Brussels, September 25, 2013

Periodical Technical Inspection Data collection
An overview of available data

European Commission data

To justify its proposal for a regulation on periodic roadworthiness tests for motor vehicles, the European Commission ordered a study on the impacts of different policy options which was based on several reports, out of which only 2 address powered two-wheelers:

- **"AUTOFORE 2007", from International Motor Vehicle Inspection Committee (CITA)**
- "DEKRA Road Safety Report 2008",
- "MOT Scheme Evidence-base, Department of Transport of UK, 2008"
- "DEKRA Road Safety Report on Trucks 2009",
- **"DEKRA Motorcycle road safety report 2010"**
- "TÜV Reports 2009 / 2010",

1.1. DEKRA Motorcycle Road Safety Report 2010:

1.1.1. A private corporation

DEKRA is a private corporation and cannot claim to have a truly independent expertise, in a field where companies have a major stake in the promulgation of the proposed regulation. The market of powered two-wheeler inspections alone is estimated at around 1.5 billion euros.

1.1.2. A German limited sample

DEKRA, as a German company, based its study only on a German sample, of 700 motorcycles accidents in Germany and the Commission wants to base a regulation, the exact same text for all the 28 countries, from a so restricted study, without taking in account the diversity of national characteristics

1.1.3. Lack of demonstration of the link between technical failure and accident

In its report, DEKRA states: "*Between 2002 and 2009 a total of 700 motorcycles were inspected by DEKRA following accidents. Of these 700 motorcycles, 165 motorcycles, i.e. 23.6%, were defective. Of these 165 motorcycles, 56 motorcycles, i.e. 33.9%, exhibited defects that were of relevance to the accident.*"[1] From this sentence, DEKRA, hence the European Commission, concluded that "*solid investigation results show that **8%** of the accidents involving motorcycles are caused or linked to technical defects*".[2]

In fact, the causality between defects related to vehicle and accidents has not been proven at all and DEKRA fails to demonstrate that the so-called "exhibited defects" were the primary contributing factor or if they were just latent technical risk factors among other. And in a case of there are more than one latent risks, how is it even possible to know which latent risk was the one which provoked the accident. In other words, if a drunk motorcyclist drives too fast and with an incorrect tyre pressure and has an accident, it is impossible to know how the tyres contributed to this accident.

1 DEKRA Automobil GmbH, *Motorcycle Road Safety Report 2010*, pp. 24-25.
2 EUROPEAN COMMISSION, *Roadworthiness Package. Commission staff working paper. Impact Assessment*, 13.07.2012, p. 8.

Moreover, DEKRA itself demonstrates that 50% of the defects were related to tyres, and especially to an incorrect tyre pressure [3] (this is by the way a recognized fact by the motorcycling community to be addressed by OBD) and an annual technical inspection will not solve this particular issue.

1.2. CITA and its report AUTOFORE 2007

In 2007, CITA, the International Motor Vehicle Inspection Committee published a report, *Study on the Future Options for Roadworthiness Enforcement in the European Union*, which aimed to "*recommend improvements in roadworthiness enforcement in the European Union*". The report concluded that the roadworthiness testing regime should include motorcycle and mopeds to improve the road safety.

1.2.1. Private corporations

Like DEKRA, CITA represents organisations which have an interest for extending periodical inspections. According to CITA itself, it "i*s the international association of public and private sector organisations actively practicing compulsory inspection of in-service motor vehicles and their trailers*".[4]

1.2.2. Three "inadequate" sub-studies

"Autofore WP530 - Extension of roadworthiness tests to other vehicle categories", "Autofore WP700 - Roadworthiness Testing Evaluation" and a German study "Bönninger e.a. 2002".

The two first ones are based on data from MAIDS *In-depth investigations of accidents involving powered two wheelers*, but they do not distinguish between primary and other causes of accidents and mention that 5.1% of the accidents can be explained by a technical failures of the PTWs. So, in fact, this interpretation of the percentage is not right.

