

MANILA LRT1 EXTENSION, OPERATIONS AND MAINTENANCE PROJECT

Preliminary Information Memorandum

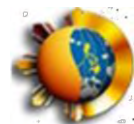


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Transaction Advisors



With Assistance From



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ACRONYMS

| | |
|-------|---|
| AFCS | Automatic Fare Collection System |
| BOT | Build-Operate-Transfer |
| BTO | Build-Transfer-Operate |
| DBP | Development Bank of the Philippines |
| DENR | Department of Environment and Natural Resources |
| DOF | Department of Finance |
| DOTC | Department of Transportation and Communications |
| EO | Executive Order |
| ICC | Investment Coordination Committee |
| IFC | International Finance Corporation |
| IRR | Implementing Rules and Regulations |
| JICA | Japan International Cooperation Agency |
| LRV | Light Rail Vehicle |
| NEDA | National Economic and Development Authority |
| PIM | Preliminary Information Memorandum |
| PPP | Public-Private Partnership |
| RA | Republic Act |
| RFP | Request for Proposals |
| ROP | Republic of the Philippines |
| ROW | Right-of-Way |
| SBAC | Special, Bids and Awards Committee |
| SCADA | Supervisory Control and Data Acquisition |

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Purpose of this Memorandum

The purpose of this Preliminary Information Memorandum is to provide preliminary information to potential investors on the proposed transaction, and to solicit comments and feedback on key issues, bid process and timing for the selection of the winning bidder.

Investor feedback is actively encouraged. In particular, the Department of Transportation and Communications (DOTC) and the Light Rail Transit Authority (LRTA) are keen to hear investor's thoughts on the following areas:

- (i) Appetite and interest in participating in the Transaction.
- (ii) Risks and concerns associated with the Transaction.
- (iii) Manner and timetable for the competitive tender process.

Feedback may be sent by email to DBP and IFC at the contact information provided below:

| | | | |
|-----|---------------|-------------------|----------------|
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Information Contained in this Preliminary Information Memorandum

This PIM summarizes the major elements of the Manila LRT1 Extension, Operations and Maintenance Project, including the current regulatory framework for light rail, the service area, tariff structure, the configuration of Metro Manila's transport system, and government institutions that would be involved in the implementation of the Project. It also summarizes possible investment issues and the BOT Law procurement process.

EXECUTIVE SUMMARY

The Investment Opportunity

- The Manila LRT1 Extension, Operations and Maintenance Project (the “Project”), sponsored by the Department of Transportation and Communications (DOTC) and the Light Rail Transit Authority (LRTA), is one of the priority projects of the Republic of the Philippines (ROP) under its Public-Private Partnership (PPP) Program launched by President Benigno Aquino III in November 2010.
- An integral component of the Rail Transit Network envisioned in the Metro Manila Urban Transportation Integration Study, the Project aims to improve the existing LRT1 system that currently provides vital access to central Manila and expand this further at its southern end, particularly to the populous and rapidly developing Cavite province (“Cavite Extension”). This project would enhance the Metro Manila and Cavite regions’ competitiveness and quality of life, fostering sustainable, transit-oriented development in Metro Manila and the surrounding provinces.
- Current LRT1 operations cover approximately 20kms of service line with a total of 20 stations from Roosevelt Avenue to Monumento (North Link) to Baclaran. The 5.7km North Link started commercial operations in 2010. A common station connecting LRT1, LRT Line 3 (MRT3), and possibly MRT Line 7 is currently being studied for implementation. An 11-hectare area within the LRTA compound in Pasay City serves as the existing line’s depot accommodating its current fleet of 139 light rail vehicles (LRVs) and various buildings of the LRTA. Ridership on the line is significant, currently about half a million passengers ride LRT1 everyday.
- The DOTC and the LRTA will undertake complementary projects, via traditional public procurement, intended to promote the Project’s viability and sustainability. This will include the design and procurement of new rolling stock required for the Project and depot development, which covers the construction of a new satellite depot and expansion of the current depot funded through Official Development Assistance (ODA) from the Japan International Cooperation Agency (JICA). Furthermore, the LRTA is currently in the process of tendering out various system rehabilitation and upgrade works aimed at improving the condition of the existing LRT1 assets. These projects, when completed, will be turned over at no cost to the Concessionaire, which will then be responsible for the assets’ operation and maintenance.
- Private participation will be required for the operations and maintenance (O&M) of the existing LRT1 assets; financing, design, procurement, construction/installation of the complete railway infrastructure and systems for the Cavite Extension; and commissioning and O&M of the integrated LRT1 system (existing and extension) .
- The ROP, represented by the DOTC and the LRTA, will be the direct counterparties in the Concession Agreement (CA) to be procured under the Philippine BOT Law (RA 6957, as amended by RA 7718) and its Revised Implementing Rules and Regulations dated April 2006 (the Revised IRR).
- The Project was approved by the National Economic and Development Authority (NEDA) Board on March 22, 2012.

I. INTRODUCTION

The Philippine government launched in November 2010 an aggressive program for PPPs in order to mobilize much needed investments in infrastructure that would support its objectives of sustained and inclusive economic growth.

The Manila LRT1 Extension, Operations and Maintenance Project is among the government's priority PPP projects aimed at addressing the backlog in infrastructure development in the country and spur economic development especially along the extension of the LRT1 corridor.

In preparation for the competitive tender, the DOTC engaged the services of the Development Bank of the Philippines (DBP) with the International Finance Corporation (IFC), an affiliate of the World Bank, to act as Lead Transaction Advisors in developing, structuring and assisting the DOTC, and its attached agency, the LRTA, in the conduct of the competitive tender for the Project. IFC in turn has hired specialized consultants for this project to support the work of the Advisors. These include: URS (international technical advisor) and Pinsent Masons (international legal advisor).

Furthermore, the DOTC is currently in the process of obtaining an ODA facility from JICA to finance the procurement of new rolling stock and depot development, while the LRTA, using local funds, is currently tendering out major rehabilitation works for the existing LRT1 system.

TRANSACTION PREPARATION PROCESS

The DOTC/LRTA and its advisors have prepared and structured the legal, technical and economic aspects of the Manila LRT1 Project and now wish to conduct a preliminary market test of the Transaction opportunity with potential investors. The feedback from this preliminary briefing and subsequent consultations with investors will help inform the DOTC, the LRTA and the advisors in finalizing the terms of the Transaction and the process/timetable for tender.

II. PROJECT BACKGROUND

Severe traffic congestion and environmental degradation characterize Metro Manila particularly at city centers where high density development continues. Urban sprawl has spilled over onto surrounding provinces (Cavite, Laguna, Bulacan and Rizal) which are within daily commuting distance, with population in these areas now reaching 5 million. About 22.5 million motorized trips are made every day in Metro Manila, of which about 70% are carried by public transportation. With increasing vehicle ownership, congestion is expected to worsen, further increasing travel times of commuters.

