

## IMPLEMENTING RULES AND REGULATIONS FOR THE RADIO FREQUENCY IDENTIFICATION TAG FOR ALL MOTOR VEHICLES REQUIRED TO BE REGISTERED UNDER THE LAND TRANSPORTATION AND TRAFFIC CODE, AS...

*LTO MEMORANDUM CIRCULAR NO. ACL-2009-1199, August 07, 2009*

Read online (full-text search, related cases, audio case brief): <https://batas.org/library/acf973677d58/>

---

WHEREAS, the Department of Transportation and Communications (“DOTC”), and the Land Transportation Office (“LTO”), are authorized under Republic Act No. 4136, as amended, otherwise known as the Land Transportation and Traffic Code (the “Code”), to issue rules and regulations governing the registration and re-registration of motor vehicles, and make arrests for violations of the provisions of the Code, among other powers;

WHEREAS, the exclusive information technology (“IT”) provider of the DOTC/LTO under the LTO IT Project Build-Own-Operate Agreement (the “Project Proponent”) presented to the DOTC/LTO its proposal for the implementation of the Radio Frequency Identification (“RFID”) technology as an enhancement of the LTO IT Project and for the improvement of DOTC/LTO’s general and specific services (hereinafter the “RFID Project”); including other LTO concerns such as vehicle identification, anti-carnapping, anti-colorum and law enforcement and traffic adjudication;

WHEREAS, the RFID Project will also ensure better compliance with Republic Act No. 8749, otherwise known as the “Clean Air Act of 1999”, by providing facility to ascertain the actual physical appearance of every motor vehicle during emission testing;

WHEREAS, the RFID Project was reviewed by the Project Management Committee (PMC) and the several Sub and/or Joint Committees of the LTO IT Project, resulting to several corresponding favorable recommendations for the approval and implementation of the Project;

WHEREAS, DOTC issued Department Circular No. 2009-06, dated May 6, 2009, and effective July 7, 2009, approving the implementation of the RFID Project;

WHEREAS, this Memorandum Circular was subjected to further discussion between LTO and Project Proponent prior to its issuance;

NOW, THEREFORE, premises considered, this Memorandum Circular (the “Circular”) promulgates the implementing rules and regulations for the RFID Project as follows:

### Section 1.0 RFID PROJECT DESCRIPTION AND OBJECTIVES

#### 1.1 PROJECT DESCRIPTION

The RFID Project is an initiative to ease the motor vehicle registration and renewal process by tagging each motor vehicle with an RFID Tag.

RFID technology will be used to ensure compliance with motor vehicle registration requirements such as road

worthiness and emission testing, and other LTO concerns such as vehicle identification, anti-carnapping, anti-colorum and law enforcement and traffic adjudication.

The RFID Tags will be tied with the existing motor vehicle information stored within the LTO database to bind the two records. This will aid LTO in not just manual and visual confirmation of a motor vehicle's authenticity, but an electronic means of verification and compliance monitoring.

The RFID Tags will be equipped with the latest in data encryption to prevent fraud. They are designed to be tamper proof. An RFID Tag antennae is designed to fragment when it is tampered, such as lifting it from the original tagging position. It is designed to last up to approximately ten (10) years under normal operating conditions and usage.

## 1.2 OBJECTIVES

The RFID Project involves the development, integration, deployment, and maintenance of RFID technology to enhance the motor vehicle registration process of LTO, emission testing, and other LTO concerns such as vehicle identification, anti-carnapping, anti-colorum and law enforcement and traffic adjudication. The RFID Project will have the following objectives:

1.2.1 Motor vehicle registration process flow without any major disruptions in the current processes and procedures;

1.2.2 Integrate the RFID System without substantial modifications in the LTO IT Project's systems;

1.2.3 Deploy RFID Tags onto motor vehicles nationwide;

1.2.4 Deploy RFID Readers to LTO District and Extension Offices and private emission testing centers as well as the motor vehicle inspection centers; and,

