

Exchange of information on national and international requirements on primary safety

NOTIFICATION OF REPORT FROM WHEEL DETACHMENT (Phase 1)

GRRF may recall that the UK raised the issue of heavy commercial wheel detachment at GRRF 57 (Informal document No. GRRF-57-23) and was keen to receive any information from other Contracting Parties on the subject of Heavy Vehicle (HV) wheel detachment or loose wheel fixings which could feed into research on this issue. A number of relies and reports were received which were taken into consideration and highlighted the fact that wheel detachment is not unique to the UK, but a global problem.

This first phase of the research reported in October 2006 and it was hoped to present the results to GRRF at the last 61st session. However, time did not permit but as a reminder the presentation was placed on the website as an informal document (GRRF-61-37).

To build on the previous work which was primarily based on theoretical analysis of data and 'paper' studies the UK has commissioned a new phase which will to include actual testing, in particular of initial tightening, re-torquing procedures and assessment of aftermarket solutions (locking devices and movement detectors).

Data will be gathered from both simulated tests using a vibration machine, full vehicle tests on a test track, and accelerated wear tests on a proving ground with repeated harsh cornering, braking, acceleration, and driving over un-even surfaces to induce severe vibrations using a 6X4 instrumented rigid vehicle.

The Phase 2 research is expected to report in **Summer 2008**.

Phase 1 research report

Executive summary:

<http://www.dft.gov.uk/pgr/roads/vehicles/heavyvehiclewheeldetachmentr1726>

Full report:

http://www.dft.gov.uk/pgr/roads/vehicles/coll_heavyvehiclewheeldetachment/heavyvehiclewheeldetachmentr1727

For any further information please contact: lawrence.thatcher@dft.gsi.gov.uk or address to:

Mr. Lawrence Thatcher
Department for Transport,
TTS 3, Zone 2/04,
Great Minster House,
76 Marsham Street,
London, SW1P 4DR. United Kingdom.