

**DOTC ROAD TRANSPORTATION INFRASTRUCTURE IT PROJECT  
(LTO COMPONENT)**

**REVISIONS IN THE TERMS OF REFERENCE**

**1. Page 109, Subheading 2 of the Terms of reference which states**

***“Data Backup and Retrieval***

*The following services are provided in response to the data backup and retrievals:*

1. ***Data Backups: Defined as the transport of data from data sources to the CLIENT designated location. The backup operation must be performed manually, automatically, or a combination thereof.***
2. ***Data Retrieval: PROVIDER will guarantee recoverable data within four (4) hours of request via the provided retrieval mechanism.”***

**is hereby reworded as follows:**

**Data Backup and Retrieval**

The Total Solutions provider is required to design its data center and backup data center consistent with the system availability as provided. The backup data center shall be housed in the Government Integrated Data Center of the National Computer Center.

The Recovery Time Objective (RTO) shall be defined as four hours for non-critical systems and two hours for the Driver’s License System, the Motor Vehicle Registration System (which shall include MAIDRS), the Law Enforcement and Traffic Adjudication System, and the Revenue Collection System Systems. The Recovery Point Objective (RPO) shall be defined as ten minutes for the Driver’s License Database, the Motor Vehicle Registration Database (which shall include the MAIDRS database), the Law Enforcement and Traffic Adjudication database, and the Revenue Collection System Database and thirty minutes for non-critical databases not mentioned above.

2. **Page 129, Heading V, Subheading A, fourth paragraph of the Terms of reference which states**

The proposed solution must address both current and future needs of LTO and must have at least 98% availability.

**is hereby reworded as follows:**

The proposed solution must address both current and future needs of LTO. Its components that affect two or more LTO offices, the web, and the kiosks must have 99.99% availability while those that are integral only to one office may have an availability of 98%.

3. **Page 99, first Subheading, first paragraph of the TOR is reworded as follows:**

**Application Criticality**

The criticality of an application determines the support activities to be performed.

Service Item	Quality Measurement	% Service Target	Application Criticality
<b>Drivers Licensing System</b>	24 hours a day, 7 days a week	99.99%	Critical
<b>MVRS</b>	24 hours a day, 7 days a week	99.99%	Critical
<b>MAIDRS</b>	24 hours a day, 7 days a week	99.99%	Critical
<b>LETAS</b>	24 hours a day, 7 days a week	99.99%	Critical
<b>Revenue Collection System</b>	24 hours a day, 7 days a week	99.99%	Critical
<b>Financial and Administrative Services System (FASS)</b>	24 hours a day, 7 days a week	99.99%	Critical
<b>Electronic Traffic Violation Ticketing System</b>	24 hours a day, 7 days a week	99.99%	Critical
<b>Capacity Monitoring</b> (Disk – Threshold 80%)	24 hours a day, 7 days a week	99.99%	Critical
<b>Inventory Management System (under FASS)</b>	24 hours a day, 7 days a week	99.99%	Critical
<b>Executive Information System</b>	7:00 am -7:00 pm including weekends and when required by a service request	99.99%	Important
	7:00 pm – 7:00 am	98%	
<b>Queue Management System</b>	7:00 am -7:00 pm during weekdays when the LTO offices are open	99.99%	Important

Service Item	Quality Measurement	% Service Target	Application Criticality
	7:00 pm – 7:00 am and holidays when LTO offices are closed	Not required	
<b>Geographical Information System</b>	7:00 am -7:00 pm including weekends and when required by a service request	99.99%	Supportive
	7:00 pm – 7:00 am	98%	

**4. Page 125 Section 8 is hereby reworded as follows**

8. Executive Information System (EIS)
  - a. Performance and Trends of all DOTC/LTO Services and Offices;
  - b. Financial and Revenue Collection performance and Trends;
  - c. Customer Feedbacks and Satisfaction Survey Results;
  - d. Transportation Industry Trends;
  - e. Progress and Projection Tools.
  - f. Transportation Information System.

**5. Page 95, Subheading 16 on penal provisions is reworded as follows**

Availability	Applications	Metrics	Penalty
<b>Less than 99.99% but greater than 85%</b>	Critical, important, and Supportive applications that require an availability of 99.99% as provided.	Quarterly	1/10% of 1% for every percentage points difference from 99.99% of the Quarterly Payment
	Back Office Applications that require an availability of 99.99% based on its use in two or more LTO offices.	Quarterly	1/10% of 1% for every percentage points difference from 99.99% of the Quarterly Payment
	Network Infrastructure that requires an availability of 99.99% based on its use in two or more LTO offices.	Quarterly	1/10% of 1% for every percentage points difference from 99.99% of the Quarterly Payment
	Others that require an availability of 99.99% based on its use in two or more LTO offices.	Quarterly	1/10% of 1% for every percentage points difference from 98% of the Quarterly Payment
Less than 98% but greater than 85%	Other applications that require an availability of 98% as defined or impacts on only one office of LTO.	Yearly	1/10% of 1% for every percentage points difference from 98% of the Yearly Payment