1.2.5 Integrate RFID Readers in the PETC IT Facility and the MVIS for data verification and compliance monitoring.

## Sec. 2.0 DEFINITION OF TERMS

Except as otherwise expressly provided in this Circular, the capitalized acronyms, words and phrases used herein shall have the meaning ascribed to them as follows:

2.1 Code – refers to Republic Act No. 4136, as amended, otherwise known as the Land Transportation and Traffic Code;

2.2 Department of Transportation and Communications or DOTC – the primary policy, planning, programming, coordinating, implementing, regulating and administrative entity of the Executive Branch of the Government of the Republic of the Philippines in the promotion, development and regulation of dependable and coordinated networks of transportation and communication systems, as well as the fast, safe, efficient, and reliable postal, transportation and communication services.

2.3 Inventory Management System or IMS – the application system developed by the Project Proponent that keeps track of LTO accountable items.

2.4 Law Enforcement and Traffic Adjudication System or LETAS – the application system that covers administrative proceedings involving law enforcement and adjudication of violation of traffic rules and regulations, such as, but not limited to, admitted case settlement, contested case settlement, alarms data entry and verification and clearance generation.

2.5 Land Transportation Office or LTO - the government agency created under and by virtue of the Code;

2.6 LTO IT Project – The information technology project undertaken by the Republic of the Philippines, through the DOTC/LTO, and the Project Proponent, under the Build- Own-Operate (BOO) scheme of Republic Act No. 6957, as amended by Republic Act No. 7718, otherwise known as the BOT Law, and pursuant to the LTO IT Project BOO Agreement.

2.7 Motor Vehicle or MV – the mechanical transportation propelled by non-muscular power and which uses public thoroughfares and which are required to be registered with the LTO under the Code.

2.8 Motor Vehicle Registration System or MVRS – Refers to any of the following registration transactions:

- a. New Registration;
- b. New Registration of Previously Recorded Motor Vehicle;
- c. Renewal Registration;
- d. Registration of Imported Motor Vehicle;
- e. Registration of Chop-Chop Motor Vehicle;
- f. Registration of Locally Assembled/Backyard Rebuilt Motor Vehicle by Non- Accredited Manufacturer;
- g. Registration of Previously Registered Assembled/Backyard Rebuilt Motor Vehicle by Non-Accredited Manufacturer;
- h. Registration of Undocumented Motor Vehicle;
- i. Registration of Stolen and Recovered Motor Vehicle;
- j. Special Registration of Imported Vehicles;
- k. Special Registration of Auctioned Vehicles;
- l. Special Registration of Government Vehicles;
- m. Special Registration of Recovered Vehicles;
- n. Special Registration of Assembled Vehicles;
- o. Change classification (all types);
- p. Transfer of Ownership (all types);
- q. Annotation of Mortgage;
- r. Cancellation of Mortgage and other liens or encumbrances;
- s. Certification Transactions;
- t. Other Miscellaneous Transactions, including but not limited to:

- (1) Duplicate Certificate of Registration;
- (2) Duplicate Official Receipt;
- (3) Duplicate Plates/Replacement Stickers;
- (4) Re-stamping of Engine/Chassis Number;
- (5) Stamping of Component Identification Number;
- (6) Underbond Motor Vehicles;
- (7) MV Obtained under Sheriff Certificate of Sale (Judicial and Extra-Judicial Foreclosure Sale);
- (8) Motor Vehicle Obtained Under an Extra-Judicial Sale Conducted Before the Notary Public;
- (9) Motor Vehicle Obtained Under Sheriff's Certificate of Sale Pursuant to a Money Judgment;
- (10) Motor Vehicle Purchased from Diplomatic or Tax-Exempt Personnel;
- (11) Motor Vehicle with Restraint and Levy; and,
- (12) When the Financing Company No Longer Exists and Release Mortgage Contracts is Missing.

2.9 Private Emission Testing Center(s) or PETC(s) – the persons accredited and authorized by the Department of Trade and Industry and DOTC/ LTO, respectively, to conduct emission tests on MVs.

