



European Tyre and Rim Technical Organisation

ETRTO Communication on Tyre Information

Brussels, July 16th 2018

ETRTO is actively working on an Industry standard on Tyre Information based on a series of ISO standards on RFID tyre tags that will be published in 2019. ETRTO is taking into account the needs and the inputs received from different stakeholders, as well as those of the Tyre Manufacturers themselves.

Based on the above mentioned picture, the following requirements were defined:

- Need to guarantee the traceability of the tyre with an identifier that has to be:
 - Unique
 - Long-lasting
 - Unfalsifiable
- This unique Identifier shall include in a coded format according an ISO standard:
 - Brand or Company name
 - Item/Article
 - Serial number

and shall be readable for all the stakeholders assuring a standardised accessibility.

To satisfy these requirements, ETRTO identifies the solution by using a Unique Item Identifier (UII) based on the SGTIN 96 code. For tyre application, the ISO 20910 standard for coding RFID tyre tags is under development. Different technologies are available to convey the UII; however ETRTO acknowledged that these different solutions provide also different traceability capabilities.

Therefore, ETRTO considers a Radio Frequency IDentification (RFID) device as the most appropriate technology to be coded with the Tyre Unique Item Identifier, in line with the requirements for RFID tyre tags set in the standard under development ISO 20909, for the following reasons:

- Guarantee readability in different conditions, such as:
 - During the shelf life of the tyre
 - During the entire tyre life for traceability reasons
 - End of Life management
- Make it unfalsifiable: the UII coded by the tyre manufacturer will be permalocked
- Robust against damages/ageing/robbery/counterfeiting
- Fitting the needs of different stakeholders (OEM, Dealers, Governments, Regulatory Authorities, Retreaders, Tyre manufacturers etc)
- Better cost/benefit ratio (including the time to write and to read) than optical solutions
- Flexible: back-end data linked to the specific tyre can be updated without changing the UII locally stored in the RFID
- ISO standards for RFID enabled Tyres are expected to be published in 2019
- Possible future readability of the RFID by the vehicle

The RFID technology is available in different means (embedded, patch, sticker), with different traceability targets.. In any case, the RFID and its UII shall be considered the enabler to let different stakeholders get access to specific Tyre Information stored in Tyre Manufacturers controlled servers and based on the agreement between the Tyre Manufacturer and the Requester.



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Therefore, to manage the Tyre Information, ETRTO is pro-actively working on a Proof of Concept based on a standard API to demonstrate how an RFID enabled tyre can be interrogated, letting the requester (stakeholder) get access to the manufacturer database, where specific information can be retrieved, based on a robust and standardised authentication service. ETRTO is also engaging the Technical Tyre Associations in other regions with the aim to cooperate on Global scale for a common solution.

Nicolas de Mahieu
Secretary General

A handwritten signature in black ink, appearing to read 'N de Mahieu', with a long horizontal line extending to the right.