Availability	Applications	Metrics	Penalty
Less than 85%	Critical, Important, and Supportive applications that require an availability of 99.99% as provided.	Quarterly	1/10% of 1% for every percentage points difference from 99.99% of the Quarterly Payment <b>and</b> Replacement of relevant component if the two (2) consecutive quarters cumulative availability is less than 85%
	Back Office Applications that require an availability of 99.99% based on its use in two or more LTO offices.	Quarterly	1/10% of 1% for every percentage points difference from 99.99% of the Quarterly Payment <b>and</b> Replacement of relevant component if the two (2) consecutive quarters cumulative availability is less than 85%
	Network Infrastructure that requires an availability of 99.99% based on its use in two or more LTO offices.	Quarterly	1/10% of 1% for every percentage points difference from 99.99% of the Quarterly Payment <b>and</b> Replacement of relevant component if the two (2) consecutive quarters cumulative availability is less than 85%
	Others that require an availability of 99.99% based on its use in two or more LTO offices.	Yearly	1/10% of 1% for every percentage points difference from 99.99% of the Quarterly Payment <b>and</b> Replacement of relevant component availability is less than 85%
	Other applications that require an availability of 98% as defined or impacts on only one office of LTO.	Yearly	1/10% of 1% for every percentage points difference from 98% of the Quarterly Payment <b>and</b> Replacement of relevant component availability is less than

Availability	Applications	Metrics	Penalty
			85%

**6. Page 127, Subheading F , is hereby reworded as follows:**

F. Supply, Delivery, Testing, Documentation and Installation of appropriate Computing Products and other resources relative to the implementation of the project on DOTC/LTO IT Infrastructure and Environment facilities such as:

Item	Location	Quantity
Data and Voice Communication Equipment	Main and Backup Data Center and all LTO Offices	Specs and quantity to be determined by the TSP; standards are provided under page 142-143 of the TOR
Cloud-based equipment platforms	Main and Backup Data Center	Specs and quantity to be determined by the TSP
Structured cabling System	Main and Backup Data Center, LTO Offices	Specs and quantity to be determined by the TSP
Unified Threat Management	Main and Backup Data Center, all nodes and LTO Offices connected to the Data Centers	Specs and quantity to be determined by the TSP
Electronic Traffic Violation Ticketing System	LTO Main Office	500 units as provided under page 135...
Queue Management System	LTO District and Field offices which offer registration services.....	Specs and quantity to be determined by the TSP. Minimum quantities are provided under Annex G.
Card/Document Readers	LTO District and Field offices	Specs and quantity to be determined by the TSP. Minimum quantities are provided under Annex G
Vehicle Certificate of Registration ID Printers	LTO Main office	Specs and quantity to be determined by TSP using the standards provided below.
email System	Main and Backup Data Center	Specs and quantity to be determined by the TSP
Closed Circuit Television	Main and Backup Data Center, LTO Offices	Specs as provided below. Minimum quantities are provided under Annex G
Short Messaging System	Main and Backup Data Center	Specs and quantity to be determined by the TSP
Servers	Main and Backup Data Center	Specs and quantity to be determined by the TSP
Desktop Computers	Main and Backup Data Center, LTO Offices	Specs and quantity to be determined by the TSP and as

Item	Location	Quantity
		revised below. Minimum quantities are provided under Annex G
Fire detection and alarm systems for the Data Centers	Main and Backup Data Center	Specs and quantity to be determined by the TSP
Environment Monitoring Solutions for Data Centers	Main and Backup Data Center	Specs and quantity to be determined by the TSP
Creation and maintenance of LTO Configuration Management Database	Main and Backup Data Center	Specs and quantity to be determined by the TSP
Uninterruptible Power Supply (UPS)	Main and Backup Data Center, LTO Offices...	Specs and quantity to be determined by the TSP. Minimum quantities are provided under Annex G
Generator/s for Data Centers	Main and Backup Data Center	Specs and quantity to be determined by the TSP.
Data Center Air Conditioning (A/C) Systems	Main and Backup Data Center	Specs and quantity to be determined by the TSP.

**7. Page 137, Subheading M is hereby reworded as follows:**

**M. Vehicle Certificate of Registration System**

In line with the government’s thrust for an environment friendly approach, a paperless system is to be adopted by integrating and utilizing the latest card technology in issuing Vehicle Certificate of Registration (CR).

The card system shall consist of:

- a. Database (software and hardware). The card system must be able to interface with the front-end and back-end systems including but not limited to card readers with law enforcement officials, card readers at the kiosks, and at the LTO offices
- b. Centralized, personalization, printing system that will create the final form of the card. This must be installed in the central office and must be able to print on a daily basis the required number of CR cards for national delivery for the entire duration of the contract. The printers must be installed with enough backup systems to insure that there is no delay in printing the CR cards at any time. Card identity information must be printed and recorded on the card under secure procedures and be non-alterable.
- c. Data storage features that can store the photo and/or biometric information and other relevant data needed for verification and renewal such as: name, personal details, biometrics, vehicle details, receipt number, violations etc.
- d. Authentication system that will allow the card to be authenticated using card readers and will allow for authentication even in offline situations.