2.10 PETC IT Provider – a person engaged in the business of providing PETC IT Services as required by DOTC Department Order 2004-01, as amended, and Department Order No. 2005-37, particularly IT Services for the uploading of emission test results, online and real-time, to the LTO IT Project.

2.11 PETC IT Facility – the entire information technology infrastructure needed for the interconnection between the PETCs or PETC IT Provider's IT Facilities with the LTO OT Project's systems and database, more particularly referring to the proprietary customized software, hardware, network and services provided by the LTO IT Project Proponent;

2.12 Radio Frequency Identification or RFID – the generic term that is used to describe a system that transmits the identity (in the form of a unique serial number) of an object or person wirelessly, using radio waves. It's grouped under the broad category of automatic identification technologies. The automatic identification technologies have been used to reduce the amount of time and labor needed to input data manually and to improve data accuracy. RFID is designed to enable readers to capture data on tags and transmit it to a computer system.

2.13 RFID Reader – a fixed or mobile device that emits radio waves and receives signals back from an RFID Tag. The RFID reader passes the signal received or information in digital form to a computer system.

2.14 RFID System – the entire information technology infrastructure needed for the RFID Project, including, but not limited to, the customized software, hardware, network and services to be provided by the LTO IT Project Proponent.

2.15 RFID Tag – consists of a microchip attached to a radio antenna mounted on a substrate. The chip stores data and to retrieve the data an RFID Reader is required.

2.16 Revenue Collection System or RCS – the application system developed by the Project Proponent that handles the computation of fees and collection of payments.

### Sec. 3.0 RFID PROJECT SCOPE AND DOCUMENTS

#### 3.1 The RFID Project covers the following scope:

3.1.1 Enhancement of the LTO IT Project's systems, particularly its Motor Vehicle Registration System, Revenue Collection System and Law Enforcement and Traffic Adjudication System, to include RFID technology and/or the RFID Tag.

3.1.2 Integration of the RFID technology and/or RFID Tag in the PETC System under D.O. Nos. 2005-34 and 2005-37.

#### 3.2 The following documents shall comprise the RFID Project Documents and shall serve as permanent records and reference thereof, to wit:

3.2.1 The RFID Project MOA between DOTC/ LTO and STRADCOM dated June 16, 2009;

3.2.2 DOTC Department Circular No. 2009-06, dated May 6, 2009, and effective July 7, 2009, approving the implementation of the RFID Project;

3.2.3 The resolutions of the PMC and the other Sub and/or Joint Committees of the LTO IT Project and the supporting documents of the said resolutions;

3.2.4 This Memorandum Circular; and,

3.2.5 Such other documents that shall be derived or executed relative to the RFID Project.

### Sec. 4.0 EFFECTIVITY

#### **4.1 FOR REGISTRATION OF MOTOR VEHICLES**

4.1.1 All motor vehicles required to be registered under the Code shall have the duly approved RFID Tag attached or mounted to the duly specified location of its windshield or body as a pre-requisite to its registration or re-registration.

4.1.2 The initial or one-time RFID Tagging of all covered motor vehicles shall be based in their existing renewal registration schedules and at applicable LTO District and Extension Offices. To prepare for roll-out and the training of all personnel, the commencement date of such RFID Tagging shall be on October 1, 2009. All new motor vehicles after said date shall likewise have an RFID Tag attached to it prior to its registration.

4.1.3 Any motor vehicle owner or registrant may opt for RFID Tagging after October 1, 2009, but before its actual scheduled renewal registration deadline date. However, after October 1, 2009, no motor vehicle shall be permitted registration on its renewal registration deadline date without first having been tagged with an RFID Tag.

## 4.2 FOR EMISSION TESTING

4.2.1 The PETC IT Facility shall also be enhanced to permit it to verify the actual physical presence of a motor vehicle during emission testing.

4.2.2 The LTO and the LTO IT Project Proponent, and/or the PETCs and/or the PETC IT Providers, shall ensure the development, roll-out and testing of the integration of the RFID Project with the PETC IT Facility in time for its implementation on January 1, 2010.

