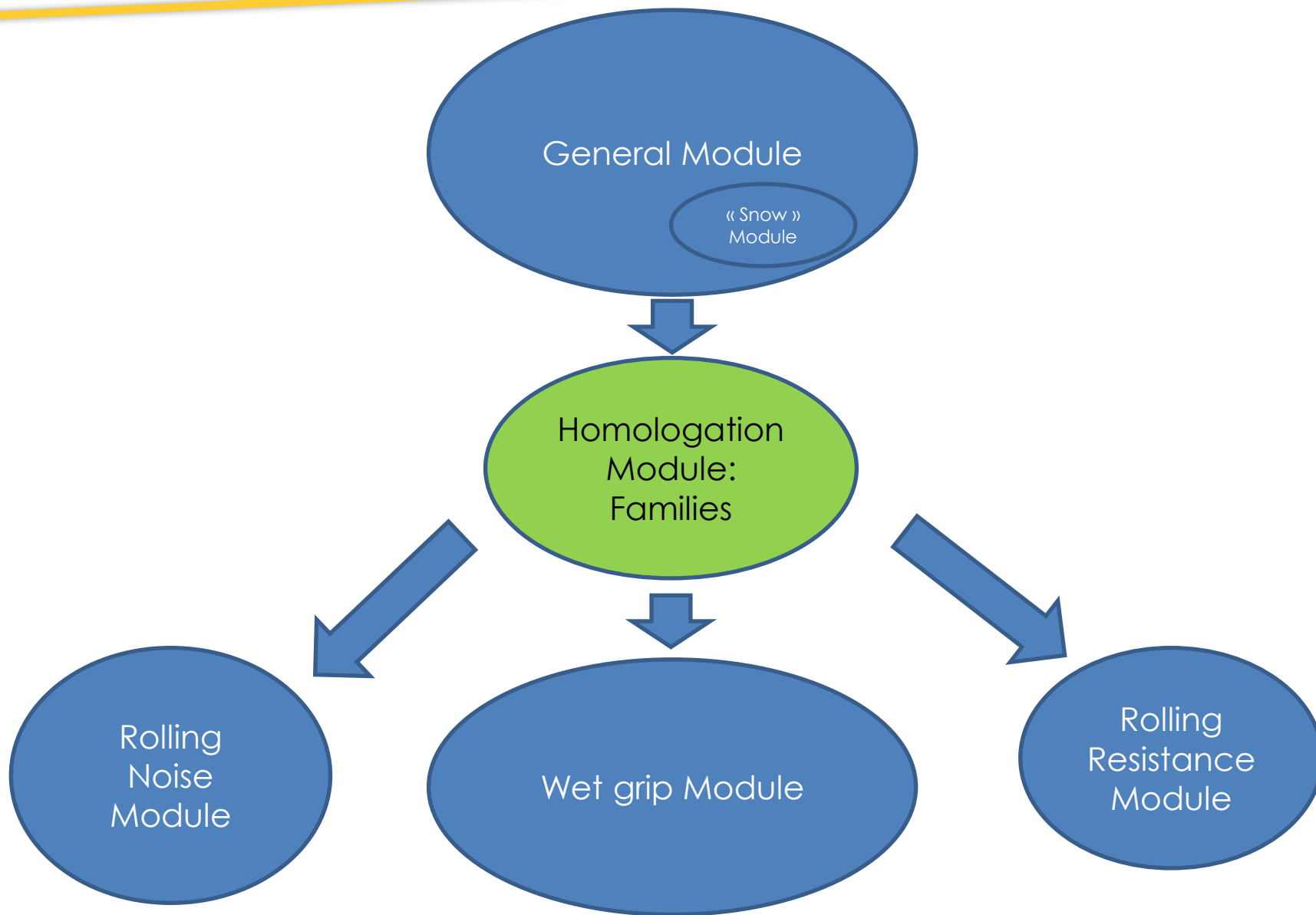


APPROVAL / LABELLING OF EUROPEAN TYRES

Approval and Conformity of Production



WHICH REGULATION TO BE APPLIED?

