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Request for information relating to Heavy Vehicle wheel detachment

<u>Transmitted by the Expert from the United Kingdom</u> (Exchange of information on national requirements on primary safety)

The UK is keen to receive any information from other Contracting Parties on the subject of Heavy Vehicle (HV) wheel detachment or loose wheel fixings.

HV wheel detachment has been as issue for the UK in the past and although the number of reported cases has diminished some incidents still occur. However, there are many reported instances of loose wheel fixings that could lead to wheel detachments.

Research into the causes of wheel fixings becoming loose after they have been correctly tightened highlighted some probable causes. Disregarding the damaged mating surfaces of the wheel fixing(s) threads, over-tightened wheel fixings, debris between wheel rim and hub and other preventable causes, the research concluded that the main cause was the 'relaxation' of the wheel stud which ultimately reduced the clamping force between the wheel rim and hub. If this was not detected early by re-tightening, vibration and other forces cause the wheel fixings to continue loosening and could result in a wheel detachment.

These results were communicated to industry, many companies and service agents now include a wheel fixing tightness check at regular service intervals, if not sooner and will always re-check the tightness within 50 km if the wheel fixings have been disturbed.

A brief search of the internet (web) revealed that some HVs in other countries also suffer with the same problem.

The UK is in the process of investigating this issue and would be grateful for any information regarding HV wheel detachment or any solutions that may have assisted in reducing the problem.

Please e-mail any relevant information to: <u>lawrence.thatcher@dft.gsi.gov.uk</u> or address to:

Lawrence Thatcher

Department for Transport, TTS 6, Zone 2/04, 76 Marsham Street, London, SW1P 4DR. United Kingdom.