

UNITED ARAB EMIRATES Tire Labeling Scheme

Foreword

This regulation aims to provide RFID labels that are registered in a central database for all approved tires in the UAE. These RFID labels shall provide information of the tire's compliance as well as its traceability to both seller and consumer.

Article 1 - Scope

This regulation establishes the requirements of the RFID labels for tires. The requirements set out in this regulation shall apply to the type of tires specified in Annex A.

The Annexes in this regulation and may be changed by ESMA, and shall be subject to the approval of its Board of Directors prior to its implementation.

Article 2 - Definitions

1. RFID – Radio Frequency Identification
2. Tire/Tyre –
3. ESMA – Emirates Authority for Standardization and Metrology that is the national standardization body of the UAE authorized to enforce this regulation.
4. UAE authorities – UAE authorities that are authorized to survey or inspect the local market in cooperation with ESMA.
5. 3rd Party printing center – a 3rd party certification body recognized by ESMA to provide printing services of the RFID label to manufacturers or distributors.
6. Manufacturer/Distributor – a party recognized by ESMA to print/generate RFID labels for their own products only.
7. Retail shop – a physical location where tires are displayed and/or stored with the intention to sell the product.
8. Showrooms – a physical location where tires are displayed for promotion and/or marketing. Car showrooms are included under this definition.
9. RFID label – a sticker label incorporating an RFID chip and inlay complying with the specifications prescribed in Annex B.
10. GSO conformity certificate – a certificate of conformity issued by the GSO and is awarded to the manufacturer of the tire and the details of the tire specified in the certificate.

Article 3 - Requirements

1. All tires covered by this regulation shall be provided with the RFID label.
2. All tires covered by this regulation shall have a valid GSO conformity certificate prior to the request of RFID labels.

3. RFID labels shall comply with the design specifications as prescribed in Annex B.

Article 4 - Conformity assessment

All GSO tire conformity certificates shall be verified for its authenticity and recognized prior to the awarding of the RFID labels.

Article 5 - Market monitoring and surveillance

UAE authorities, in cooperation with ESMA, shall have access to the secure database for real-time verification of RFID labels in the market.

Article 6 - Responsibilities

All RFID label information is solely generated by ESMA, including the encryption of such information. Printing centers including manufacturers/distributors recognized by ESMA to have printing privileges shall request for this information from ESMA.

1. Manufacturers and UAE Distributors shall provide the RFID labels on all tires covered by this regulation.
2. Retail shops and Showrooms shall only accept tires (covered by this regulation) with the RFID labels.
3. Manufacturers/Distributors and/or Printing centers shall ensure that the materials (labels, RFIDs and printers) used in printing the RFID labels complies with the requirements set forth in this regulation.

Article 7 - RFID Labels - Printing Privileges

Printing of the RFID labels shall be given to a 3rd party certification body and/or a manufacturer/distributor upon evaluation and approval from ESMA. Evidence of availability of the following requirements shall be provided by the interested party applying for the printing privileges:

1. Compatible printing hardware;
2. Compliant RFID labels;

ESMA reserves the right to revoke this privilege if reasonable cause is found.

Article 8 - Violations and penalties

Reports of violations and other information related to the effective implementation of this regulation as seen through market surveillance shall be forwarded by the concerned authority to ESMA for study and evaluation.

Penalties as imposed by the issuing authority shall apply.

Article 9 - Transitional provisions

Voluntary period from Week 41 up to Week 52 of 2014.

Annex A – Regulated Types

All brand new passenger car tires manufactured starting from week 45 of 2014.

Annex B – RFID-Tire Tag Design

List of information to be retrieved from the ESMA database (upon scanning the 2D barcode) and displayed on the End-user smart phone using the ESMA Mobile App:

1. "This tire is approved for UAE use and is registered in ESMA."
2. CCR No.
3. Brand Name of the Tire
4. Country of Origin
5. Tube/Tubeless
6. Temperature Rating
7. Traction Information
8. Treadwear
9. Tread Pattern

List of information to be retrieved from the ESMA database (upon scanning the RFID Chip) and displayed on the inspector hand-held device:

1. RFID Code
2. CCR No.
3. Brand Name of the Tire
4. Country of Origin
5. Tube/Tubeless
6. Temperature Rating
7. Traction Information
8. Treadwear
9. Tread Pattern

- A. Manufacturer Name
 B. RFID-Tag Details
 - Printed Date (DD-MMM-YYYY);
 - Printed By: (Company Name);



QR Code
 Links to a webpage in ESMA website showing information about the RFID-TIRE Tag, its use, purpose, and the instructions on how to read the tag using a smart phone.
 This section will be static and will be the same for all tags printed.

