

## DOTC-LTO Infrastructure and Information Systems Project Request for Information

The Department of Transportation and Communications (“DOTC”) and the Land Transportation Office (“LTO”) shall select a Total Solutions/Maintenance Provider or Systems Integrator for the acquisition, installation, integration, upgrade, operation and maintenance (the “Works”) of the LTO Infrastructure and Information System (“LTO-IIS”).

The LTO-IIS shall process motor vehicle registrations, renewal and application of drivers’ licenses and permits, apprehensions, back-end transactions, and such other ancillary transactions/processes (the “Transactions”). The number of transactions handled by the LTO from 2006-2010 is shown in the table below:

	2006	2007	2008	2009	2010
MV Registration	8,336,860	9,073,113	9,878,985	10,369,746	11,036,592
Licenses and Permits	5,267,855	5,587,423	5,908,675	5,490,573	5,947,629
Apprehension Cases	892,319	899,701	930,088	736,427	791,555
<b>TOTAL TRANSACTIONS</b>	<b>14,497,034</b>	<b>15,560,237</b>	<b>16,717,748</b>	<b>16,596,746</b>	<b>17,775,776</b>

The existing workflow/business flow of the Transactions is attached to this Request for Information (“RFI”) as Annex A.

At present, the LTO has 301 offices composed of a Central Office, Regional Offices, District Offices, Extension Offices, and Drivers’ License Renewal Centers nationwide (collectively, the “LTO Offices”) that process the Transactions. It is also anticipated that more LTO Offices shall be established in the future.

DOTC-LTO shall require the Works to be performed from ground up. The expected outputs are provided hereunder:

- a. Installation/ building of two 24 by 7 Data Centers (Production and Back up) using robust, scalable, and reliable servers (proxy, exchange, firewall, ftp’s, active directory, anti-virus, IDS, etc.), redundant power supplies, controlled environment, security features and access, and monitoring cameras. The Data Centers shall not be constrained by the IPv4 limitations even if it must be ready for IPv6 operations.

Estimated Cost Php:

- b. Installation of Network WAN/LAN infrastructure equipment (routers, switches, handsets, call manager etc, and/or VSAT) linking the two Data Centers, (one at LTO central office and a back-up at DOTC main office); all the LTO Offices, and the main DOTC office with sufficient bandwidth for voice, data, and video. Included are WAN / LAN and bandwidth utilization and monitoring devices for proactive network performance resolution. The WAN/LAN infrastructure must support star, mesh and/ or hybrid network topologies.

This RFI seeks to procure high bandwidth networking systems to deploy state-of-the-art, distributed computing and networked storage systems. LTO plans to implement mission-critical applications on multiprocessor systems [virtualization tools/high-speed process for communications protocols] that are available in the marketplace today. Additionally, it is

planning to deploy technologies that enable virtualization of mission-critical applications across computer systems. Thus, LTO's high performance/ virtualized computing resources and the applications that run on it will offer competitive advantages, allowing LTO to optimize its IT assets.

Among the principal requirements to be detailed in this RFI is the ability to deliver products that provide scalable bandwidth, high speed, low latency, and high availability features to support current and future applications. Additionally, the proposed products must support standards-based hardware interfaces and software protocols to support all existing and future applications. The proposed solution must be scalable to meet future demand and it shall support high speed networking (802.3ba) without major re-engineering of the network.

Latency and traffic measurement tools are required. The product must also provide features that virtually segment the physical network infrastructure to accommodate our virtualized systems. Self-provisioning features are also required. Finally, the product must also provide support management capabilities and applications services that ease the management of the virtualized infrastructure while ensuring its scalable performance. The solution must be modularly scalable, providing a means to add connectivity and bandwidth without impacting physical rack space or system management. Additionally, the vendor's platform must accommodate higher speed networking interfaces in the future, specifically the (802.3ba) 40GB and 100GB Ethernet switched network interfaces. The solution shall deliver wire speed performance and sufficiently low latency that supports a scaling implementation of high-performance virtualized applications. The solution shall support quality of service (QoS) capabilities, including shaping and policing of network traffic to support isochronous and synchronous applications deployed in this project. Integral to this requirement is support of the IEEE Data Center Bridging Standards (DCBX IEEE 802.1Qaz) specification.