4.2.3 No PETC or PETC IT Provider shall be granted authorization or continuance of its authorization if its facilities and systems are non-compliant with the requirements and standards of the RFID Project. For the avoidance of doubt, this Memorandum Circular shall complement and form an integral part of the existing PETC implementing rules and regulations.

## Sec. 5.0 RFID TAGGING AND MODIFIED PROCESS FLOWS FOR MOTOR VEHICLE REGISTRATIONS

### 5.1 DESCRIPTION OF RFID TAGS

The RFID Tags will have a single colored background and will bear a unique serial number that will be loaded in the LTO IT Project's IMS. The RFID Tags are considered accountable items and once attached to a motor vehicle shall not be detached. Any attempt to remove it will damage or destroy the RFID Tag. In such cases, the MV owner will have to immediately obtain another RFID Tag from LTO as provided herein. Except for motorcycles and tricycles, the RFID Tag will be a front adhesive type, while for the former it will be a back adhesive type.

[See figure on original document: NAR Vol. 20 July-September 2009 p.1340]

RFID Tag  
Figure 1

The RFID Tag is composed of 2 portions: (1) Write Once; (2) Read and Write Many.

Data on the Write Once portion will contain the Unique ID (UID) number only. This cannot be changed during the life of the RFID Tag. The UID is not the serial number of the RFID Tag and it is encrypted by the RFID System and shall only be accessed via an authorized RFID Reader.

For the Read and Write Many portion, information may be saved in this portion subject to further review and approval.

The following MV information will be available to authorized personnel who will utilize the prescribed RFID Reader:

- MV File number; - Body Type;
- Engine Number; - MV Classification;

- Chassis Number; - Franchise;
- Plate Number - Route;
- MV Type; - Owner Name;
- Color; - Last Registration Date;
- Make; - Alarms – (Settled and Unsettled); and
- Series; - Other data deemed necessary
- Year Model;

For emphasis, an unauthorized RFID Reader cannot access the data in the RFID Tag, and data retrieved/read shall specifically be used only for the intended purpose.

## 5.2 DESCRIPTION OF RFID READERS

### 5.2.1 FIXED READER

The fixed reader is an International Standards Organization (ISO)-compliant passive RFID Reader that can read specific RFID Tags through radio frequency up to a specified distance. The reader is mounted on a fixed stand and is connected to a computer application system through ethernet interface.

### 5.2.2 HANDHELD READER

The handheld reader is an ISO-compliant device that can read specific RFID Tags through radio frequency up to a specified distance, the reading distance being adjustable to comply with business rules. The reader is programmable and can run applications. Only authorized RFID Readers will be able to read the information in the RFID Tag. Validations and encryptions include, among others, the following:

- Unique ID;
- RFID Reader Code;
- Username and Password of RFID Reader;
- RFID Reader IP Address; and,
- Computer IP Address.

All data will be encrypted once transmitted to the RFID System. Only the RFID System shall have the key to decrypt the data transmitted by the RFID Reader.

## 5.3 NEW REGISTRATION AND RENEWAL REGISTRATION OF MOTOR VEHICLES WITH NO RFID TAG

### 5.3.1 AUTHORIZED PERSONNEL ROLES

- a. LTO Inspector shall be responsible for physically attaching the RFID Tag to the prescribed location on a motor vehicle as well as ensuring that only duly registered motor vehicles are provided RFID Tags.
- b. LTO Evaluator shall ascertain that after an RFID Tag has been duly attached to an MV, only such MVS are subsequently registered.
- c. LTO Cashier shall be responsible for collecting the prescribed RFID fee and depositing the same to the duly designated government depository bank account.
- d. LTO Custodian/Releasing Officer shall be the custodian of all RFID equipment and RFID Tags until issuance to the LTO Inspector for his attachment to an MV.

e. LTO District Office Chief shall be primarily responsible for the proper implementation of the RFID Project, including the RFID Tagging, in his/her respective jurisdiction.

f. RFID Tagging Assistant will assist the LTO Inspector in physically attaching the RFID Tag to the prescribed location on the motor vehicle.