CCR No.
 GSO Conformity Certificate No. This section will change depending on the certificate number of GSO.

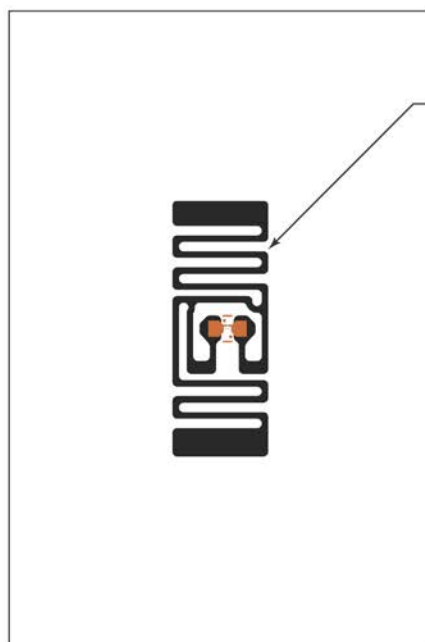
Type (Tire Designation/Size)
 This section will change for every tire labeled.

2D BARCODE (for suggestion)
 This section should contain only the RFID Code (unique to each and every tag issued) the same ID code written in the RFID Chip.

The code should be designed to create unique codes for an average of 8 million distinct codes per year.

This barcode is to be scanned using the mobile application of ESMA for tires. The information regarding the tire will then be retrieved from the ESMA database and displayed in the smart phone of the end-user.

Emirates Authority For Standardization & Metrology



RFID Chip-Inlay
 Contains the RFID code only.