Estimated Cost Php:

- c. Delivery and installation of Desktops (around 1000 units) and Thin Client Desktops for LTO Offices (equivalent of 3000 units), remote servers (matching the number of LTO Offices), Necessary software licenses, desktops and servers, anti-virus, Microsoft Office packages, and remote access licenses;

Estimated Cost Php:

- d. Installation of Service Desk (software, hardware);

Estimated Cost Php:

- e. Delivery and minimal customization of off-the-shelf ERP application solutions which are robust, flexible and scalable to meet LTO's initial applications and possible DOTC application extensions in the future that can ride on the LTO network. The proposed ERP solutions shall be WEB-based and cloud ready – interface capable with government agencies (such as, but not limited to, the Land Transportation Franchising and Regulatory Board, the National Statistics Office, the Bureau of Customs) and non-government agencies (such as, but not limited to, manufacturers, assemblers, dealers, importers, drug testing centers, emission testing centers, insurance companies, driving schools). A self-service kiosk shall be available for the LTO Offices. The ERP solution shall have built-in capability to provide online reports to DOTC and LTO managements and users. Furthermore, the use of

text messages to notify users is a welcome enhancement. Payment option through banking facility shall also be encouraged subject to applicable government auditing rules and guidelines. The required LTO applications are:

1. Information and Communication Technology Infrastructure
2. LTO Front Office Applications
  - a. Drivers' Licensing System (i.e. use of biometric technology is recommended)
  - b. Motor Vehicle Registration System
  - c. Manufacturers, Assemblers, Importers, Dealers Accreditation and Reporting System
  - d. Law Enforcement and Traffic Adjudication System
  - e. Revenue Collection System
3. LTO Back Office Applications
  - a. Financial and Administrative Services
  - b. National Government Accounting System
  - c. Human Resources
  - d. General Ledger
  - e. Geographical Information System
  - f. Executive Information System
  - g. Transportation Information System

Estimated Cost Php:

- f. Delivery, installation, and fine-tuning of a robust database capable of supporting large volumes of data for the LTO and DOTC applications;

Estimated Cost Php:

- g. Delivery and nationwide installation of a generic intelligent/smart/laser card system and readers to replace existing drivers' license cards and other similar items. Such card system must primarily interface with the main LTO-IIS, and secondarily for other DOTC systems;

Estimated Cost Php:

- h. Maintenance and operation of the LTO-IIS for the next 5 to 7 years while receiving a pre-determined annual consultancy/service fee;

Estimated Cost Php:

- i. Alignment of LTO IT Operations to International Quality Standards of ISO 9001:2008 for the second year, ISO 20000 for the 3<sup>rd</sup> year, and ISO 27000 for the fourth year;

Estimated Cost Php:

- j. Delivery and installation of Storage Solutions (SANS and NAS) and peripherals to store the database, transactions, electronic documents, middleware, and firmware to enable connectivity. Additionally, backup solutions shall be included;

Estimated Cost Php:

- k. Delivery of servers and processors depending on LTO applications;

Estimated Cost Php:

- I. Delivery of documentations, User's /Systems manual and training;

Estimated Cost Php:

- m. Data conversion/migration/cleansing;

Estimated Cost Php:

- n. Miscellaneous costs;

Estimated Cost Php:

- o. Delivery and installation of all the outputs mentioned above by 31 Dec 2012.

Total Cost Php:

The Total Solutions/Maintenance Provider or Systems Integrator is free to provide its own solutions/processes (including improvement of the workflow/business flow), their corresponding estimated cost, and the timetable for implementation if the solutions/processes would be implemented on a staggered basis. All solutions/processes must be sufficiently described and/or illustrated.

DOTC-LTO has prepared this RFI as part of their due diligence and for purposes of conducting an effective and transparent market sounding process. Due to the urgency of the matter, interested parties shall not be required to state their responses in detail. General responses shall be allowed. DOTC-LTO shall take into account, but shall not be bound by, such responses in preparing the Terms of Reference for the LTO-IIS. Failure to participate in this RFI shall not bar prospective bidders from participating in the bidding of the LTO-IIS.

It is understood that all costs indicated herein are indicative and non-binding. The following preliminary schedule shall be observed for the LTO-IIS:

	Date	Time	Venue
Clarification of RFI; DOTC, LTO to respond to questions on RFI	19 January 2012	10am	DOTC Conference Room, 16 <sup>th</sup> Floor, The Columbia Tower, Brgy. Wack Wack, Ortigas Avenue, Mandaluyong City
Submission of proposal/solution	24 January 2012	Close of business	DOTC, Office of Undersecretary Limcaoco, 16 <sup>th</sup> Floor, The Columbia Tower, Brgy. Wack Wack, Ortigas Avenue, Mandaluyong City
Presentation of proposal/solution (optional)	27 January 2012	10am	LTO Central Office, East Avenue, Bulwagan Edu Hall

Please course all questions to DOTC Assistant Secretary Catherine P. Gonzales at [catherinepgonzales@yahoo.com](mailto:catherinepgonzales@yahoo.com).