Urban rail services provide a more efficient alternative to road-based services. The current LRT network however needs to be expanded in reach and capacity in order to significantly increase daily passenger volumes. Currently, the three LRT lines collectively carry around 1.5 million passengers per day which accounts for less than 10% of person trips in Metro Manila.

A. ORIGINAL LINE

The LRT Line 1 began construction in 1981 with the first LRVs arriving in 1982. By December 1984, a portion of LRT1 was opened to the public and in 1985, the original LRT1 line from Baclaran, Pasay City to Monumento in Caloocan City, approximately 13.95km in length, became fully operational.

LRT1 was one of the pioneer PPP projects in the Philippines as the operations and maintenance of the facility was contracted out to METRO, Inc., a subsidiary of the Manila Electric Company, for 16 years under an operations and maintenance (O&M) agreement with the LRTA. On 31 July 2000, the O&M contract with METRO expired. LRTA decided not to renew the agreement or retender it, and took over the operations of LRT 1 which it has been managing up to the present.

B. NORTH EXTENSION PROJECT

In July 2008, construction of the LRT1 North Extension project commenced which extended the LRT1 system by an additional 5.7km from Monumento up to North Avenue in Quezon City. The north extension includes three additional stations at Balintawak, Roosevelt, and a common station near North Avenue to connect with the existing Metro Rail Transit 3 (MRT3) line and the planned MRT7 line. At present, however, only the Balintawak and Roosevelt stations are operational pending a review of the design and exact location of the common station.

C. FUTURE PROJECTS/LINE EXTENSIONS

The government is also considering an additional extension from Bacoor to Imus and from there a further extension to Dasmariñas City, both in Cavite. DOTC/LRTA intends to undertake a business case study soon to gauge the financial and economic viability of pursuing this further extension.

III. EXISTING SYSTEM DESCRIPTION

The existing LRT Line 1 system (the “Existing System”) is composed of a depot located at the LRTA compound in Pasay City, the electrical and mechanical system, 139 LRVs or rolling stock, 20 stations, railway infrastructure including approximately 20kms of viaducts and tracks and other related assets.

A. ROLLING STOCK

The table below enumerates the current train fleet for the Existing System comprising in total 139 trains sets (combination of 3- and 4-car trains).

Table 1: LRT1 Existing Rolling Stock

| RollingStock | First-generation | Second-generation | Third-generation |
|------------------------|--|---|---|
| Year | 1984; refurbished in 1999/2004 | 1999 | 2007 |
| Manufacturer | BN | Hyundai Precision and ADtranz | Kinki Sharyo / Nippon Sharyo |
| No. of LRVs | 64* / Currently 63 | 28 | 48 |
| Car type | 8-axle (4 bogie) rigid body | 6-axle (3 bogie) rigid body | 6-axle (3 bogie) rigid body |
| Car size | 2.5 m (8 ft 2 in) wide; 29.28 m (96.1 ft) long | 2.59 m (8 ft 6 in) wide; 26–26.5 m (85–87 ft) long | 2.59 m (8 ft 6 in) wide; 26–26.5 m (85–87 ft) long |
| Train length | <i>Original</i> - 59.59 m or 195.5 ft (2-car); <i>Refurbished (1999)</i> - 89.37 m or 293.2 ft (3-car) | 105.7 m or 347 ft (4-car) | 105.7 m or 347 ft (4-car) |
| Articulation | Double | Single | Single |
| Capacity | <i>Original</i> - 748 passengers (2-car); <i>Refurbished (1999)</i> - 1,122 passengers (3-car) | 1,358 passengers | 1,384 passengers |
| Doors | Plug-type; 5-doors/side | Interior sliding type; 4-doors/side | Interior sliding type; 4-doors/side |
| Traction system | DC induction mono-motor | AC induction mono-motor | AC induction mono-motor |
| Traction power | 750 V DC OCS; pantograph power connection | 750 V DC OCS; pantograph power connection | 750 V DC OCS; pantograph power connection |
| Carbody shell | BI sheet | Stainless steel | Stainless steel |
| Ventilation | <i>Original</i> - Forced ventilation; 12 units/car <i>Refurbished (2004)</i> - Air-conditioned; roof-mounted duct type; 5 units/car | Air-conditioned; roof-mounted duct type; 2 units/car | Air-conditioned; roof-mounted duct type; 2 units/car |
| Status | Refurbished / In Service | In Service | In Service |

*1 BN LRV was severely damaged in 2000 and was subsequently decommissioned.

Source: LRTA

Figure 1: LRT1 3rd Generation LRV (Kinki Sharyo/Nippon Sharyo)



Source: http://en.wikipedia.org/wiki/File:LRT1-Manila_towards_Taft_Station.jpg

B. POWER

Power is supplied via MERALCO's 34.5 kV ac electric utility network. MERALCO powers eight rectifier substations along the existing line and one in the depot area. The substations convert utility power into 750 V dc traction overhead contact power supply and into 480 V ac auxiliary power supply for the station and depot facilities. A capacity expansion project wired all rectified stations to a Supervisory Control and Data Acquisition (SCADA) system for monitoring/control. All passenger stations are also provided with separate 220 V AC service drops from the MERALCO local supply network while a standby generator has been installed at the Operations Control Center (OCC) to ensure functionality during power outages.

C. SIGNALING

The original signaling system was based upon relay type trackside systems, with trains running at 2- to 3-minute headways. The signaling was of a fixed block type with two aspect signals, red and green, at each block section. A buffer block section always separates two trains. The trains were manually driven, protected by an automatic train stop if passing a red signal or over-speeding. Recently, the signaling system was totally replaced using Siemens technology which consists of an OCC, three SIMIS/SICAS interlocking stations (Baclaran, Central Terminal, and Monumento), Automatic Train Protection (ATP) system: wayside, ATP: On-board and axle counting system.

D. TELECOMMUNICATIONS

The telecommunications system recently had a major upgrade with new installations such as:

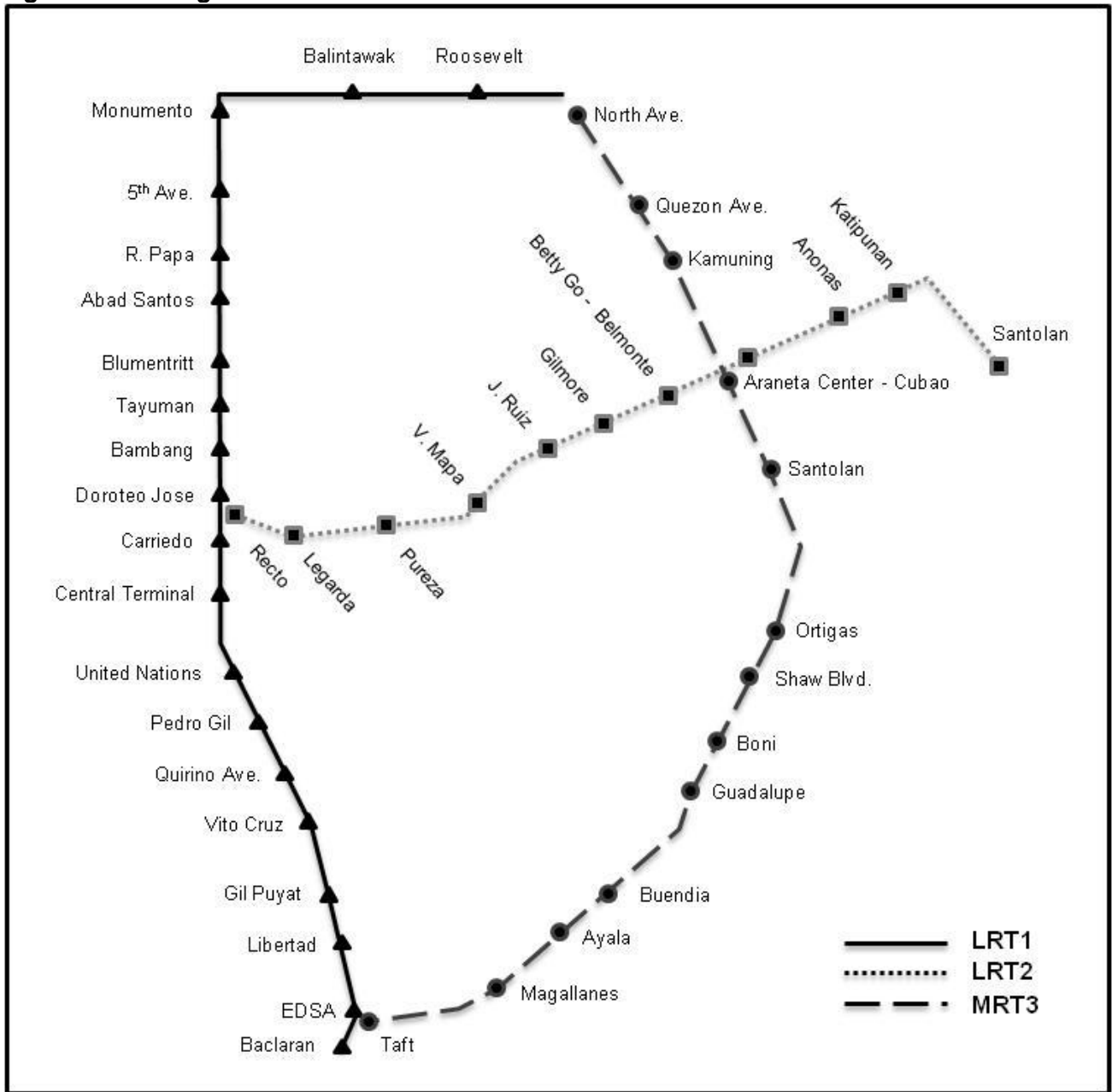
1. New Master Clock system;
2. Complete replacement and upgrade of the Public Address system;
3. New Transmission Network Management system;
4. New CCTV system;
5. New SCADA for RSS monitoring and control;
6. New Fiber Optic Transmission system;
7. Separate Automated Fare Collection LAN;
8. Upgraded Private Automatic Branch Exchange (PABX);
9. Additional 28 mobile radio units and 60 portable hand-held units;
10. New structured cabling system, RSS connection, and depot LAN infrastructure;
11. Lightning Protection and Grounding; and
12. Uninterruptible Power Supply (UPS).

E. STATIONS AND ALIGNMENT

The figure below shows the current network map. The original northern end is at Monumento station but this was extended by another 5.7kms comprising of 2 new stations (Balintawak and Roosevelt). The line is also physically connected to the MRT3 system near the SM North EDSA/Trinoma mall area which is the proposed location of a common station which is still under review by DOTC/LRTA. The proposed common station may be included as part of the Existing System once completed.

The Existing System intersects with LRT2 in Manila where the LRT1 Doroteo Jose station is linked to the LRT2 Recto station via an elevated walkway. The line also connects with MRT3 and major bus routes at EDSA station before terminating at Baclaran station.

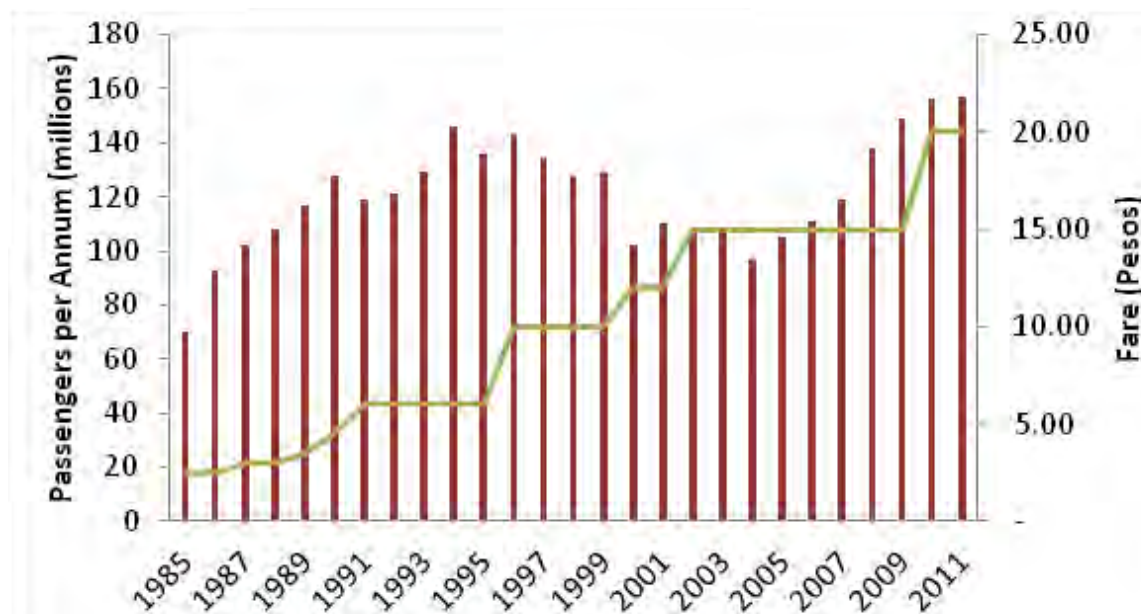
Figure 2: Existing Metro Manila LRT/MRT Lines



IV. SYSTEM PERFORMANCE

Trends in the ridership and tariffs of the Existing System since it commenced operations are shown in the following graph with the red bars showing the annual recorded ridership and the green line tracking the maximum fare price.

Figure 3: LRT1 Historical Ridership and Fare (1985-2011)



Source: LRTA

Since 1996, capacity constraints due to operational and maintenance problems impacted ridership. Between 1998 and 2002 the number of LRVs available in during peak hours was only around 70% of LRTA's target.

The improvement in LRV availability and hence capacity in 2004 and 2007, as part of the LRT Line 1 Capacity Expansion Project, contributed to the increase in ridership beginning in 2005.