RFID-TIRE TAG SPECIFICATIONS

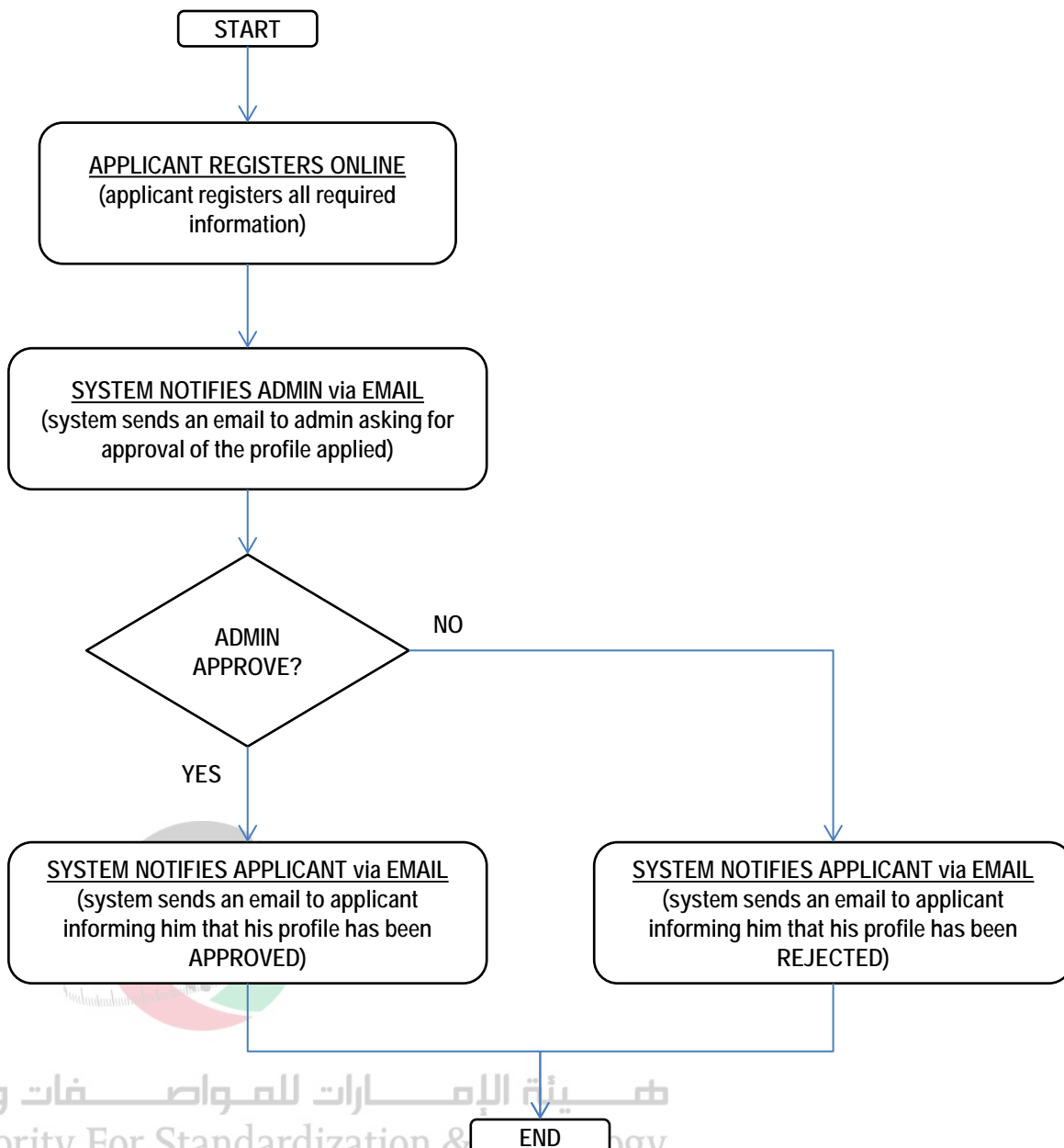
- The tag is a self-adhesive, plastic based tag.
- The tag is printed in black and white design.
- The tag incorporates an RFID chip inlay containing a code that is stored in the ESMA database and linked to the tire details that is printed in the tag itself.
- Each tire in the UAE for sale/display shall have a tag.



REQUIRED INFORMATION – PROFILE REGISTRATION

1. CONTACT NAME
2. COMPANY NAME
3. JOB TITLE
4. BUSINESS TYPE (*drop-down list*)
 - a) MANUFACTURER
 - b) DISTRIBUTOR
 - c) RETAILER
 - d) 3RD PARTY CB
5. EMAIL ADDRESS (*hyperlink*)
6. WEB PAGE (**HYPERLINK**)
7. TELEPHONE NUMBER
8. FAX NUMBER
9. **MOBILE NUMBER**
10. BUSINESS ADDRESS
 - a) STREET
 - b) P.O. BOX #
 - c) CITY
 - d) STATE/PROVINCE
 - e) ZIP/POSTAL CODE
 - f) COUNTRY
11. **TRADE LICENSE EXPIRY DATE**
12. **TRADE LICENSE (ATTACHMENT)**
13. **AUTHORIZATION LETTER (ATTACHMENT)**

*Red colored information are optional for applicants to fill.



PROFILE TYPES	APPLICATION	APPROVAL	PRINTING
MANUFACTURER, DISTRIBUTOR or RETAILERS (with printing facility)	YES	NO	YES
MANUFACTURER, DISTRIBUTOR or RETAILERS (without printing facility)	YES, THROUGH 3 RD PARTY USER PROFILE (3 RD PARTY, USING THEIR OWN USER PROFILE APPLIES IN BEHALF OF THE APPLICANT)	NO	NO
3 RD PARTY	YES	NO	YES
CE (Conformity Engineer)	NO	YES	NO
ADMIN	YES	YES	NO

USER LOGS-IN TO PROFILE
(applicant goes to web app, and logs-in using username and password)