In Europe :

- **Regulation 117 of GENEVA and its amendments: Homologation** issued by the Administrative Authorities within the framework of the reception of the vehicles and their components . The process is resulting from the Agreements of 1958.

<http://www.unece.org/>



- **Regulation 1222/2009 of BRUSSELS and its amendments: Certification** issued by the tyre Manufacturer within the framework of the process of consumer information through labelling.

Date of entry into force : 1st november 2012

The term “ **homologation**” means “**type approval pursuant to a Regulation**” :

- Administrative procedure by which the competent authorities of one Contracting Party declare, after carrying out the required verifications, that a vehicle, equipment or parts submitted by the manufacturer conform to the requirements of the given Regulation.
- Afterwards the manufacturer certifies that each vehicle, equipment or parts put on the market were produced to be identical with the approved product (COP).

The term « **certification** » means **the application of an alternative administrative procedure to the type approval** :

- The most known and applied in certain Member States of the Economic Commission for Europe is the self-certification by which the manufacturer certifies, without any preliminary administrative control, that each product put on the market conforms to the given Regulation;
- The competent administrative authorities may verify by random sampling on the market that the self-certified products comply with the requirements of the given Regulation (**surveillance of the market**).

DESCRIPTION OF THE TYPE APPROVAL PROCESS

Approval request from the Tyre Manufacturer () to the Administrative Authority. A technical file joined this request



The Technical Service or the Type Approval Authority



performs the tests on the samples of tyres provided by the Tyre Manufacturer



MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE ET DE L'ÉNERGIE
ARCHÉ DE LA DÉFENSE
92055 PARIS LA DÉFENSE

COMMUNICATION CONCERNANT / COMMUNICATION CONCERNING :

E2 - EXTENSION D'HOMOLOGATION / APPROVAL EXTENDED

des pneumatiques en ce qui concerne les émissions de bruit de roulement et/ou l'adhérence sur sol mouillé et/ou la résistance au roulement en application du Règlement n° 117 (série d'Amendements 02).
of tyres with regard to rolling sound emissions and to adhesion on wet surfaces and/or to rolling resistance to Regulation n° 117 (602 series of Amendments).

HOMOLOGATION N° : 13064 S2WR2 Extension n° : 02
APPROVAL N°
MARQUAGE : E2 02 13064 S2WR2
MARKING

A test report is drawn up

A certificate is issued by the Type Approval Authority



UTAC
GROUPE UTAC CERAM

Avalon de Linas-Monferré
BP 20212 - 91311 Monferré cedex France

RAPPORT N° : 14/0xxxx
REPORT

DEMANDEUR : TYRE MANUFACTURER
APPLICANT : FRANCE

OBJET : Vérification de la conformité d'un pneumatique aux prescriptions :
SUBJECT : Verification of the compliance of a tyre with the requirements

- du Règlement ECE 117R02, à l'exception des prescriptions prévues au § 8 du Règlement et à l'appendice 2 des accords de 58 révisés / of the ECE Regulation 117R02, with the exception of requirements in § 8 of the Regulation and in appendix 2 to revised 58 agreement.

Type according to the regulation 117:

