

## **Technical requirements for and type-approval of studded tyres for vehicles (TRAFICOM/383441/03.04.03.00/2022)**

### **Background and legal basis of the Regulation**

The Finnish Transport and Communications Agency issued the Regulation on technical requirements for and type-approval of studded tyres for vehicles (TRAFICOM/220809/03.04.03.00/2019) on 10 February 2021. The Regulation entered into force on 1 July 2021. It replaced the earlier Decree of the Ministry of Transport and Communications on studs for vehicle tyres (408/2003), which was repealed in connection with the enactment of the new Vehicles Act (82/2021) by Decree 173/2021 that entered into force on 1 July 2021.

The Vehicles Act (82/2021) includes an authorisation to issue further regulations on requirements for studs and studded tyres allowed to be used in road traffic (section 16, subsection 7), on the marking of national type-approval of a tyre-stud combination and the placement of the marking (section 44, subsection 5), the technical data to be provided when applying for the type-approval of a stud or a tyre-stud combination (section 48, subsection 5), on demonstrating conformity and the contents of the reports presented to demonstrate conformity (section 49, subsection 3), and on sufficient conformity arrangements and minor derogations from compliance with the procedures laid down in the Framework Regulation on motor vehicles and their trailers in connection with national type-approval (section 66, subsection 8).

### **Other related regulations and statutes**

In addition to this Regulation, more detailed provisions on general control of the conformity of production are laid in the Finnish Transport and Communications Agency's Regulation on procedures for controlling the conformity of production of a vehicle, system, component, separate technical unit, part and equipment (TRAFICOM/425095/03.04.03.00/2022).

### **Objective of the Regulation**

The objective of the Regulation is to update the current Regulation in accordance with the amendments made to the standard SFS-7503:2018 (Road wear test of studded tyres / Nastarenkaiden tienkuluttavuusmittaus).

The Regulation refers to the standard SFS 7503:2018, the new version of which was published on 13 December 2022, as the most important test method regarding road wear. In the future, the test tyre inflation pressure defined in the standard would not depend on the tyre's load capacity (LI category). The standard is also intended to undergo other minor editorial changes. In addition, it is necessary in the Regulation to specify the tolerances of the protrusion of the stud for the purpose of production conformity control and market surveillance.

Provisions concerning general control of the conformity of production would be omitted from the Regulation. Provisions concerning general control of the conformity of production would be omitted from the Regulation. In future, general provisions on the control of the conformity of production would be included in the Finnish Transport and Communications Agency's Regulation on procedures for controlling the conformity of production of a vehicle, system, component, separate technical unit, part and equipment (TRAFICOM/46660/03.04.03.00/2020). A regulatory project has been launched to amend the said regulation (TRAFICOM/ 425095/03.04.03.00/2022).

## **Drafting process of the Regulation**

The Regulation has been drafted at the Finnish Transport and Communications Agency. The Finnish Transport and Communications Agency has presented the Regulation to stakeholders during the regulatory project.

The launch of the regulatory project was announced on the Finnish Transport and Communications Agency's website and by email to those who have joined the mailing list for the drafting of road transport regulation.

Written comments were requested on the draft Regulation during the period from 02 June - - 02 August 2023.

The request for comments was published on the website of the Finnish Transport and Communications Agency. The request for comments was also sent by email to those who have joined the mailing list for the drafting of road transport regulation. The final Regulation will be published on the Finnish Transport and Communications Agency's website and in the Finlex online database. The issuance of the Regulation will be announced on the website of the Finnish Transport and Communications Agency and separately to stakeholders.

The draft Regulation has been notified in accordance with the notification procedure technical regulations (Directive (EU) 2015/1535 of the European Parliament and of the Council).

## **Comments received through consultation**

The comments received and the changes made based on them are described in the comments section attached to this explanatory memorandum.

## **Changes and impact assessment**

The Regulation change will have no significant economic impacts nor any impact on accessibility. The Regulation supplements provisions laid down by law and supports the practical implementation of the law.

At a general level the Regulation aims to reduce the road wear caused by studs. Regulation is needed in the field, in particular, because of the constantly increasing total transport performance and the increasing concentration of traffic on the road infrastructure of Southern Finland. Another objective of the Regulation is to reduce the particulate emissions caused by the studded tyres used in passenger cars and vans, in particular.

Moreover, the aim is to update the Finnish Transport and Communications Agency's regulations so that in future general provisions on the control of the conformity of production would be included in a regulation on procedures for controlling the conformity of production. The intention is to transfer from this Regulation general provisions on the control of the conformity of production to the Regulation on procedures for controlling the conformity of production (TRAFICOM/425095/03.04.03.00/2022). Indeed, in addition to ensuring that regulation is up to date, the purpose of this Regulation is to clarify the legal situation and harmonise the requirements concerning the control of the conformity of production between different products to be type-approved and their manufacturers.