The other study form Germany, found out that 13% of accidents involving a motorcycle and 30% for mopeds are caused by a technical failures.[5] But Germany has a periodical technical inspections for powered two-wheelers, evidence enough that technical inspection is not an efficient solution for road safety.[6]

Alternative data

Several stakeholders have strongly challenged the EC rationale attempting to justify the setup of a harmonized scheme of PTI for Powered Two Wheelers, among which:

- A majority of Member States among which The Netherlands, France, Belgium, Finland;
- Almost half of the MEPs;
- the users Federation, including the FIA;
- Well known scientists such as transport economics expert Rune Elvik, member of ETSC

3 DEKRA Automobil GmbH, *Motorcycle Road Safety Report 2010*, pp. 24-25.
4 CITA, website of CITA, « Introduction to CITA », http://www.cita-vehicleinspection.org/Home/IntroductiontoCITA/tabid/74/Default.aspx
5 CITA, AUTOFORE Report. Study on the Future Options for Roadworthiness Enforcement in the European Union, 2007, pp. 10, 28, 37-41.
6 VAN DER VLIET, RICHARD, *New forms of governance and interpretative policy analysis. A case study of the proposal for the European harmonisation of motorcycle periodic technical inspections*, Amsterdam, 2011, pp. 41-44.

Indeed, a careful analysis of unbiased data clearly shows a different picture.

2.1. Data from MAIDS

The study MAIDS, recognized as one of the most indisputable scientific study by all the involved parties, found out that the vehicle was the primary accident contributing factor of the accident in only **0.3%** of accidents. In other terms, among 921 accidents (in 5 different European countries), only 3 were provoked by a vehicle defect. MAIDS also considered secondary contributing factors to the accidents for which technical failures were involved in only **3.47%** of accidents. MAIDS concluded that there were a vehicle failure in 5.1% of accidents, of which 72% of them were a tyre issues. But it is not proved that they could have participate to the cause of the accident.[7] MAIDS conclusion with regards to technical defects is that PTW technical failures is one of the less frequent contributing factors of all factors.

2.2. Data from the Norway

In this report *Special Analysis, Fatal Motorcycle Accidents 2005-2009,* the Norwegian Public Roads Administration found out that "*technical faults have been registered as a cause or contributing factor in only **3%** of the accidents. The technical faults have been associated with worn tyres and incorrect air pressure.*"[8]

2.3. Data from the Swedish road authority

Between 2005 and 2011, after a study among 341 fatal motorcycle accidents in Sweden, the Swedish road authority, Trafikverket, concluded that technical defects on the motorcycles had a major effect only in **1,81 %** of all fatal accidents, or 9 out of 498 accidents.[9]

According to Bilprovningen, the leading tester in Sweden, "*9 % needed had to go to second test. Most common reason for demanding a second test were lacks in communication systems, wheel, powertrain and brake system. 3 % were not approved in the second test."* Motorcycles are the vehicles with best approval rate year after year.

2.4. Data from Finland

"*The Ministry of Traffic and Communications stated that the proportion of technical defects is **3.1%**. The figure is based on the frequency of fatalities in the VALT material during 2002–2007 and includes all cases in which a technical defect was mentioned. [...]*
***T**he significance of the defects in relation to the causes of the accidents was not investigated.[...]*
The VALT accident data show that a technical defect in the vehicle was the immediate risk factor of the accident only in two cases during the period of the sample.[...]
*The weighted value of technical risk factors in proportion to the occurrence of the accident or the severity of its consequences was **0.7%**".*[10]

7 MAIDS, *In-depth investigations of accidents involving powered two wheelers*, 2009, pp. 29-31, p. 68.
8 NORWEGIAN PUBLIC ROADS ADMINISTRATION, *Special Analysis, Fatal Motorcycle Accidents 2005-2009*, 11.2011, p. 4
9 Trafikverkets djupstudier av dödsolyckor.
10 SUOMEN MOTORISTIR RY, *The Benefits and Costs of Periodic Technical Inspection of Motorcycles in Finland*, pp. 6-8.