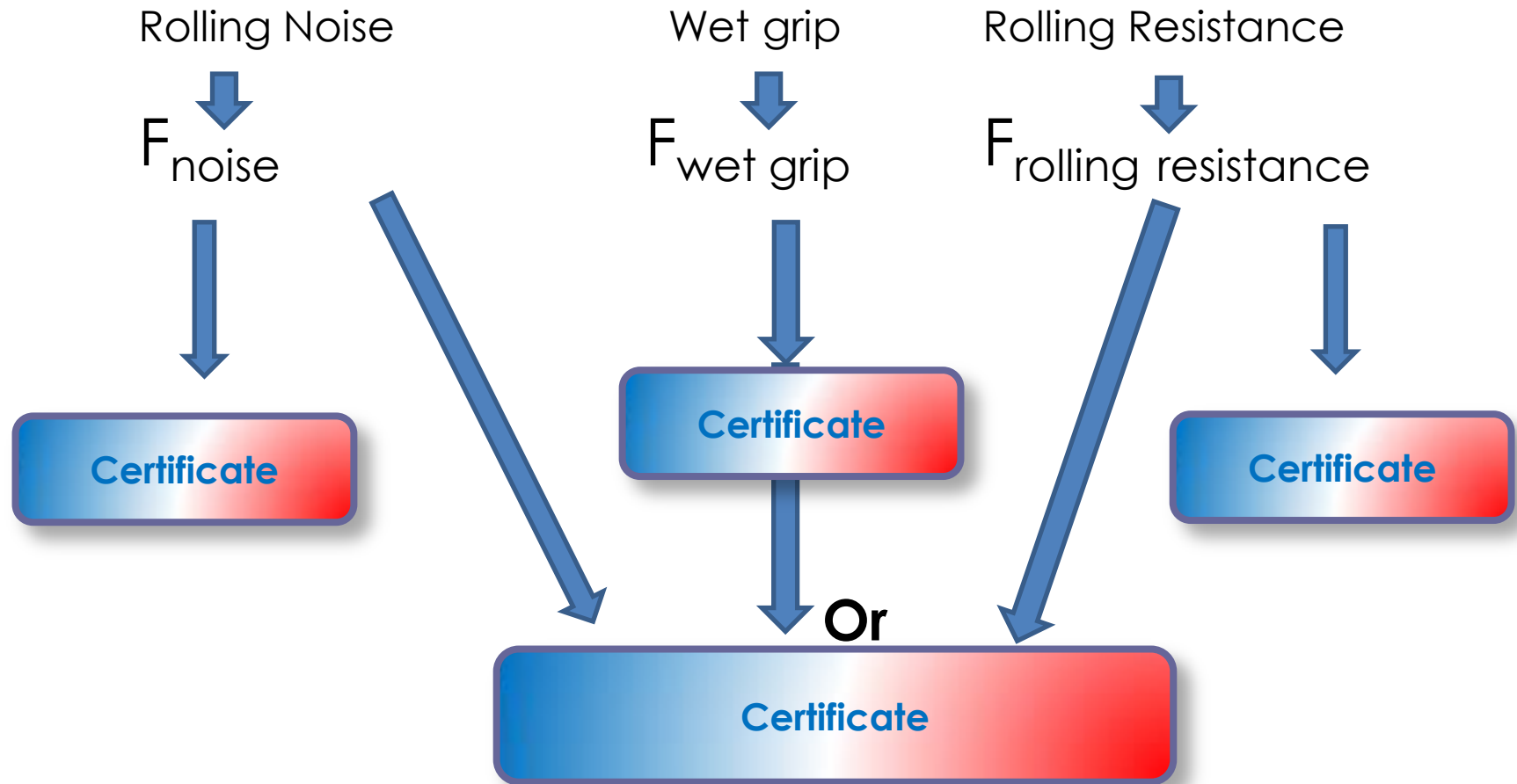
A **range of tyres** consisting of a list of tyre size designations, brand names and trade descriptions, which do not differ in such essential characteristics as:

- **(a)** The manufacturer's name;
- **(b)** The tyre class (C1, C2 or C3);
- **(c)** The tyre structure (Radial, Bias, ...);
- **(d)** The category of use: normal tyre, snow tyre and special use tyre;
- **(e)** For Class C1 tyres:
 - ... (i) Those to be approved for rolling sound emission levels, whether normal or reinforced (or extra load);
 - ... (ii) Those to be approved for their performance adhesion on wet surfaces, whether normal tyres or snow tyres with a speed category of Q or below excluding H (≤ 160 km/h) or speed category R and above including H (> 160 km/h);
- **(f)** For Classes C2 and C3 tyres:
 - ... (i) those to be approved for rolling sound emission levels at stage 1, whether M+S marked or not;
 - ... (ii) those to be approved for rolling sound emission levels at stage 2, whether traction tyre or not;
- **(g)** The tread pattern

Definition of the type according to the regulation



Creation of families



Certificate

CERTIFICATE

.....
of a type of tyre with regard to "rolling sound emission level" **and/or** "adhesion performance on wet surfaces" **and/or** "rolling resistance"

Approval n° Extension n°

.....

.....