The current LRT1 fare structure is set out in the table below. In 2010, the maximum fare was increased to Php20 inclusive of the North Extension line from Monumento to Roosevelt. Despite the increase in the fare, ridership continued to increase. This increase is likely a result of the extension but may also be due to the fact that LRT1 fares are still relatively cheaper compared to alternative modes of transportation such as buses for the same distance.

Table 2: Current LRT1 Fare Matrix

| Distance (no. of inter-stations) | Fares excluding those to and from Balintawak or Roosevelt Station | | | | Fares to and from Balintawak or Roosevelt Station | | | | | | | |
|---|---|-----|------|-------|---|-----|-----|------|-------|-------|-------|----|
| | 1-4 | 5-8 | 9-12 | 13-17 | 1-2 | 3-4 | 5-7 | 8-10 | 11-13 | 14-16 | 17-18 | 19 |
| Single Journey Ticket Fare (PhP) | 12 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 20 | 20 | 20 | 20 |
| Stored Value Ticket Fare (PhP) | 12 | 13 | 14 | 15 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

Source: http://www.lrta.gov.ph/tickets_fares.htm

V. SYSTEM UPGRADES

Several upgrades for system maintenance and capacity improvement have been done, as follows:

1. 1999 LRT Line 1 Capacity Expansion Project (Phase I). Phase I raised line capacity by 50% to 27,000 pphpd. Seven new air conditioned 4-car ADtranz trains were added while the existing BN fleet was converted into 21 x 3-car trains.
2. 2001 Automatic Fare Collection System (AFCS). An AFCS based upon plastic recyclable magnetic tickets (with automatic gates) replaced the original token-based system.
3. 2001 Rolling Stock Rehabilitation. Original BN fleet rehabilitation was also done, covering:
 - a. Interior refurbishment and modernization with repainting and corrosion protection.
 - b. Electrical and mechanical works to prepare vehicles for installation of new components.
 - c. Roof section preparatory works for air con units and additional power supply unit.
4. 2002 Track Maintenance and Ballast Renewal. Work was done on the track and structures such as ballast renewal, damaged sleepers replacement, tamping, and drainage repair.
5. 2004 LRT Line 1 Capacity Expansion Project (Phase II) - Package B. Air conditioning was installed in the original fleet of LRVs in 2004.
6. 2010 LRT Line 1 Capacity Expansion Project (Phase II) - Package A. Phase II increased the capacity of the existing line to 40,000 pphpd at a minimum headway of 112.5 seconds through addition of new equipment and 12 x 4-car Kinki Sharyo/Nippon Sharyo trains, and upgrading of the traction power supply and distribution system, track work, the AFCS, signaling and telecommunications systems and civil works at some stations and the depot. In particular, the existing signaling system was replaced with a signaling and train control system based upon Automatic Train Protection (ATP) and Automatic Train Supervision (ATS). Some old signaling equipment was retained (e.g. point switch machines, track circuits and signals).

Due to the low fares charged for LRT1, the system upgrades mentioned above and any additional capital investments (e.g. for additional rolling stock and refurbishments) required subsidies from the national government.

Presently, even at the current low fare structure, fees from users of LRT1 cover operations and maintenance costs of the system as shown by having a positive fare box ratio (see table below).

Table 3: LRT1 Farebox Ratio (2008-2011)

| Year | 2008 | 2009 | 2010 | 2011 |
|-----------------------|------|------|------|------|
| Fare box Ratio | 1.48 | 1.39 | 1.21 | 1.09 |

Source: LRTA Website

Although the farebox ratio has been decreasing, this is brought about by higher operating and maintenance costs, particularly labor costs, coupled by restrictions in increasing fares. The sharp decrease in 2011 is also partly due to a significant accounting expense recognized by LRTA.

Even with a positive fare box ratio, in some cases, maintenance has been deferred due to lack of readily available funds to procure capital spares coupled by certain limitations or restrictions in the procurement guidelines of government. This has resulted in cannibalizing of some LRVs to ensure the operation of the system.

In order to mitigate the effects of the degradation of capacity on the route due to renewal and refurbishment deferrals, the following major projects are currently being tendered by the DOTC and LRTA under their Php1.062 Billion LRT Safety, Reliability and Capacity Improvement Program:

Table 4: LRT Safety, Reliability and Capacity Improvement Program

| Project Number | Title | Brief description | Duration (Months) | Approx. Value (PhP millions) |
|----------------|---|--|-------------------|------------------------------|
| 1 | Rail Replacement | Replacement of 23,000 metres of rail | 36 | 381 |
| 2 | HD Bolts to OHLE Gantries | Replacement of Holding Down Bolts to OHLE Gantries | 36 | 150 |
| 3 | Replace cracked bogies | Replacement of 34% of the Series 1 LRT vehicle bogies; (63% were replaced in 1998) | 34 | 184 |
| 4 | Series 1 Fleet Refurbishment | Refurbishment of passenger spaces, including repair of roof leaks, water damage to walls and floor, repainting body shells, | 12 | 150 |
| 5 | Restoration of 14 LRVs from 2 nd & 3 rd generation fleets | Full restoration to ameliorate the lack of spare parts and cannibalization of spares from three broken down sets and two collision damaged LRVs. | 18 | 197 |

Source: LRTA Website

A further project to improve line speed and capacity is the replacement of the time expired ballast. Currently LRTA is studying whether the preferred mode of replacement should be some slab track variant or ballasted track, glued or unglued.

