



Roadmap and implementation plans of draft Standards

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Work package 5



WP 5 “Implementation and dissemination of results”

Tasks

- **Task 5.1:** Roadmap for implementation (Leader: BAST Participants: TRL, AIT, VTI, DRD, DIN)
- **Task 5.2:** Dissemination and networking (Leader: FEHRL Participants AIT, VTI, DIN, TRL, DRD, BAST, ZAG)

- Start: month 1 (November 2013)
- End: month 36 (October 2016)

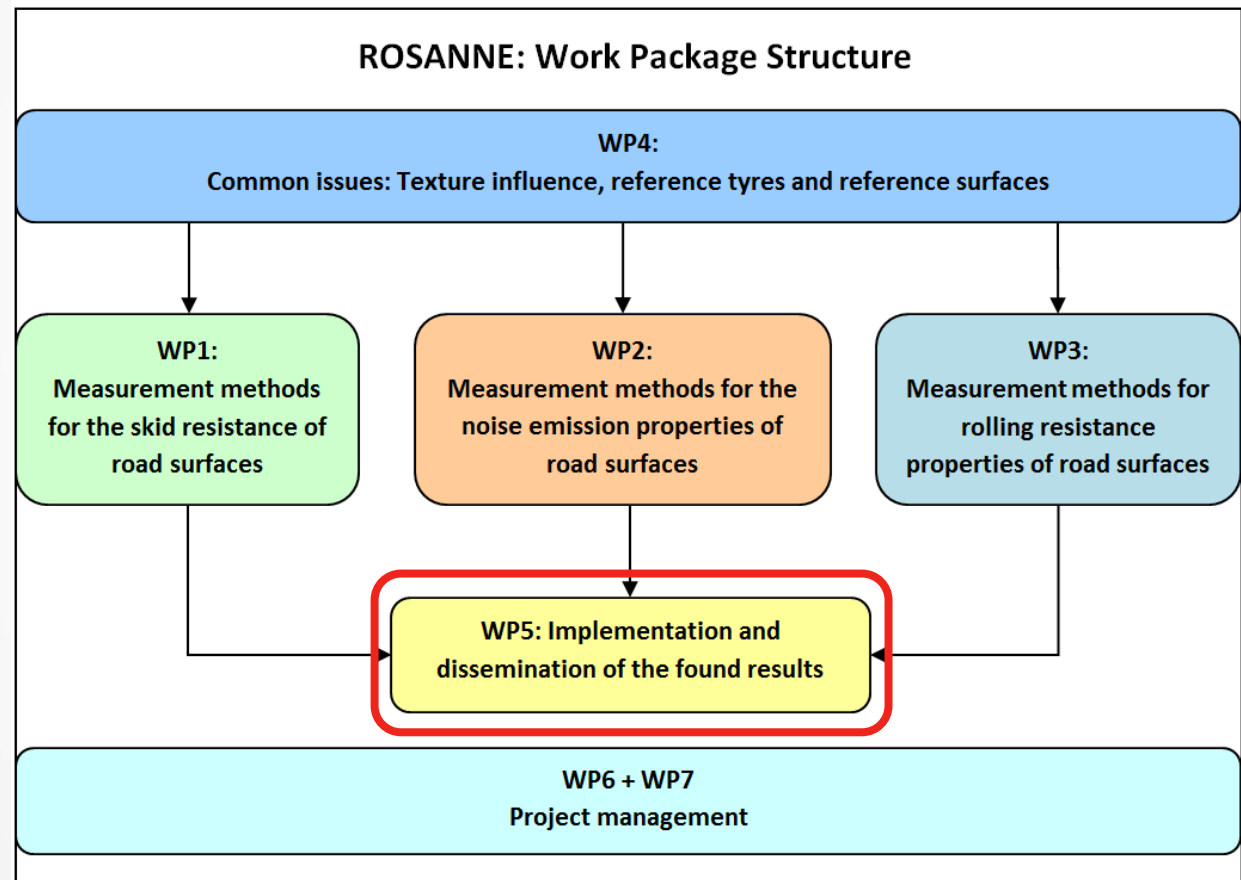


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Work package 5



WP 5 – interaction with the other Work packages



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Work package 5



Objectives:

- develop a roadmap for implementation of the draft standards developed by WP1, WP2 and WP3, respectively WP4
- roadmap will contain individual timelines for skid resistance, noise emission and rolling resistance measurements
- assess the achieved level of quality and readiness for standardization
- analyzing the relation to the existing European and national standards
- evaluation of the benefits and obstacles of the introduction of the proposed draft standards
- presenting the results of the project to appropriate working groups and technical committees in CEN and ISO



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Standardization



General:

- CEN system offers a wide range of deliverables (full Standard, TS, TR...) for transfer of results from WP 1 – 4
 - Joint technical work with ISO is possible
 - Main targeted committee CEN/TC 227/WG 5 “Surface characteristics” of CEN/TC 227 “Road materials”
 - Aim: one property – one measuring principle/system
- ⇒ Harmonization and Standardization



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Standardization



WP 1 – Skid resistance:

- major contributor to road safety
- difficult to compare the levels of skid resistance provided by roads in different countries across Europe – currently a lot of different systems available
- some previous attempts to harmonize the results of skid resistance measurements from different devices
- Establishment of a Common Scale with sufficiently robustness and required precision failed so far
- TYROSAFE – proposed a road map

