				company when UMRT#1 is financially stable.			
				, ,			
			Overall structure drafted based on that of Osaka and TRTC was confirmed.	SAPI team clarified with Task team about their requests as follows:	Organization structure based on one-LLC, with detailed number of personnel per divisions, title and	SAPI team added "Board of General Directors" *1	SAPI team understand that the position training center is subject to their funct
			-> Task team requested SAPI team to adjust it with	- Training cost: At this stage, it is difficult to specify	qualification was confirmed.	team agreed with "Board of General Directors" and	When it acts as examination team of
			one-LLC type under MAUR and further develop it,	all activities, thus it should be included in gross	-> SAPI team was requested further study for	request SAPI team to study further whether "training	
Organization Structure		-	such as number of personnel per each division, title	·	necessity of deputy directors and training center.	center" should be established in "operation unit" or	"operation". Otherwise, it can be a p
			and required qualification, cost for salary and training cost/contents.	raining contents: Those are scope of GC and contractors, not scope of SAPI team.		under "Board of General Directors" as independent	operation unit to save operational expenses.
			cost/contents.	Contractors, not scope or SAFT team.		*1: Although "Board of General Directors" is not stated in	expenses.
						Law on Enterprise, it is quite common in Vietnam.	
			SAPI team pointed out O&M company needs cash		In replying to Task team's request, the estimation of	In replying to Task team's request, the detailed	SAPI team incorporated the confirme
			contribution from HCMC to cover operational		cash contribution was presented.	explanation was confirmed with Task team.	explanation into final report.
			expenses for initial years, investment of non-fare		-> Task team requested SAPI team to add detailed	-> Task team requested SAPI team to incorporate	,
	Cash contribution by	_	business/Office IT systems and cash shortage in	-	explanation.	the confirmed explanation into Final report.	
	HCMC		2015 (first operation year)> Task team recognized it and requested SAPI				
Financial Plan			team to conduct detailed estimation.				
Financial Plan							
			SAPI team followed GC's latest study and present		•	In replying to Financial department's comment,	
		on GC's latest report (working paper 36).	rough financial figure to Task team.		in every year. Financial department of HCMC pointed out that it is not feasible.	increase of fare was assumed in every 5 years until 2015. (three times only)	
	Fare rate etc			-		-> This was confirmed with Task team including	-
						member of financial department.	
	1		Business risks and mitigation can be identified at				
			this stage were reviewed.				
1			-> Task team commented stability fund is not				
		_	feasible for HCMC. Task team requested SAPI		-	-	-
Business Risks							
Business Risks			team to develop financial plan with cash subsidy from HCMC annual budget only.				

Discussed and Confirmed Points in Seminars.

TOR 1st Semir			1st on-site work	2nd on-site work		3rd on-site work	
		1st Seminar	2nd Seminar	3rd Seminar	4th Seminar	5th Seminar	After on-site work
		12-May	12-Jun	13-Jul	24-Jul	27-Aug	
2 Roadmap		-	SAPI presented overview of roadmap.	SAPI presented the detailed roadmap. Task to disclosed the revision on date of starting componention. (Jan 2014 -> Jul 2015)	Revised roadmap was reviewed. Task team commented that they would like to transfer the knowledge of PU to O&M company as much as possible. There is personnel reshuffling risk by order of HCMC. Thus they would like to establish O&M company earlier, if possible, to avoid that risk. -> SAPI team incorporated it into roadmap.	r -	-
To propose a detailed work plan for preparation of the O&M organization establishmen	Forming preparation unit (PU)	-	Task team declared; - MAUR will form PU by April 2010 under MAUR The staff of PU will transfer to O&M company after establishment of O&M company HCMCPC already approved and prepared the budget for staff training.	-	-	-	-
	Clarification on Railway Law	-	SAPI team reported there are some legal constraints which directly affect to hiring plan, salary level and training plan of O&M company. -> Task team recognized it and requested SAPI team to conduct further study.	-	SAPI team reported the detailed legal constraints and recommended PU to conduct the clarification work with MoT. -> Task team commented that hopefully JICA will amend Railway Law, because now they are developing technical standard in Hanoi with MoT.	-	-
	Rregistration	-	Rough registration procedure was reviewed. Task team recognized that refining financial plan prior to registration work is required to fix capital of company.	-	Steps consists of evaluation process and registratic process was reviewed. -> Task team commented that 180/2004/ND-CP is already out of date. -> SAPI team replied it was confirmed with local lawyer that it is still alive. -> Task team commented they will check it.	n Task team commented: Even if 180/2004/ND-CP is still alive, the steps of checking MPI and Prime minister are not required. Because UMRT project was already approved by GoV. According to them, all registration issues other than technical can be decided within provincial-level People's Committees (HCMCPC).	SAPI team incorporated Task team's comments into final report.
- Others	Office IT System	-	Task team recognized Office IT system is important for O&M company. They commented technical and financial support from JICA is required to implement the system.		-	Task team requested SAPI team to include a proposal to JICA for investment source to Office IT systems by using redundant fund.	SAPI team noted it as " investment on office IT systems should be discussed including applying to JICA Loan." in Final report.
	Name of O&M company	-	-	-	Task team requested SAPI team to propose the name of O&M company in line of company vision and business strategy.	In replying to Task team's request, style of "Saigon + mission/vision" was proposed as the name of company> Task team requested there must be alternative "Ho chi minh city + mission/vision" style.	SAPI team incorporated it into appendix 8 of final report.
	Technical support from JICA	-	Task team requested long term technical support from JICA to increase capability of O&M company.	-	-	-	-