VI. PROJECT DESCRIPTION

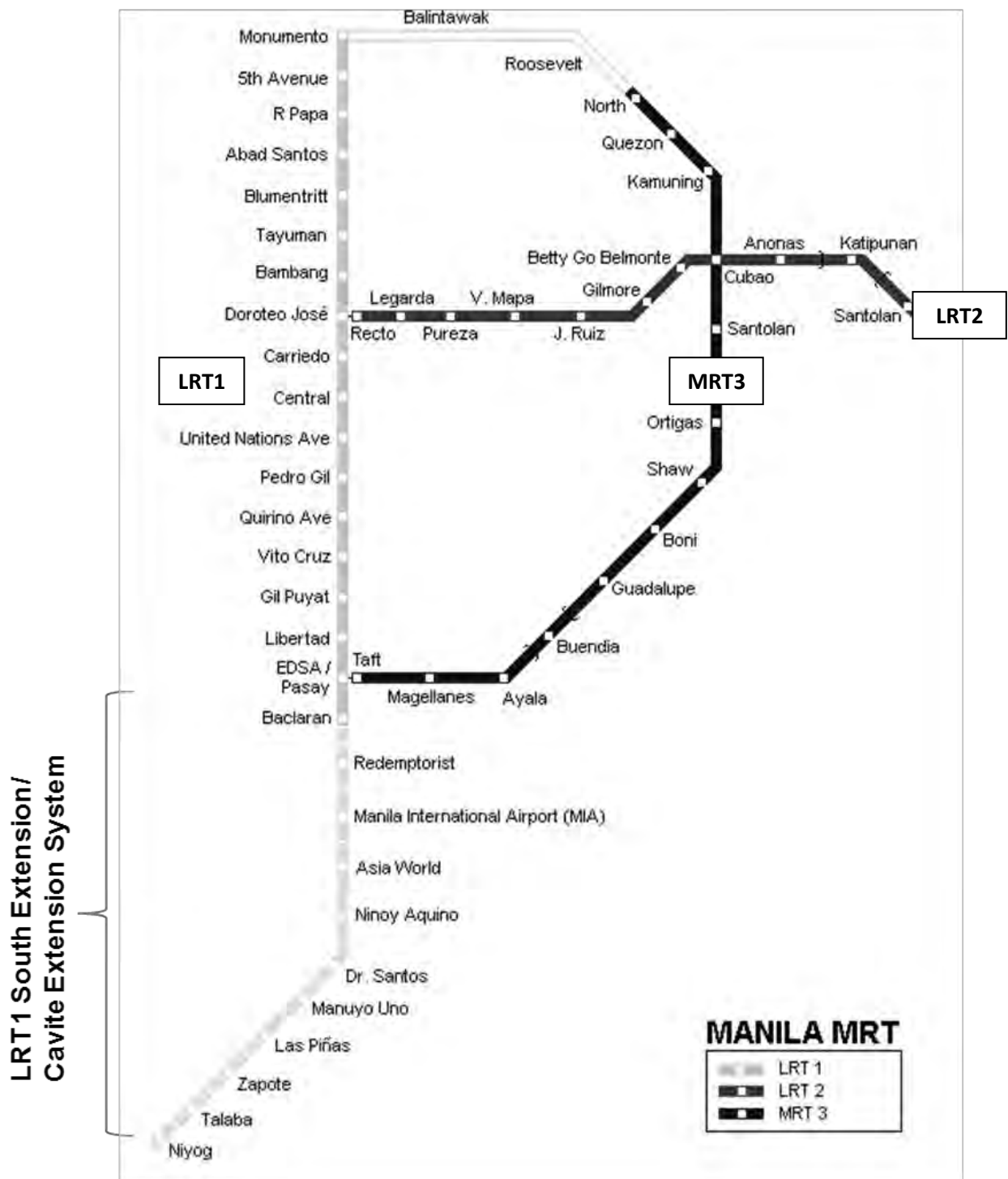
The Manila LRT Line 1 Extension, Operations and Maintenance Project (the “Project”) consists of:

- a) operation and maintenance of the Existing System;
- b) design, procurement, engineering, construction, installation, completion, testing, and commissioning of the Cavite extension facilities (“Cavite Extension System”) and its integration with the Existing System. The Cavite Extension System includes the following:
 - i. Railway infrastructure component that will extend the Existing System by another 11.7 kilometers, adding eight (8) new stations with a provision for a further two (2) future stations, where approximately 10.5 kilometers of the Cavite Extension System will be elevated and 1.2 kilometers will be at grade. The Cavite Extension System will start from Baclaran and pass through the cities of Paranaque and Las Pinas in Metro Manila, up to the municipality of Bacoor in the province of Cavite; and
 - ii. Railway systems component which includes provisions for train control and signalling system, traction power supply, distribution system, and telecommunications system;
- c) integration of the Existing System and the Cavite Extension System (“Integrated System”);
- d) operation and maintenance of the Integrated System; and
- e) System Enhancement Works covering whole-of-life investments for the Integrated System, which include fleet upgrades (replacements and refurbishments), periodic rehabilitation/restoration works, any required depot expansion works to accommodate outstanding train fleet, and all other investments needed to ensure sustained levels of services in accordance with the performance standards to be set in the Concession Agreement.

To support the Project, the DOTC and the LRTA will be responsible for and undertake the financing, procurement, construction, installation and commissioning of the following components, which will be turned over for operation and maintenance to the Concessionaire upon completion:

- a) the rolling stock component involving the procurement of about thirty-nine (39) new four (4)-car trains and the refurbishment of about thirty-five (35) of LRTA’s existing LRVs;
- b) the depot development which covers the construction of a new satellite depot in Zapote to provide light maintenance works and the expansion of the existing depot in Pasay to accommodate the larger fleet; and
- c) the LRT Safety, Reliability and Capacity Improvement Program as described in table above.

Figure 4: LRT1 Integrated System Map



Source: Urbanrail.net

Table 5: Manila LRT1 Basic Project Description

| Elements | Characteristics |
|--|----------------------------|
| Original Line 1 | 15 km |
| North Extension | 5.70 km |
| South/Cavite Extension | 11.70 km |
| Total Operational Length | 32.4 km |
| Original No. of Stations | 18 |
| North Extension Stations | 2 |
| South/Cavite Extension* | 8 (+2 optional) |
| Total No. of Stations | 28-30 |
| Existing LRVs | 139 (35 for refurbishment) |
| New LRVs (South/Cavite Extension) | 156 |
| Total No. of LRVs | 295 |
| Concession period | 30-35 years |
| Construction period (Est.) | 3-4 years |
| Preparation of the Detailed Engineering Design | 6-8 months |
| Partial Operation of Extension start year | 2015 |
| Full Operation of Extension start year | 2017 |

*Including Intermodal Stations

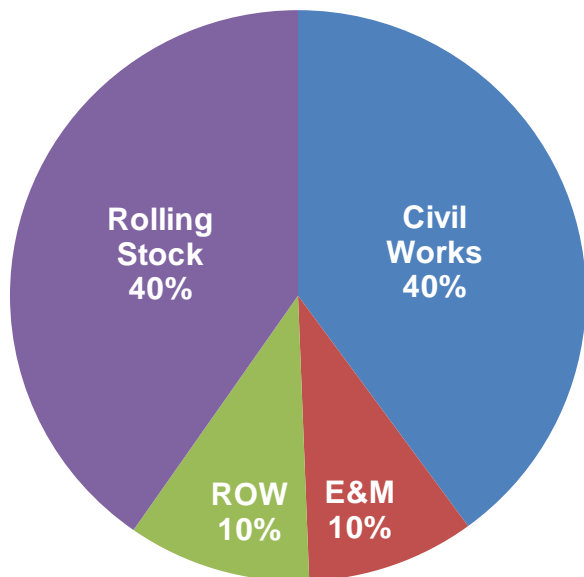
The DOTC is currently exploring whether one of the planned intermodal bus terminals along the Cavite Extension System may be converted to a major intermodal transport.

At present, the Project does not provide for upgrading of the Automatic Fare Collection System (AFCS) as the DOTC and the LRTA plan to competitively tender a unified AFCS for all three LRT lines to a single private provider. In the event that the DOTC/LRTA is unable to pursue the proposed unified AFCS or if there would be significant delay in the delivery of this component then the Concessionaire may have to provide for the ticketing system for the Cavite Extension System, compatible with the Existing System, in order to have a fully functional Integrated System; or the DOTC/LRTA may undertake this component as part of its contribution to the Project.

VII. CAVITE EXTENSION COST

The Cavite Extension cost estimate is divided into four (4) major components: Civil Works (including track works) or Railway infrastructure, Electro-Mechanical Systems or Railway systems, Rolling Stock, and Right-of-Way.