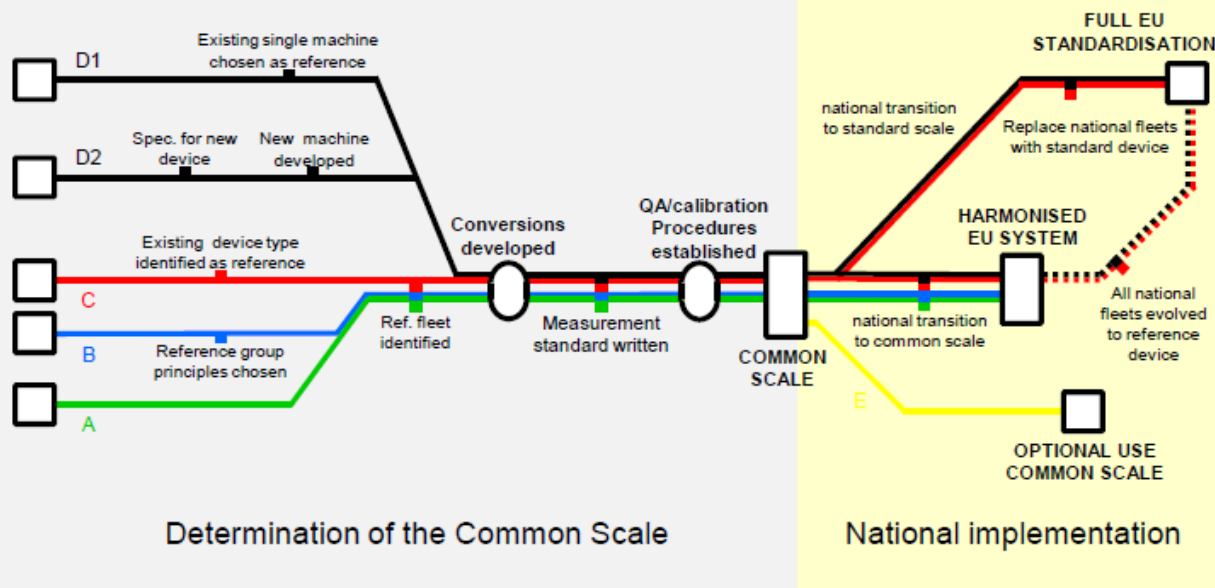


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Standardization



Route	Description
E	Optional use of Common Scale for comparisons where a linked national device is available.
D	Common Scale using one specified machine as the reference device.
C	Common Scale harmonising by reference to average of a group of machines of a single device type.
B	Common Scale harmonising by reference to the average of a group of machines from different device types but of similar operating principle.
A	Common Scale harmonising by reference to the average of all device types in use that have a defined technical specification.



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Standardization



WP 1 – Skid resistance:

- implemented into activities of CEN/TC 227/WG 5 (future approach for CEN/TS 15901 series and CEN/TS 13036-2)
- dividing in groups – SFC-devices and LFC-devices
- CEN/TS 13036-2 are planned to be substituted by one full EN standard with different parts (SFC-devices and LFC-devices (part a: low slip ratio; part b: high slip ratio))
 - first draft of the part about SFC-devices in 2016
 - draft of the part about LFC-devices – no timeline defined yet



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Standardization



WP 2 – Noise emission:

- low-noise road surfaces have become more and more accepted as an effective means of road traffic noise abatement
- European Environmental Noise Directive 2002/49/EC (END) obliges the Member States to create noise maps around the major roads and inside the main agglomerations and to accompany these with action plans which could employ low-noise pavements as a key element
- correct characterization of the acoustic performance of pavements important



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Standardization



WP 2 – Noise emission:

- CPX and SPB-methods currently linked to national noise mapping procedures – results are usually not comparable
- introduction of common European noise calculation methods for environmental noise is a good chance for also harmonizing the way that pavement influence on road traffic noise emission is determined across Europe



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Standardization



WP 2 – Noise emission:

- implemented into activities of CEN/TC 227/WG 5 – TG3
- decision by the consortium that CPX will be the primary method for noise characterization



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Standardization



WP 2 – Noise emission:

- Liaison with WG 27, 33 and 39 of ISO/TC 43/SC 1 "Noise" (i.e. EN ISO 11819 series)
 - ISO 11819-1: ROSANNE findings as well as the backing board method will be implemented in the next revision period
 - ISO 11819-2: under preparation (2nd DIS & CEN-enquiry), some results from ROSANNE are incorporated in the draft version
 - ISO/TS 11819-3: currently DTS, ROSANNE findings are implemented in this version
- temperature correction developed in ROSANNE will be part of the draft of ISO/TS 13471-1 in 2017



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Standardization



WP 3 – Rolling resistance:

- to reduce CO₂ emission and fuel consumption in Europe it is essential to have a sound technical and scientific understanding of the contributions of the various factors affecting rolling resistance
 - essential for new design of road infrastructure and pavements
- robust methods for measuring rolling resistance in field and laboratory are required
- various methods are available with a lot of unknown factors
- ROSANNE focused on trailer measurements



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Standardization



WP 3 – Rolling resistance:

- Currently only a ISO for testing the rolling resistance in laboratory on a steel drum – no Standard about the contribution of pavements to rolling resistance
- Basis for future activities of CEN/TC 227/WG 5 - possible new Task Group 4
- 1st step: Technical Report about rolling resistance measurements



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Standardization



WP 4 – Texture, reference tyres and reference surfaces:

- texture is directly linked to the three other surface properties
- beneficial for standardization deliverables from WP 1 to 3 and the associated committees
- additional international target committees (ISO/ASTM) identified – will be involved as a further step



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