6.1 Sound level of the representative tyre size **Niveau sonore** (see paragraph 2.5. of this Regulation), as per item 7. of the test report in Appendix 1 to Annex 3: dB(A) at reference speed of 70/80 km/h

6.2 Wet adhesion level of the representative tyre size, see paragraph 2.5. of this Regulation, as per item 7. of the test report in the Appendix to Annex 5: (G) using the vehicle or trailer method

6.3 Rolling Resistance level of the representative tyre size, see paragraph 2.5. of this Regulation, as per item 7. of the test report in Appendix 1 to Annex 6

6.4. Snow grip level of the representative tyre size, see paragraph 2.5. of this Regulation, as per item 7. of the test report in the appendix to Annex 7:..... (Snow grip index) using the brake on snow method , spin traction method or acceleration method.

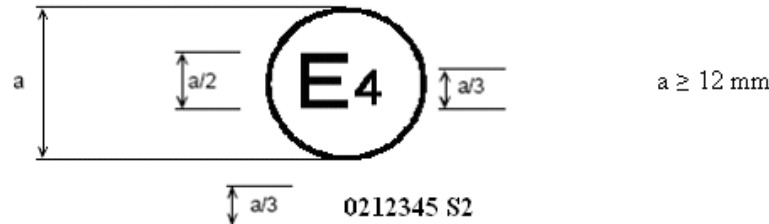
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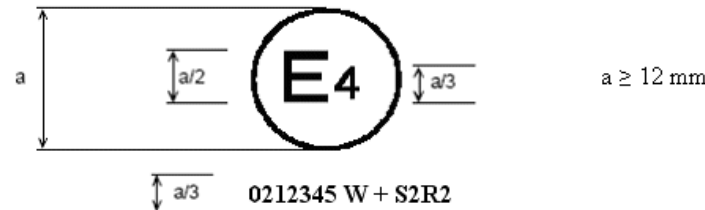
14.2 A list of tread-pattern designations :

THE MARKINGS ON THE SIDEWALLS FOR DIFFERENT CASES:

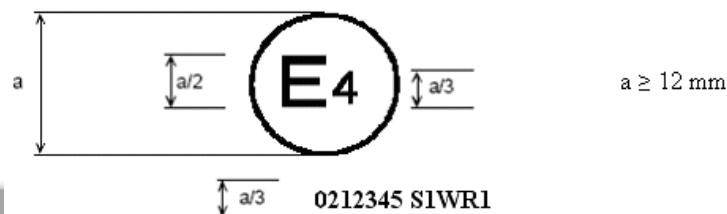
Approval of a family according to only one performance (e.g. rolling noise)



First approval of a family according to wet grip performance and extension of approval for rolling noise (Level 2) and rolling resistance (Level 2). **Introduction of the sign « + »**

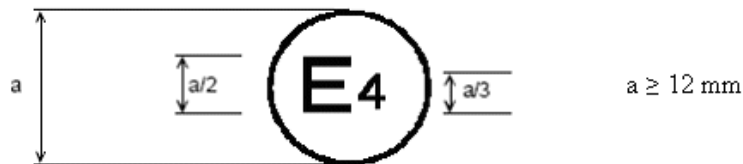


Approval a family for the 3 performances:



THE MARKINGS ON THE SIDEWALLS FOR DIFFERENT CASES:

Approval of a family of tyres in addition and in parallel to the approval according to the regulation R30 or R54 :

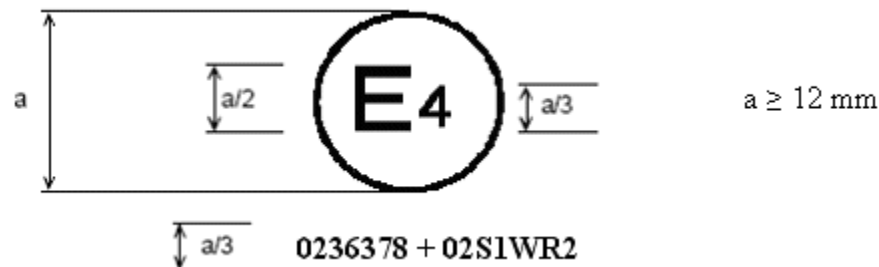


$\frac{a}{3}$ 0212345 S2WR2 0236378
or
 $\frac{a}{3}$ 0212345 S2WR2
 $\frac{a}{3}$ 0236378

