Proposal for Supplement 9 to the 03 series of amendments to Regulation No. 129 (Enhanced Child Restraint Systems)

Submitted by the expert from the European Association of Automotive Suppliers

The text reproduced below was prepared by the expert from the European Association of Automotive Suppliers (CLEPA). It proposes to amend UN Regulation No. 129 to update the references to EN Standards for toxicity and flammability. The modifications to the current text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

I. Proposal

Paragraph 6.3.1.1., amend to read:

"6.3.1.1. The Enhanced Child Restraint System manufacturer shall declare in writing that the toxicity of materials used in the manufacture of restraint systems and accessible to the restrained child is in conformity with the test requirements of EN 71-3:2019+A1:2021, for a Category III material as defined in paragraph 4.2., Table 2 and following the test method of paragraph 7.2., specifically paragraph 7.2.2., Table 3, Category III sampling method. Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service. This paragraph does not apply to Non-integral ECRS with a stature range starting at 100 cm or above."

Paragraph 6.3.1.2., amend to read:

"6.3.1.2. The flammability of Enhanced Child Restraint Systems submitted for approval shall be assessed by one of the following methods:

Method 1 is applicable only to non-built-in Enhanced Child Restraint Systems and Method 2 is applicable only to vehicle specific built-in Enhanced Child Restraint Systems.

Method 1

The Enhanced Child Restraint System manufacturer shall declare in writing that the flammability of materials used to manufacture the Enhanced Child Restraint System is in conformity with the method of section 5.4 of EN 71-2:202111+A1:2014 with a maximum rate of spread of flame of 30 mm/s. Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service. Where fabrics are assembled together, these shall be tested as a composite.

"Composite material" means a material composed of several layers of similar or different materials intimately held together at their surfaces by cementing, bonding, cladding, welding, etc. In such a case, the material shall be tested as a composite. When different materials are connected together intermittently, such materials shall not be considered as composite materials and therefore tested separately.

Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service.

Method 2

The applicant shall declare in writing that when testing materials in accordance with Annex 22 of this regulation, the materials used shall not burn, nor transmit a flame front across its surface, at a rate of more than 100 mm per minute. Each material used in an enhanced child restraint system shall conform to these requirements. However, the requirement concerning transmission of a flame front shall not apply to a surface created by cutting a test specimen for purposes of testing pursuant to Annex 22.

The requirements shall be met in both the "in-use" and in the "stowed" positions of the built-in Enhanced Child Restraint System.

If a material stops burning before it has burned for 60 seconds from the start of timing, and has not burned more than 51 mm from the point where the timing was started, it shall be considered to meet the burn-rate requirement specified above.

Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service.

II. Justification

- 1. UN Regulation No. 129 refers to European Standards (EN) for toxicity and flammability. In each case, a declaration of compliance with a specific (i.e. dated) version of each standard is required. However, both versions have recently been revised by CEN and the versions referenced by UN Regulation No. 129 have been withdrawn. This proposal updates the references to reflect the latest published version of each standard in order to avoid administrative burdens during the type-approval process of ECRS. In summary,
 - a. EN 71-3:2019+A1:2021 replaces EN 71-3:2019 (toxicity)
 - b. EN 71-2:2021 replaces EN 71-2:2011+A1:2014 (flammability)