Figure 5: Estimated Project Cost Distribution



The table below indicates the organizational split of development costs for both the Existing System and the Cavite Extension System.

Table 6: Project Components Distribution

| Project Item | Contribution |
|--|--------------|
| Operation & maintenance of existing LRT1 assets (upon contract award) | Private |
| Rehabilitation of existing LRT1 Assets (under Stimulus Package) | Government |
| Railway infrastructure (civil works/track works) for the Cavite Extension System | Private |
| Railway systems (electro-mechanical works) for the Cavite Extension System* | Private |
| Right of Way Acquisition | Government |
| New rolling stock, refurbishment of existing rolling stock, depot capacity expansion and new satellite depot | Government |
| System Enhancement Works for the Integrated System | Private |

*AFCS will be provided either by Government or via a Private Concessionaire through a different PPP Contract

The estimated total project cost for the Cavite Extension is approximately **Php55 billion (approx. USD1.25 billion)**. This does not include any contingencies or consultancy costs (ex. detailed engineering design consultant, legal advisor, financial advisor, etc.) nor does it include costs related to financing or insurance.

VIII. PROJECT IMPLEMENTING AGENCY

The Project is being implemented jointly by the Department of Transportation and Communications (DOTC), and its attached agency, the Light Rail Transit Authority (LRTA).

A. DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS

The DOTC is the primary planning, implementing and administrative entity of the ROP's executive branch for transportation and communications systems/services. Its specific legal mandate in relation to rail is set out in its charter¹, as follows:

- a. Promote the development of dependable and coordinated networks of transportation and communication systems;
- b. Guide government and private investment in the development of the country's inter- model transportation and communication systems in a most practical, expeditious, and orderly fashion for maximum safety, service, and cost effectiveness; and
- c. Impose appropriate measure so that conditions for the continuing economic viability of the transportation and communication entities are not jeopardized and do not encourage inefficiency and distortion of traffic patronage.

To accomplish its mandate related to rail, the DOTC is given the following powers and functions:

- a. Formulate and recommend policies and guidelines for the preparation/implementation of transportation and communications systems at the national, regional and local levels;
- b. Establish and administer comprehensive and integrated programs and may call on any public or private agency/corporation/organization to participate and assist therein;
- c. Assess, review and provide direction to transportation and communication research and development programs of the government in coordination with other institutions;
- d. Administer/enforce laws, rules and regulations on transportation and communications;
- e. Coordinate with the Department of Public Works and Highways on all infrastructure projects and facilities. However, attached corporate entities may undertake specialized projects such as railways as directed by the President or provided by law;
- f. Issue certificates of public convenience for the operation of public land and rail transportation utilities and services; and
- g. Establish/prescribe regulations for issuance of certificates of public convenience for public land transport utilities and for the inspection/registration of air and land transport facilities.

B. LIGHT RAIL TRANSIT AUTHORITY

As an attached agency under the DOTC, the LRTA is primarily responsible for the construction, operation, maintenance, and/or lease of light rail transit systems in the Philippines, giving due regard to the reasonable requirements of the public transportation system of the country. Among the powers of the LRTA under its charter², the following are particularly relevant for this Project:

- a. To contract any obligation or enter into, assign or accept the assignment of, and vary or rescind any agreement, contract of obligation necessary/incidental to its proper management;
- b. To improve, develop or alter any property held by it;
- c. To carry on any business, either alone or in partnership with any other person or persons;
- d. To employ an agent or contractor or perform such things as the Authority may perform;
- e. To exercise the right of eminent domain, whenever the Authority deems it necessary;

¹ Executive Order (EO) No. 125 as amended by EO No. 125a, effective 13 April 1987

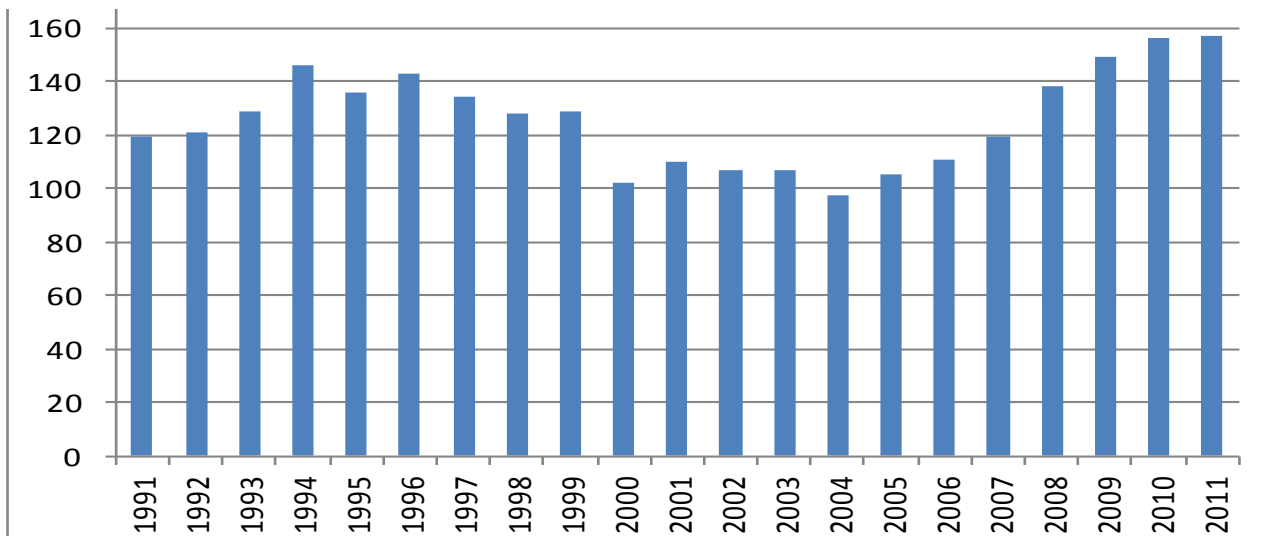
² EO No. 603 signed 12 July 1980

- f. To prescribe rules and regulations in the conduct of its general business as well as to fix and implement the terms and conditions of its related activities; and
- g. To determine the fares payable by persons travelling on the light rail system, in consultation with the Board of Transportation.

IX. TRAFFIC STUDY

A. EXISTING LINE

Figure 6: LRT1 Passenger Traffic (in Millions of Passengers)



Source: LRTA, November 2011

Note: Data up to October 2011; Highest recorded ridership on 2012: February 28 (Tuesday) with 658,627 passengers

Ridership has been rising significantly since 2003, with 4.33% growth from 2009 to 2010. If a conservative 3% growth rate is used, the existing line’s projected ridership is as follows.