### 5.3.2 RFID TAGGING OF MOTOR VEHICLE

#### a. MVRS TRANSACTIONS

Effective October 1, 2009, motor vehicles required to be registered under the Code shall be installed with an RFID tag. The process or workflow of the applicable MVRS transaction of a motor vehicle in this instance shall be the same except that prior to the release of such motor vehicles' accountable items, e.g. registration stickers for the current year, it shall be installed with an RFID Tag under the following procedures:

1. Upon payment of the applicable MVRS transaction fees, including the RFID fee as prescribed in DOTC D.C. No. 2009-06, the MV owner or his duly authorized representative shall proceed and present to the LTO Inspector the LTO Official Receipt of the said fees paid.

2. After authenticating the LTO Official Receipt presented to him, the LTO Inspector shall check, using the RFID System, that the physical attributes of the motor vehicle being transacted and to be tagged match the information in the LTO IT Project's database. If the foregoing do not match, the MV owner or his duly authorized representative shall be required to revert back the applicable MVRS transaction to the originating LTO Evaluator for correction and/or reconciliation.

3. Only when the physical attributes of a motor vehicle match with the LTO IT Project's database will RFID Tagging commence. The LTO Inspector shall scan an RFID Tag and assign it to the motor vehicle. The RFID Tag will then be physically attached to the upper middle area inside of a motor vehicle's windshield, or in the case of motorcycles and tricycles, on the upper middle area of its gas tank.

For all MVs other than motorcycles/tricycles

[See figure on original document: NAR Vol. 20 July-September 2009 p.1340]

To be placed at the upper middle portion and any tint will need to be removed. ( Tag was blown up to show emphasis)

Figure 2

For motorcycles/tricycles

[See figure on original document: NAR Vol. 20 July-September 2009 p.1340]

To be placed on top of the gas tank

Figure 3

4. To ascertain that the RFID Tag was not damaged during the installation, and to also verify the RFID Tag assignment of the motor vehicle, the LTO Inspector shall scan the RFID Tag with an RFID Reader and if successful, shall upload the pertinent information to the RFID System, whereby RFID Tagging is now deemed complete.

5. The MV Owner or his duly authorized representative will then proceed to the LTO Releasing Officer, who shall release the applicable accountable item(s) for the motor vehicle after having verified in the RFID System and/or the LTO IT Project's system that RFID Tagging of the motor vehicle was successfully completed.

6. A duly registered motor vehicle whose previously installed RFID Tag is subsequently damaged or destroyed, but such motor vehicle nonetheless remains operable and road worthy, shall be required to have a new RFID Tag installed within fifteen (15) days from the date of such damage or destruction.

#### **b. RFID TAGGING TRANSACTION ONLY**

MV owners who intend to secure a RFID Tag even if their MV is not yet due for any MVRS transaction may proceed to any duly authorized LTO District Office and follow the procedures herein:

1. The MV owners or their duly authorized representatives are required to bring their MV to a duly authorized LTO District Office for physical inspection, and shall also bring such MV's LTO Official Receipt (OR) and Certificate of Registration (CR).
2. The LTO-OR and CR shall be submitted to the LTO Evaluator for assessment and verification. MVs with an existing alarm or apprehension shall not be permitted to obtain a RFID Tag unless such alarm or apprehension is settled. Similarly, MVs found to be delinquent will be required to first update their registration prior or simultaneous to obtaining an RFID Tag.
3. Upon payment of the RFID fee as prescribed in DOTC D.C. No. 2009-06, the same procedures as in 5.3.2(a) above will be followed.

