Commission Study on Motor Vehicle Tyres and Related Aspects

Transmitted by the expert from the European Commission

Note: During the fifty-third session of GRRF(TRANS/WP.29/GRRF/53, para. 37) some participants expressed a wish for further information about the Commission Study on motor vehicle tyres and related aspects. The document reproduced below contains detailed information about the purpose of the above mentioned study.
Commission Study on Motor Vehicle Tyres and Related Aspects

The Commission services wish to examine the relevance and effectiveness of the separate directives presently regulating the design, performance, construction and fitting of tyres (Directive 92/23/EEC as amended on motor vehicles and Directive 97/24/EC on two- and three-wheeled motor vehicles). This examination is required in order to assess the precise scope and nature of ongoing technological advances and to ensure that any future regulatory changes take due account of the principal need for safety for vehicle occupants and other road users.

The specific requirements in relation to this study are:

1. **An assessment of the role played by (inappropriate and/or inappropriately fitted) tyres in causing accidents and their operating condition (e.g. correct inflation, load capacity, etc.)** The presumed positive contribution made by tyres in terms of improvements in active safety performance of motor vehicles and motorcycles.

The Commission expects a comprehensive review of accident research data and the role played by tyres and fitting of tyres in precipitating accidents. The review will not be limited geographically and should extend to include accident research existing in other major manufacturing countries i.e. United States and Japan. The contractor will provide a clear distinction between types of tyre and linked technical systems or components in accident causation. Particular care will be taken to distinguish between high speed tyres (so called “Z” rated) and other products.

The study will clearly detail the thrust and principal areas of accident research, identify recommendations emanating from research and identify possible repercussions on regulatory systems or on the general concept of product liability. The contractor will provide an assessment of the impact of accident research on product development in terms of projected market introduction and actual vehicle profiles. The concepts of kick-back, shimmy and wobble, juddering and vibration as they affect motorcycles and accident figures will be thoroughly assessed.

2. **The present and prospective state of technological development in relation to tyres and associated components and systems.**

The Commission services are aware of the development of increasingly sophisticated systems which seek to enhance the stability of vehicles. Such systems may incorporate computer messaging functions to the vehicles Electronic Stability Programme and motor management systems and include steering and braking override functions. The study will comprise an inventory of ongoing and prospective (over a time-frame of up to ten years) technological developments in the area of tyre and rim systems and linked systems/components including an assessment of developments in terms of tyre pressure sensors and anti-lock braking systems.
To the extent permitted by commercial confidentiality the study will pinpoint the principal technological characteristics of the developments, in particular in terms of safety and comfort enhancement. A clear distinction between tyres, components and systems impacting on M1 passenger cars and those impacting on motorcycles will be drawn.

The review will differentiate, where possible, between whole vehicles, technical systems, units and components. The key findings of all relevant work will be summarised and supported by a cost/benefit analysis.

3. **Assessment of the desirability of modification to the regulatory frameworks governing tyres and fitting of tyres.**

The study will analyse the respective strengths and weaknesses of the current regulatory framework governing tyres and their fitting, and will assess the adequacy (or otherwise) of the present regulatory framework. The assessment will take into account the various standpoints of vehicle manufacturers, tyre and rim manufacturers, representative organisations and road safety organisations. The contractor will also refer to national legislative frameworks governing the driving of vehicles fitted with unsuitable tyres. Furthermore it will distinguish between the regulatory frameworks governing M1 passenger cars (high performance vehicles and mean performance vehicles) and motorcycles.

4. **A series of corresponding recommendations concerning the scope, extent and precise content of possible amendments to Directives 92/23/EEC as amended and 97/24/EC in order to reconcile the advantages of advancing technology with quintessential requirements of safety of the vehicles concerned and other road users.**

Any such recommendations should take account of present and reliable prospective levels of market penetration by new technology tyres and linked components/technical systems. The recommendations will contain clear reference to the current legislative provisions that they are designed to replace and distinguish between amendments that may be required for all vehicles pertaining to the respective vehicle parc and amendments that may be required only for vehicles belonging to high speed categories.

5. **An impact assessment (cost-benefit analysis) of the recommendations in terms of economic, social and environmental impacts**

The following impacts shall be assessed:

- Economic impacts (positive and negative macro and micro-economic impacts notably in terms of economic growth and competitiveness);

- Social impacts (positive and negative changes in public health, safety, consumer rights, changes in employment levels);

- Environmental impacts (positive and negative impacts associated with the changing status of the environment arising from the use (or exclusion from use) of certain technologies and materials.)
The study will include a cost/benefit analysis, taking into account relevant time dimensions. Care will also be taken to account for dynamic impacts such as the effect of technological development on reducing costs over time or changes in the behaviour of companies and individuals in response to the recommended measures.