Table 7: Projected Annual Average Ridership Demand (In Millions of Passengers)

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017* |
|--|-------|-------|-------|-------|-------|-------|
| Ave. Ridership Demand (existing line only) | 161.6 | 166.5 | 171.5 | 176.6 | 181.9 | 187.4 |
| Ridership Constraint based on Capacity (320 d/yr) | 172.8 | 172.8 | 172.8 | 172.8 | 172.8 | 172.8 |

*Estimated start of extension operation. Figure does not yet factor additional ridership from the extension.

B. SOUTH EXTENSION / CAVITE EXTENSION

In the Philippine Population Census of 2007, Cavite had a population of 2.86 million, which made it the second most densely populated province in the country. Most of the populace live in the municipality of Bacoor. The Cavite Extension System will not only service Bacoor but also parts of Parañaque and Las Piñas with dense populations of 552,660 and 532,330 respectively (2007 Population Census). Hence, the extension is likely to increase ridership as more people are allowed a swift and comfortable alternative to buses, jeepneys, and other forms of private transport to and from Manila. The following table shows other transport costs that can be used as

benchmarks for understanding the willingness to pay an increased fare for riding the LRTs should this be implemented in the future.

Table 8: Other Transport Costs – Manila

| Good | Cost | Est. Cost of 10km trip |
|----------------------------|---|------------------------|
| 1 liter of gas (unleaded)* | Php52.60-57.67 (At 8km/liter) | Php65.75-72.09 |
| 1 liter of diesel* | Php42.80-54.35 (At 8km/liter) | Php53.50-67.88 |
| Taxi | Php40 boarding and Php3.50 per 300m | Php157 |
| Jeepney ticket | Php8.00 for first 4kms then Php1.25 /km | Php15.50 |
| Local bus (air con) | Php12 for first 5kms then Php2.20 /km | Php23 |
| Shared Taxi / Shuttle | Php12 minimum | Php50 |
| LRT fare (current) | Between Php12 to Php20 | Php15-20 |

* Source: Dept. of Energy, Oil Price Monitor as of April 2012

X. PROCUREMENT PROCESS

A. LEGAL BASIS OF PROCUREMENT

The international competitive bidding for the Project will be conducted in accordance with the procurement rules and procedures for public bidding set out in Republic Act No. 6957, as amended by Republic Act No. 7718, otherwise known as the “BOT Law,” and its Revised Implementing Rules and Regulations (2006) (Revised IRR).

B. NATURE OF THE PROCUREMENT PROCESS

The Bidding for the Project will follow the two-stage/two-envelope system for procurement pursued through the solicited mode under the Revised IRR. Under the two-stage/two-envelope system, Prospective Bidders are first pre-qualified based on minimum legal, technical and financial eligibility requirements laid down by the Special Bids and Awards Committee (SBAC) formed by the DOTC and the LRTA. Only those Prospective Bidders who pre-qualify shall be deemed eligible to submit their Bid, composed of their technical and financial proposals, to the SBAC for consideration. The Qualification Documents and the Bid of each Prospective Bidder will be evaluated based on their completeness, adequacy and compliance with the prescribed evaluation criteria.

The general procedure for the Bidding will be as follows:

- a) Prospective Bidders will be asked by the SBAC to apply to pre-qualify to bid by submitting their Qualification Documents on the Qualification Documents Submission Date in order to prove their compliance with the Qualification Requirements, as described in the Instructions to Prospective Bidders.
- b) After reviewing the Qualification Documents, the SBAC will determine which of the Prospective Bidders fulfil the prescribed Qualification Requirements and inform all such Pre-Qualified Bidders. Only Pre-Pre-Qualified Bidders will be able to access the Project Data Room and be eligible to bid for the Project. The SBAC shall also inform all disqualified Bidders in writing of their failure to qualify and the reasons for their disqualification from the Bidding.
- c) After Pre-Qualification is completed, the SBAC will issue to all Pre-Qualified Bidders the Bidding Documents which will consist of (a) the Invitation to Bid, (b) the Instructions to Bidders and its annexes and (c) the draft Concession Agreement and its annexes and provide the Pre-Qualified Bidders with access to the Project Data Room. The Instructions to Bidders shall provide in detail the form and required contents of the Bids, the detailed procedures for bid submission, bid evaluation and post-bid requirements. Pre-Qualified Bidders will also be given the opportunity to comment on the draft Concession Agreement and its annexes. The SBAC may consider these comments in modifying and refining the draft Concession Agreement leading up to the issuance of the final Concession Agreement upon which the Pre-Qualified Bidders must base their bids. This will help ensure that binding unconditional Bids are submitted on the basis of the final Concession Agreement.
- d) Prior to the Bidding, the SBAC will conduct a pre-bid conference to which all Pre-Qualified Bidders will be invited. During the pre-bid conference, Pre-Qualified Bidders may seek clarification regarding any requirements and/or terms and conditions of the Invitation Documents.

- e) On the Bid Proposals Submission Date the Pre-Qualified Bidders will be asked to submit their Bids consisting of their technical and financial proposals, a bid security and other supporting documents.
- f) The technical and financial proposals of Pre-Qualified Bidders will be submitted in two (2) separately sealed envelopes to the SBAC on the Bid Proposals Submission Date. The technical proposals of Pre-Qualified Bidders will be opened first and evaluated by the SBAC on a pass/fail basis. Pre-Qualified Bidders will be informed as to whether their technical proposals passed the evaluation. The financial proposals of Pre-Qualified Bidders who fail to pass the technical evaluation shall be returned unopened together with their bid securities and a letter from the SBAC stating the reasons for their disqualification from the Bidding.
- g) The financial proposals of Pre-Qualified Bidders who pass the technical evaluation will be opened and evaluated by the SBAC based on best financial proposal provided. The specifics on the criteria for the evaluation of the financial proposals shall be described in the Instructions to Bidders.
- h) The Pre-Qualified Bidder with the best financial proposal will win the Bid and shall be awarded the Project, subject to its compliance with certain requirements in the notice of award issued by the DOTC/LRTA.

XI. CONCESSION STRUCTURE

A. LEGAL FRAMEWORK FOR CONCESSION

The BOT Law provides the legal framework for government agencies to enter into PPP contracts with qualified private sector proponents for the prosecution of government infrastructure or development projects. In particular, the BOT Law and its Revised IRR describe the requirements and procedures for the preparation, approval, tendering and implementation of PPP/BOT projects.

The BOT Law provides the DOTC/LRTA with a valid and tested legal framework to undertake the transaction. The law authorizes infrastructure agencies such as the DOTC and the LRTA to enter into PPP/BOT contracts with qualified private sector proponents for the prosecution of public infrastructure or development projects. To be eligible as an implementing agency under the BOT Law, the government entity must be first authorized by law or its charter to undertake infrastructure or development projects. The project concerned must also be eligible for PPP/BOT implementation under the same law. The DOTC, the LRTA and the Manila LRT Line 1 Extension, Operations and Maintenance Project easily satisfy these legal requirements.