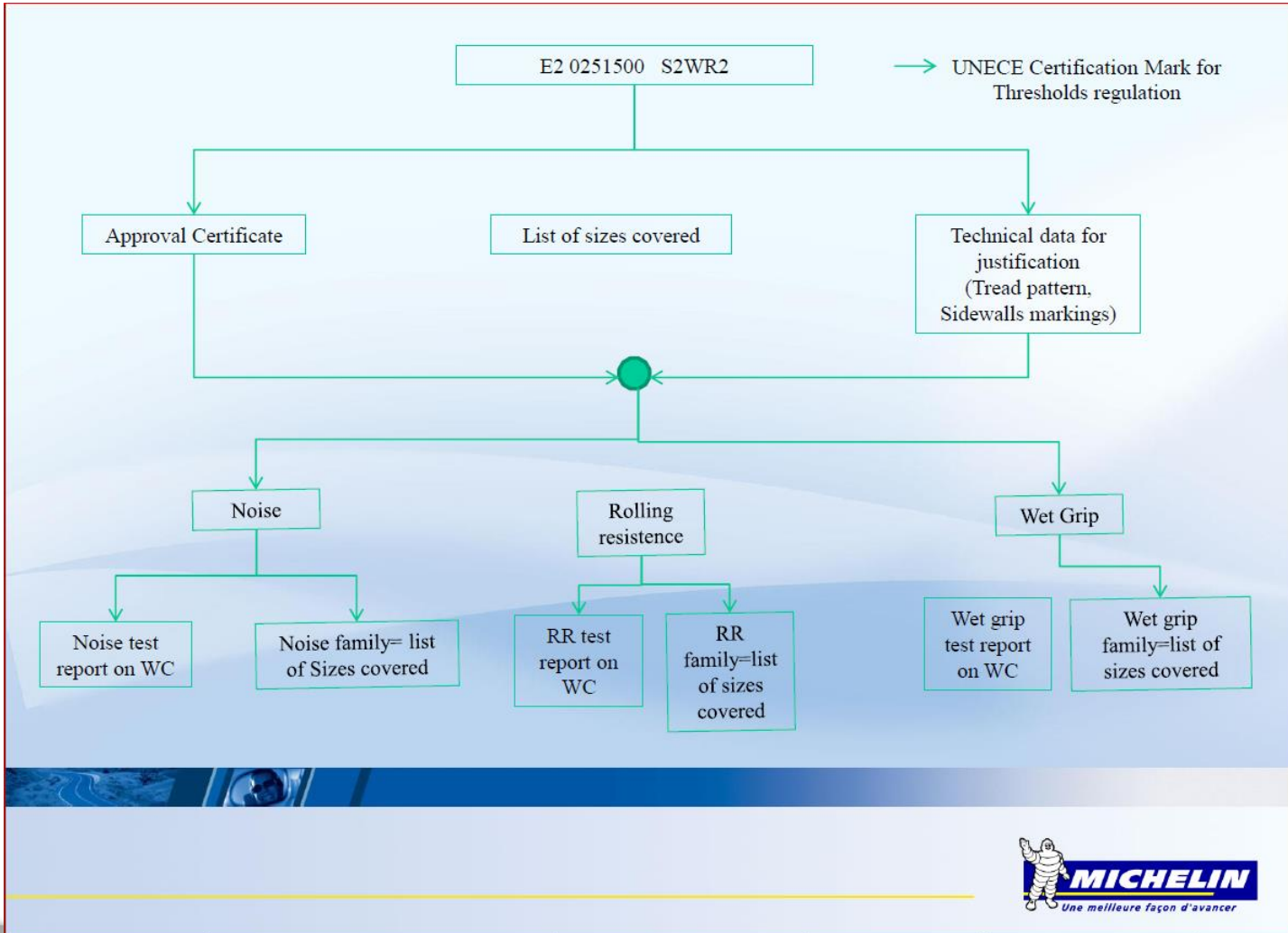


$\frac{a}{3}$ 0212345 S2 0054321
or
 $\frac{a}{3}$ 0212345 S2
 $\frac{a}{3}$ 0054321

Extension of approval in order to combine all the approvals (R117, R30 or R54):



THE CREATION OF THE FAMILIES IS BASED ON THE « WORSTS CASES »



THE CREATION OF THE FAMILIES

Rolling noise:

- Within a same definition of the type:

The mandatory limits depend on the nominal width of the tyres, so « the worst case » = First, the widest tyre.