The card specifications are as follows:

- a. Must be able to last up to ten years
- b. Must be temperature resistant up to from -20 C to 100 C or more
- c. Must have non-alterable overt, covert and forensic authentication features which are of sufficiently high resolution as to be very difficult to simulate and impossible to replicate using scanning, photography and copying techniques.
- d. Must have an optically variable device
- e. Must be tamper evident to the untrained eye
- f. Must conform to ISO/IEC 24727
- g. Must conform to the ISO/IEC 7810 ID-1 standard
- h. Must be a Contactless smart card with the following characteristics
  - i. 128Kb contactless chip
  - ii. Data Retention must be for 10 years or for the lifetime of the card
  - iii. ISO 14443 Type A/B compliant

The BIDDER must submit a description and features including but not limited to integration, security features, etc.

**8. Page 146, Subheading AA, first paragraph is hereby reworded as follows:**

The main data center located at the LTO main office must be provided with an electric generating set and automatic transfer switch (ATS). The generator must be able to handle the electrical load of all equipment in the data center including air conditioning units, servers and have a spare capacity of 100% additional load. The backup data center located at the National Computer Center at C.P. Garcia Avenue, Diliman, Quezon City is required to have similar requirements as to power availability, generators, and automatic transfer switches as provided under this entire subheading. If currently unavailable, the total solutions provider shall work with the NCC in order to upgrade the facilities to include this requirement solely for the use of the DOTC-LTO systems.

**9. Page 144, Subheading V, first paragraph is hereby reworded as follows:**

A main data center must be established to house application servers, data and voice communications equipment, peripherals and any other equipment that is necessary, including future expansion. The network room must be a self-contained secured area. All civil works necessary to construct/remodel the space which includes but not limited to constructing walls and doors with locks, floors, roofs, ceilings, painting, tiling floors, providing lighting and electrical works. The main data center and the backup data center must be certified tier 2 by an appropriate third-party certifying agency. If the backup data center has not been certified as tier 2, the Total Solutions Provider must work with the NCC to achieve this requirement solely for the portion of the data center that will be leased to DOTC-LTO.

The data center must include but not limited to the following:

1. Rack/Equipment Cabinets
2. Twelve (12) Nodes of Telecommunications Outlets
3. Environment Monitors
4. Door Access System that will include both a smartcard and a fingerprint system
5. Fire Detection and Suppression System
6. CCTV
7. Adequately Sized Breakers
8. Adequately Sized Uninterruptible Power Supply
9. Climate control system that will control both the humidity and temperature in the data center
10. Adequately Sized Generators

The Main Data center will be housed in the LTO main compound in East Ave, Quezon City. For business continuity purposes, the SOLUTION PROVIDER must establish a back-up data at the National Computer Center as provided.

The BIDDER must provide the proposed floor plan of the data center and back-up site including but not limited to the proposed size, layout, number and location of racks, location of equipment, etc.

**10. Page 143, Subheading U, last paragraph is hereby reworded as follows:**

The BIDDER must provide the brand, model, description and functionalities of the computing peripherals used. The BIDDER must also provide the operating system and applications and versions installed in these peripherals. It must take into account the number of transactions at each office per day and propose a total number of computers based on its understanding of the LTO process flow and the number of minutes each transaction may require. As a limit, the number of PCs nationwide must not exceed 4,500, which includes at least 300 for the online driver's license testing terminals. Annex



G shows the minimum number of computers and peripherals for each of the offices, the TSP must calculate the appropriate number of computers for the front-end applications based on the number of transactions for each office. The number of transactions for each office can be found in Bid Bulletin GBB No. 04.

**11. Page 145, Subheading Y, is hereby reworded as follows:**

For physical security, CCTV security system must be implemented in all DOTC/LTO Offices including the Main Data Center and Back-up Data Center.

All cameras must be at least:

1. High Definition
2. Vandal Proof;
3. Day/Night;
4. Infrared;
5. Motion Detection.

The digital video recorder must have at least:

1. Ten (10) days on-line storage;
2. Remote access/Monitoring across the WAN, LAN or internet;
3. Retrieval of files chronologically or based on certain events.
4. Must have archiving capability to store three (3) months of coverage

There should be at least four (4) CCTV Cameras in all LTO Offices except for the Central/NCR Office which shall include all the Buildings.

The BIDDER must provide the CCTV solution design, brand, model, description, integration, number/type of cameras per site, and functionality.

**12. Subject to these changes, the deadline for submission of the proposals is moved to 2:00 pm on Wednesday, November 14, 2012 at Unit 167, 16<sup>th</sup> floor, DOTC office, Columbia Tower, Ortigas Avenue, Mandaluyong City, Metro Manila, Philippines.**

**The third Pre-Bid Conference is scheduled on Tuesday, October 30, 2012 at 10:00 am at Unit 167, 16<sup>th</sup> floor, DOTC office, Columbia Tower, Ortigas Avenue, Mandaluyong City, Metro Manila, Philippines.**