

**Informal document No. GRRF-57-22
(57th GRRF, 31 January-4 February 2005,
agenda item 5.2.)**

Tyre Rolling Resistance.

ETRTO activity.

Considering that :

- It is not possible to build any regulation or international cooperation on tyres' rolling resistance without having got the definition of an agreed measurement method beforehand.
- There is not any International Standard for tyre rolling resistance measurement allowing direct precise comparisons. (*)

In March 2004, a working group (WG) was created by ETRTO.

(*) ISO 18164 allows a lot of degrees of freedom, which make results differ significantly according to the selected options.

- The main objectives of this WG are :
 - To define a Reference Method for Rolling Resistance Measurement based on ISO 18164 norm, in particular for regulation and international cooperation purposes.
 - To specify how the other existing methods will correlate.
 - To establish a state of the art for passenger car and truck tyres' rolling resistance in Europe.

This WG has to work in close relationship with

- ISO/TC31 who is building ISO 18164 norm on RR measurement.
- The Russian Federation who is proposing an amendment to ISO 18164.

Action Plan

Action	Date
Kick-off meeting.	31/03/2004
Draft proposal for a Reference Method.	12/05/2004
Round-Robin test results and analysis.	08/10/2004
Final proposal for a Reference Method and state of the art in Europe	30/06/2005



Results available on January 2005

- A first round robin test was carried out by the participating tyre companies' laboratories on 5 tyre sizes.
- Although some experimental conditions were still to be made uniform, the alignment statistical treatment showed a precision of $\pm 5\%$.
- A second round robin was launched with 10 specifically chosen tyre sizes and an improved methodology.
- Results expected by April 7th, 2005.
Target precision : $\pm 2\%$.