B. PROJECT STRUCTURE

The Project will be implemented as a variant of the Build-Transfer-Operate (BTO) contractual arrangement, which is one of the PPP variants specifically authorized under the BOT Law. In a BTO scheme, the private sector party or concessionaire will be required to construct the infrastructure facility and assume construction-related risks arising from cost overruns, delays and other performance risks connected to construction. Once the facility is commissioned satisfactorily, title over the facility (the Cavite Extension) is transferred to the implementing agency, but the private sector party operates the facility on behalf of the implementing agency pursuant to the terms of the concession agreement. In the case of the Manila LRT1 Extension, Operations and Maintenance Project, the private sector party shall likewise operate and maintain the Existing System upon award of the concession and shall be responsible for integrating the Existing System and the Cavite Extension System and for operating and maintaining the Integrated System.

As a form of repayment for financing, constructing, operating and maintaining the facility, the private sector party is authorized to charge and collect fares from the end users as approved by the regulator and set out in the concession agreement and shall be permitted to maximize revenue potential from other commercial revenue sources

The principal terms and conditions governing the transaction will be set out in the Concession Agreement, which will detail the obligations of the DOTC, the LRTA and the Concessionaire in respect of the development and operation of the facility, and other mutual undertakings, covenants and conditions to be performed or fulfilled by each of the parties.

The ROP further recognizes the need to extend fiscal support to the Project in order to reduce the impact on commuter fares and to enhance the viability and bankability of the Project. The BOT Law authorizes the ROP to finance up to fifty percent (50%) of the costs of solicited projects implemented under it. For this Project, the ROP will undertake major rehabilitation works on the existing LRT1 assets and provide the right-of-way and contribute

Project assets (e.g. rolling stock, satellite depot, etc.) to partially cover the capital cost of the Cavite Extension.

The ROP shall not guarantee the ridership level but shall ensure that fares will be adjusted based on a pre-agreed formula to be defined in the bidding documents.

XII. KEY COMMERCIAL FEATURES OF THE DRAFT CONCESSION AGREEMENT

Below are some key commercial terms contemplated for the Concession Agreement:

- Grant of a 30-35 year concession (inclusive of construction period), reckoned from the effectivity of the Concession Agreement, to the Concessionaire to exclusively undertake the following:
 - design the Cavite Extension System civil works;
 - construct the Cavite Extension System works within four years from approval of the Detailed Engineering Design;
 - operate and maintain to defined levels of performance standards the (a) Existing System immediately after award of the concession, (b) completed sections of the Cavite Extension System, as applicable, and (c) the Integrated System upon construction completion;
 - collect the authorized fares from users of the LRT1 or receive revenues from fares collected by a 3rd Party operating the Automatic Fare Collection System;
 - collect income from other sources in relation to the Project (e.g. advertising, commercial space leases, other commercial developments, etc.); and
 - turn-over the LRT1 system in good condition to the DOTC/LRTA after the concession.
- DOTC/LRTA obligations include:
 - procure and deliver in a timely manner the required right-of-way;
 - assist in securing necessary national government consents for the Project;
 - provide the agreed asset contribution to be defined in the Concession Agreement;
 - ensure timely delivery of the rehabilitation works on the Existing System under the LRT Safety, Reliability and Capacity Improvement Program; and
 - coordinate closely with the Concessionaire, the AFCS provider, the new rolling stock provider, the depot contractor and other 3rd parties to be engaged by DOTC, LRTA or the ROP in relation to the Project.
- Other major commercial points include:
 - The DOTC/LRTA will set the opening fares with approved rates which will be disclosed during the tender.
 - A performance regime related to system reliability and availability, customer care and security, among others, will be defined in the Concession Agreement and payment will be varied based on performance measured under a variety of Key Performance Indicators (KPIs), under the pain/gain philosophy of a PPP contract.
 - Force majeure shall be a risk that will be shared by both the Concessionaire and the DOTC/LRTA.

XIII. INVESTMENT FRAMEWORK

A. TAXATION

Under Republic Act No .9337 (2004), which amended the National Internal Revenue Code of 1997, domestic corporations are taxed at thirty percent (30%) of income from all sources within and without the Philippines less any deductions allowed under the Tax Code.

Resident foreign companies and non-resident foreign companies are likewise taxed at thirty percent (30%) of income. For resident foreign companies, this covers all taxable income from all sources within the Philippines. For non-resident foreign companies, this is levied on gross income from all sources within the Philippines which includes dividends, loan interest, royalties and management fees. Capital gains tax is imposed on gains realized from the disposition of a Philippine corporation's shares other than through the stock exchange.

If the country of domicile of the foreign company has an existing tax treaty with the Philippines, the appropriate treaty rate applies, which ranges from ten percent (10%) to twenty-five percent (25%). The Philippines currently has tax treaties with 22 countries such as the United States, Japan, France and United Kingdom, and other European and Asian countries.

In addition, a common carriers tax of three percent (3%) is levied on quarterly gross receipts.

B. FOREIGN EXCHANGE

Foreign exchange may be traded freely and with few restrictions, brought into or sent out of the country by foreign corporations operating in the Philippines. Foreign investments/profits can also be repatriated in foreign exchange with minimal control from the Bangko Sentral ng Pilipinas (BSP or Central Bank of the Philippines). BSP-registration requires proof of inward remittance of currency used to fund the investment (now an automatic process after corporate registration with the Securities and Exchange Commission). Should the banking system be also used for the payment of royalties, the related royalty contract should be registered with the Technology Transfer Registry of the Bureau of Patents, Trademarks, and Technology Transfer.

C. FOREIGN OWNERSHIP AND MANAGEMENT

The Concessionaire or its appointed Facility Operator of the System should comply with any nationality/ownership requirements prescribed under applicable Philippine laws and those in its country of origin or principal place of business.

XIV. INDICATIVE TIMETABLE

2012

- | | | |
|------------------|---|---|
| June | - | Publication of Invitation to Pre-qualify to Participate and Bid |
| | - | Pre-qualification Conference |
| August | - | Submission of Qualification Documents |
| September | - | Notice of Pre-qualification / |
| | - | Release of Invitation to Bid Documents |
| | - | Release of the draft Concession Agreement |
| October | - | Pre-bid Conference |
| November | - | Release of Final Concession Agreement to Pre-qualified Bidders |
| January/February | - | Submission of Bid |
| March/April | - | Issuance of Notice of Award |
| | - | Signing of the Concession Agreement |

2013

- | | | |
|-----------|---|---|
| April/May | - | Turn-over of the O&M for the existing LRT Line 1 |
| April/May | - | Ground-breaking for the Construction / Site preparation |
| September | - | Approval of the Detailed Engineering Design |
| October | - | Start of Construction of the Cavite Extension System |

2015

- | | | |
|--|---|--|
| 2 nd /3 rd Quarter | - | Start of Partial Operations of the Cavite Extension System |
|--|---|--|

2017

- | | | |
|--|---|---|
| 3 rd /4 th Quarter | - | Delivery of the rolling stock |
| | - | Start of Full Operations of the Cavite Extension System |

2042-2047

- | | | |
|-------|---|--|
| March | - | Turn-over of the LRT1 Integrated System to the DOTC/LRTA |
|-------|---|--|