### **5.4 RENEWAL REGISTRATION OF MOTOR VEHICLES WITH RFID TAGS**

#### **5.4.1 Effective January 1, 2010**

- a. Effective January 1, 2010, a PETC shall not conduct a smoke emission test on any MV without an RFID Tag.
- b. MV owners are required to first proceed to any duly authorized LTO District Office to have a RFID tag attached to their MV as provided herein.
- c. Once the RFID Tag is duly attached, the MV owner may proceed to any duly authorized PETC to have the MV undergo smoke emission testing.
- d. After the smoke emission test, the PETC will electronically transmit the emission test result to its PETC IT Provider or directly to the PETC IT Facility for authentication and verification. After a successful smoke emission test, the MV owner may then proceed to the nearest LTO District Office for its applicable MVRS transaction.
- e. MV owners are encouraged to have their MVs tagged at any LTO District Office prior to their registration schedule for a more efficient registration processing.

#### **5.4.2 Effective October 1, 2010**

- a. Effective October 1, 2010, all MVs with RFID Tags can proceed directly to any authorized PETC for their smoke emission test.
- b. The PETC shall conduct its standard smoke emission test on the MV, after which it shall electronically send the result of the smoke emission test to its PETC IT Provider or directly to the PETC IT Facility for authentication and verification.
- c. After a successful smoke emission test, the MV owner may proceed to any LTO District Office for its applicable MVRS transaction.

### **Sec. 6.0 MISCELLANEOUS PROVISIONS**

6.1 To ensure the continuing and uninterrupted availability of RFID Tags so as not to hamper or delay the implementation of the RFID Project, the Project Proponent shall maintain an inventory equivalent to ten percent (10%) of the average motor vehicle registration transactions of the LTO District or Extension Office for its immediately preceding three (3) months of operations.

6.2 A motor vehicle that is deemed not duly registered as provided herein shall be subject to the provisions of the Code, existing laws, rules and regulations.

6.3 Any related orders, issuances or parts thereof which are inconsistent with the provisions of the Circular are hereby repealed or amended accordingly.

6.4 If any one or more of the provisions contained in this Circular or any document executed in connection herewith be declared with finality by a court of competent jurisdiction as invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions contained herein or such document executed in connection herewith shall not in any way be affected or impaired.

6.5 This circular shall take effect fifteen (15) days after receipt of copies thereof by the Office of the National Administrative Register (ONAR), U. P. Law Center, Diliman, Quezon City, and publication thereof in two (2) newspapers of general circulation in the Philippines.

For strict compliance.

Adopted: 07 Aug. 2009

(SGD.) ARTURO C. LOMIBAO

Assistant Secretary

**ABOUT BATAS.ORG**

# Study smarter at BATAS.org

*The Philippine bar review and law-school companion built around how your brain actually remembers.*

**The complete Philippine law library - free for everyone.**

More than 100,000 Supreme Court decisions, Republic Acts, and executive issuances - full-text searchable, browsable by category and year, and always free. No paywall, no login. This PDF came from it.

**Audio case-brief lectures.**

Any decision becomes a podcast-style lecture - facts, issues, ruling, and doctrine - with read-along highlighting and a hands-free presentation mode. Study while commuting, working out, or resting your eyes.

**Bar review built on the science of memory.**

Complete, sequenced courses for all eight bar subjects, narrated like podcasts and reinforced with retrieval practice and spaced review - the study techniques with the strongest evidence behind them.

**The full law-school curriculum.**

One subscription unlocks the entire J.D. curriculum - every subject, every lesson, with your progress tracked down to the paragraph so you can pick up exactly where you left off, on any device.

**Mock exams that tell you where you stand.**

Timed multiple-choice exams graded instantly, with per-subject score breakdowns and focus suggestions that point you at your weakest topics first.

**A study planner that keeps you on pace.**

Set your schedule and BATAS tells you every day whether you are on track for bar day - and exactly which lesson to take next.

**Start free at <https://batas.org>**

The law library is free forever - and your first lesson is one click away.

The text of this document is an official public record and remains in the public domain. Formatting, presentation, and compilation © 2026 batas.org.

Downloaded free from the batas.org Law Library. Share it freely - the library is free for every law student, bar reviewee, and practitioner.