## **Detailed rationale**

The scope of application of the Regulation would specify in more detail with respect to procedures for controlling the conformity of production so that in future the

Regulation would take into account that products within the scope of this Regulation also fall within the scope of another regulation issued by the Agency. The objective is to clarify the relationship between the regulations. As a rule, more detailed provisions on procedures for controlling the conformity of production are laid down in the Finnish Transport and Communications Agency's Regulation TRAFICOM/425095/03.04.03.00/2022. However, this Regulation includes detailed provisions concerning tyre-stud combinations, and these provisions are to be complied with in addition to the general provisions on the control of conformity of production. In the event of contradicting provisions, this Regulation takes precedence. The Regulation will, for example, continue to specify in more detail the tests related to the control of conformity of production laid down in a separate provision as referred to in section 3.2.7 of the Regulation on controlling the conformity of production.

The definition of road wear according to section 2, indent 3, would be updated according to the updated standard SFS 7503:2022 (Road wear test of studded tyres). Additionally, the reference to the updated standard would be updated in the section 4.1. and in Annex 1.

More specific provisions on limit values for stud protrusion in tyre-stud combinations would be added to section 4.1 of the Regulation. These limit values are to be applied to tyres in connection with the control of production conformity connected to type-approval and placing on the market of tyres. Additionally, for studded tyres based on the type-approval of the stud, the protrusion limits for production tyres are stipulated in section 5.1. The limit values are more lenient than the limit values applied in type-approval testing, so that they are suitable for serial production of tyres. The objective is to clarify the scope of application of the stud protrusion requirements and to reduce the ambiguity of the Regulation. In this context, in the cases referred to in Table 2, for the measurement of stud protrusions, the possibility to allow a corresponding measurement method other than the method described in the standard, separately approved by the type-approval authority, is added to the Regulation.

Sections 4.3 and 5.5 of the Regulation would be amended so that they correspond more clearly to the purpose of regulation. Ensuring the conformity of production throughout the life cycle of a product is an essential element of type-approval. Ensuring conformity applies equally to the type-approval of studs and tyre-stud combinations. Similarly, the transitional provision in section 7 would be revised to be more clearly in line with the subject matter and purpose of the Regulation.

The Regulation on technical requirements for and type-approval of studded tyres for vehicles TRAFICOM/220809/03.04.03.00/2019 replaced the Decree of the Ministry of Transport and Communications on studs for vehicle tyres (408/2003). In connection with transferring the regulation from one legal instrument to another, it was supplemented with new, more detailed provisions on the control of conformity of production. Sections 4.3 and 5.5 of the Regulation currently in force refer to requirements included in the Framework Regulation on motor vehicles and their trailers, which have been further specified in Annex 2 to the Regulation. According to the rationale, reports on the conformity control procedures are required to be presented to the type-approval authority if type-approval is sought for a new type of a tyre-stud combination or stud on or after 1 January 2025.

Under the Regulation, applications on the type-approval of a new type would be subject to the provisions on ensuring the conformity of production laid down in the Framework Regulation (EU) 2018/858 and its Annex IV as from 1 January 2025. Moreover, Annex 2 to the Regulation laid down certain detailed provisions that were also subject to a transitional period as from 1 January 2025. With respect to provisions other than the more detailed provisions in Annex 2, this means in practice that the Regulation currently in force is applied as such before the beginning of the transitional period.

In accordance with section 66, subsection 6 of the Vehicles Act (82/2021), the control of conformity of production in connection with EU type-approvals is subject to the provisions of the Framework Regulation on motor vehicles and their trailers. Similarly, in accordance with section 66, subsection 7, the provisions of the Framework Regulation on motor vehicles and their trailers shall also apply to national type-approval and national small series type-approval because the transitional period has not yet begun and no other provisions on the matter have been laid down by law or regulations. At present, it has been otherwise provided in Annex 2 as regards stud protrusion control measurements. These detailed provisions in Annex 2 are relevant in terms of the transitional provision currently in force, because the transitional period applying to them will not change. In other respects, the scope of the transitional provision will be specified in more detail as referred to above.

It should also be noted that in accordance with section 66, subsection 3 of the Vehicles Act, the Finnish Transport and Communications Agency shall ensure the existence of a sufficient procedure to guarantee effective control of conformity of production before it grants a type-approval. Because of this requirement, the authority has already set uniform preconditions that enable it to ensure that procedures are sufficient to guarantee effective control of conformity of production, as required by law. The Finnish Transport and Communications Agency has issued a separate regulation on procedures for controlling the conformity of production to promote regulatory clarity and equality. Instead of the approval authority setting corresponding sufficient requirements separately also for approvals sought before 1 January 2025, it is justified to bring forward the applicability of the provision in question to make it also apply to type-approvals of a tyre-stud combination or a stud applied for a new type on or after the date when this Regulation enters into force. However, any derogating or supplementary provisions laid down in this Regulation would continue to take precedence, and the provisions on stud protrusion control measurements would continue to become applicable as from 1 January 2025 in accordance with the transitional provision.