USER IS GIVEN 3 BUTTONS TO CHOOSE FROM

MAIN MENU

RFID-TAG REQUEST

GSO CERTIFICATES APPLIED

TAGS HISTORY

MAIN MENU

REQUESTING FOR THE TAGS OPTION, USER IS DIVERTED TO THE GUI WHICH HAS 2 SECTIONS:

1ST SECTION REQUIRES THE ENTRY OF THE REQUIRED INFORMATION (All fields should be filled completely):

1. GSO Conformity Certificate CCR No. (Numerical 4-7 integers)
2. CCR issuance date (date format – DD-MMM-YYYY)*
3. Manufacturer Name
4. Brand Name of the Tire
5. Country of Origin
6. Type (Tire Designation/Size) – i.e. 235/45R17 94V
7. Tube/Tubeless – (Drop-down list – Tube or Tubeless)
8. Temperature Rating – (Drop-down list – ‘A’, ‘B’, ‘C’)
9. Traction – (Drop-down list – ‘AA’, ‘A’, ‘B’, ‘C’)
10. Treadwear – (Numerical value 3 digits max)
11. Tread pattern – (Alphanumeric data)
12. Production Period
 - a. Beginning: (Entry of Week No.- 2 digits and Year – 4 digits – i.e. 01-2014)
 - b. End: (Entry of Week No.- 2 digits and Year – 4 digits – i.e. 20-2015)

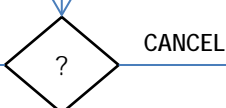
*Expiry date of GSO Cert is one (1) year from the CCR date of issuance.

Each request submitted should be given a unique job/request number.

2ND SECTION REQUIRES THE ENTRY OF QUANTITY OF TAGS:

1. Numerical field

Upon completion of data entry, options to **SUBMIT APPLICATION**, **CLEAR FIELDS** or **CANCEL** should be available through **ACTION BUTTONS**.



CLEAR FIELDS RETURNS TO THE SAME GUI FOR REQUESTING TAGS BUT WITH FIELDS CLEARED WITH PREVIOUSLY ENTERED VALUES.

USER WILL BE PROVIDED WITH THE FOLLOWING RECORDS RELATIVE ONLY TO HIS PROFILE:

A table/sheet having the following columns of information:

1. Count
2. Application Date (Date when the GSO cert was applied under this program)
3. Application Status (Approved, Pending Approval, Rejected)
4. GSO Conformity Certificate CCR No. (Hyperink)
5. CCR Issuance date
6. CCR status (Expired / Valid)*
7. Total Quantity of Tags requested (relative to the CCR certificate No.)

*Expiry date of GSO Cert is one (1) year from the CCR date of issuance.

Upon generation of the sheet/table, the user is given the options to **PRINT**, **EXPORT TO EXCEL**, or **CLOSE THE TABLE** and **RETURN TO THE MAIN MENU**.

USER WILL BE PROVIDED WITH THE FOLLOWING:

A table/sheet having the following columns of information:

1. Count
2. Job/request number
 - a) Collapsible line to display all the **RFID UNIQUE SERIAL TAG ISSUED UNDER THIS REQUEST**.
3. Request Date (Date when the tags where requested)
4. GSO Conformity Certificate CCR No. (of which the tags where printed against)
5. CCR Issuance date
6. CCR status (Expired / Valid)*
7. Quantity of Tags requested during that time of application (relative to the CCR certificate No.)
8. Tags printed by (name of the user profile who printed the tags)
9. The bottom of the sheet should provide summary of total quantity of tags issued.

*Expiry date of GSO Cert is one (1) year from the CCR date of issuance.

Upon generation of the sheet/table, the user is given the options to **PRINT**, **EXPORT TO EXCEL**, or **CLOSE THE TABLE** and **RETURN TO THE MAIN MENU**.

MAIN MENU

FOLLOWING ACTIONS WILL BE DONE UPON SUBMITTING THE APPLICATION:

1. Dialog box with 'OK' action button: Message "Your request has been successfully submitted."
2. **Email notification sent to the user's email address to confirm that the application recently made was authentic.**
3. The same email notification sent to the user should also include a link to click in case the request was considered to be fake or was done without prior knowledge of the user profile owner. This notification is to be directed to the ADMIN.
4. Email notification to conformity engineer (CE) for review and approval