After the tyre having the smallest aspect ratio and in final the tyre having the biggest diameter.

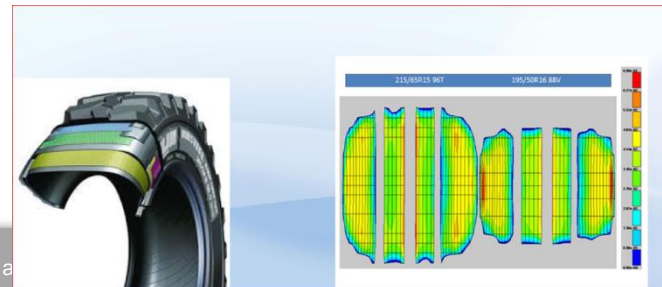


Wet grip:

- Within a same definition of the type:

The wet grip depends on the dimensions of the contact area, « the worst case » = First, the most narrow tyre.

After the tyre having the highest aspect ratio and in final the tyre having the smallest diameter.

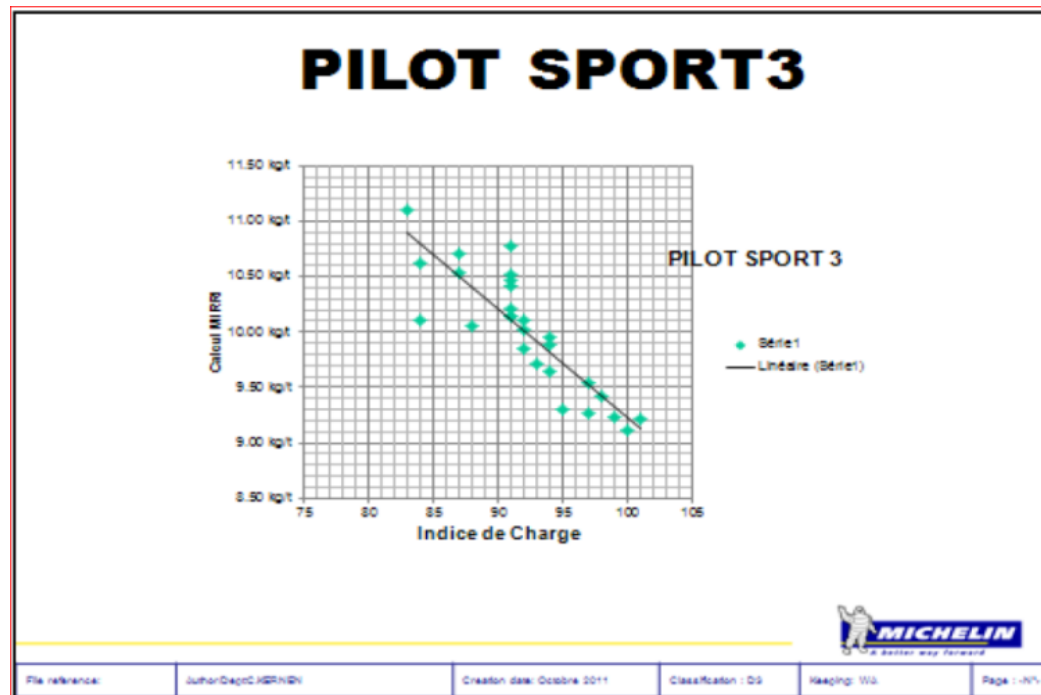


THE CREATION OF THE FAMILIES

Rolling Resistance:

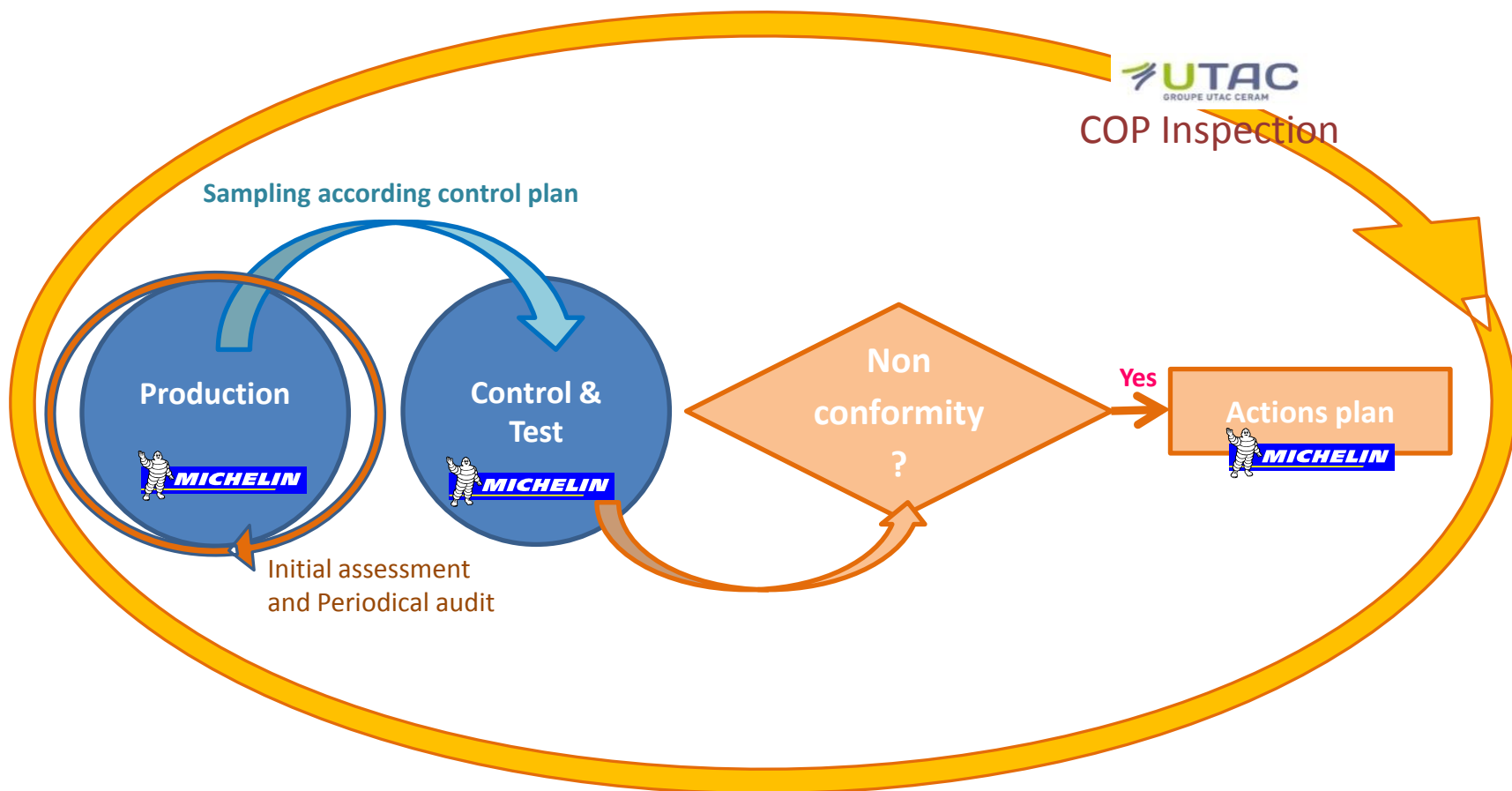
Within a same definition of the type:

The tyre (category of use normal) having the smallest load capacity (LI) represents the « worst case », but if this tyre exists as a « Run Flat », it will be this one.



The application of '58 agreements

COP : Conformity of Production





THANK YOU FOR YOUR ATTENTION