Annex 2 also includes provisions on the method of carrying out an initial assessment, allowing the initial assessment to be carried out based on an examination of the manufacturer's quality system documents instead of an on-site review. The wording of the provision is clarified to specify in more detail the content concerning the party applying the provision so that, in future, the provision will state that the manufacturer may, where justified, demonstrate that the conditions of the initial assessment are satisfied based on a written report or some other appropriate account. A justified reason may be, for example, aspects concerning geographical location or other matters affecting the ability to resolve the matter without delay, if the matter is not considered to require a physical visit to the production site. In addition to a written report, other alternatives based on case-by-case consideration may include the use of audio-visual material or a remote audit, for example. Because Annex 2 is repealed, the content of the provision will be transferred to sections 4.3 and 5.5. Section 4 of the Regulation lays down requirements for tyre-stud combinations and section 5 requirements for studs.

An information reference to section 51, subsection 1 of the Vehicles Act is added to section 5.4 of the Regulation. The provision in the Vehicles Act lays down an obligation for the holder of a type-approval to inform the authority of any changes to a type-approved vehicle, system, component, separate technical unit, part or equipment.

Section 6 of the Regulation concerns the process for applying for type-approval for a stud or a tyre-stud combination. As a rule, a type-approval application must include the name and address of the tyre manufacturer and corresponding details on the stud manufacturer, the name and address of the manufacturer's representative and the make and commercial names of the product to be type-approved. The section

would be supplemented by adding new details in the information to be included in the application. In future, the application would need to be accompanied by an information form in accordance with the model in Annex 4 (new annex). A type-approval certificate in accordance with UN Regulation No 30 or 54 would also be required for the tyre sizes tested. In practice, this has been required even at the moment, so the requirement should also be added to the listing according to the Regulation. As another new requirement, the application should include a drawing of the tyre tread pattern.

Section 7 of the Transitional provisions specified a reference for studded tyres according to valid, i.e. old type approvals, to be the approvals according to Regulation 408/2003 to avoid interpretation ambiguities.

The provisions concerning stud protrusion control measurements will be transferred from sections 2.3.5 and 2.3.6 of Annex 2 to section 4.3 of the Regulation. The content or wording of the provisions will not change.

Annex 2 to the Regulation would be repealed as unnecessary. The provision 1.1 on the method for carrying out the initial assessment would be transferred as described above, with amended wording, to sections 4.3 and 5.5 of the Regulation. Sections 2.1 and 2.3.1–2.3.4 of Annex 2 include informative references to the provisions of the Framework Regulation on motor vehicles and their trailers, which will become applicable in accordance with the provisions of the Vehicles Act, as discussed above. In accordance with sections 4.3 and 5.5 of the Regulation, it has already been provided that new types would be subject to the provisions of the Framework Regulation on motor vehicles and their trailers even after the transitional period. The content of the provisions is informative, and the provisions are no longer needed because of the technical transfers of content made to the Regulation. Moreover, other necessary provisions are partly included in the scope of the general regulation on controlling the conformity of production (TRAFICOM/425095/03.04.03.00/2022), which will reduce the need for the authority to require corresponding matters separately from each manufacturer. Section 2.2. of Annex 2 concerns such activities of public authorities on which the authority in question no longer needs to issue provisions.

Technical changes include transferring Annex 3 to a new Annex 2 and Annex 4 to a new Annex 3. As before Annex 2 specifies the requirements for a tyre label in the form of a sticker which, in addition to referencing the Regulation, includes the identifier of the type-approval granted. The sticker, which must be at least 35 cm<sup>2</sup> in size, is intended to provide consumers with easily identifiable information on the type-approval of the product. More detailed information regarding the approval would be available on the website of the Finnish Transport and Communications Agency. In addition, type-approval identifiers can be used to identify specific type-approvals in connection with market surveillance. As before, Annex 3 will contain provisions on the reporting model to be used by testing laboratories, according to which the detailed results of the road wear test must be reported when applying for type-approval. The end of the report template contains a checklist on the preparation of the test report and other necessary reports, to help support the type-approval application process.

In the table "Measured stud protrusions [mm] of new test tyres and variation in relation to target protrusion" in the new Annex 3, the wording concerning variation related to target protrusion is specified because of uncertainties of interpretation by omitting the term 'average' and by referring instead to each of the two tyres.

A new Annex 4 will be added to the Regulation. The Annex includes a model information form.

## **Entry into force**

The planned date of entry into force of the regulation is 15 March 2024.

## **Monitoring**

The impact of the Regulation will be assessed as part of the official activities of the authority.