



Working Paper No. STD-02-04
2nd STD meeting, 31 August 2009,
Agenda item 3(b)

Annex 6

Test procedure for measuring rolling resistance

- Basically, 4 measurement variants can be considered:
 - Force
 - Torque
 - Deceleration
 - Power
 - Historical measurements needed by manufacturers to keep a reference.
 - Theoretically, technically equivalent

- UNECE Regulation process: Use of Technical Services
 - Technical service shall comply with ISO/IEC 17025 standard.
 - ISO/IEC 17025 standard requests:
 - « **5.9 Assuring the quality of test and calibration results**
 - ...
 - b) participation in interlaboratory comparison or proficiency-testing programmes;
 - ...
- Definition of a virtual reference as a result of a combination of different sources instead of one unique reference

- Need for homogeneous results
 - => need to control the dispersion in each laboratory (intra lab requirement)
 - ⇒ need to control the dispersion between the different laboratories (inter lab requirement)
- Tool : Proficiency testing schemes (PTS)
- Reference : ISO/DIS 17043
(FDIS publication expected by end of 2009)

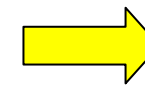
PTS benefits :

- Continuous improvement of labs performance :
 - Reduction of within labs dispersion
 - Reduction of inter labs dispersion
- Definition of assigned (reference) values
- Correction when necessary

- One PTS per year (or every two years) with participation of :
 - Technical services
 - Other participants (tyre manufacturers, etc.)
- Establishment of the assigned values from the results of the technical services
- Calculation of a correction factor for every participant

Example who tests what?

	M1	.../	M10
TS1	X	X	X
.../	X	X	X
TS10	X	X	X
M1	X		
.../		X	
M10			X



Defintion of
assigned values



Alignment for
each manufacturer

TS :Technical Service M : Manufacturer X: « tyre number and type »