2.5. Data from France

According to a study from a private insurance company, Mutuelle des Motards, and based on 12,000 accidents/year, a technical failure was noticed only in **2%** of PTWs examined by independent experts. And only 1% could have been the cause of the accident.

Moreover, from 2011 to June 2013, among more than 25 000 accidents, experts had noticed only 77 cases where tyres were damaged (**0.3%**), but without any proof that they could be the origin of the accidents.[11]

Between 2001 and 2010, motorcycles fatalities decreased by 35%, proof that there is no need of periodical inspections to increase road safety for motorcyclists.[12]

2.6. Data from the Netherlands

According to TNO, a Dutch independent research organisation, which took part to the study MAIDS, only **0.3%** of the fatalities in the Netherlands was due to the vehicle.[13]

Like in France, the death toll motorcycle accidents is decreasing by more than 42% between 1996 and 2012 despite the fact that the Netherlands does not have technical inspection.[14]

2.7. Data from Australia

In 2001, the Parliament of Victoria, in Australia, ordered a study to the Road Safety Committee to do an inquiry about the effectiveness of the vehicle inspection system. Several studies were used and they all concluded the same:

- VicRoads analyzed 5,562 crashes involving fatal and serious injury occurring between 1992 and 1999, "*the data shows that **1.1%** of vehicles had defects that caused or contributed to the crash; and the number increased to **2.7%** if vehicles with defects that may have contributed to the crash were included.*"
- Victoria Police investigated 4,511 crashes between 1994 and 1999, only "*3.55 percent of those vehicles were found to have any form of defect. For the same period **0.79 percent** were deemed to have actually caused the crash. Other factors are present in a crash. It is difficult to determine how much each factor contributes to an individual crash.*"
- According to the Australian Transport Safety Bureau, "*Significantly only **2.2 percent** of vehicles were assessed as having defects which had caused or definitely contributed to the fatality or more serious injury crash*".[15]

For most of the other countries, in their statistics and studies, technical defects are not even in the list of "probable main cause of accidents", often because it is too complex to determine that a technical failure could have been the cause of an accident.

11 MUTUELLE DES MOTARDS, *Motorcycling and road safety challenges. Statistics*, 2013.
12 1081 fatalities in 2001 and 704 in 2010.
13 MINISTRY OF INSTRACTURE AND THE ENVIRONMENT, *Action plan for improving road safety for motorcyclists. Strategic approach*, 02.2011, p. 17.
14 94 fatalities in 1996 and 54fatatlities in 2012.
15 ROAD SAFETY COMMITTEE, *Inquiry into Victoria's Vehicle Roadworthiness System*, 2001, pp. 5-9.

Road Safety records

1. Among all the European countries, Germany, Ireland, Norway and Portugal are those which have experience the most dramatic decrease of motorcycle fatalities between 2000 and 2009. And among them, only Germany has (and used to have for years) a compulsory PTI for motorcycle.[16]
   - Portugal: -45% of motorcycle fatalities between 2000-2009
   - Norway: -33% of motorcycle fatalities between 2000-2009
   - Germany: -31% of motorcycle fatalities between 2000-2009
   - Ireland: -31% of motorcycle fatalities between 2000-2009

2. In Scandinavia, Sweden is the only country where periodic roadworthiness tests are mandatory for motorcycles. However, Sweden does not have better motorcycle accident statistics than Denmark, Finland or Norway. And in fact, in 2005, due to good performance the annual test requirement for motorcycles older than ten years was changed in 2004 to biennial tests.

3. Countries like Spain, Sweden, the Netherlands or the United Kingdom adopted recently national strategies[17] to improve the road safety for motorcyclists. They aim to reach a greater safety for two-wheelers users in taking global measures to improve the infrastructure or the driving education. The solution to improve the road safety is to take into account the particular needs of all modes of transport, as bicycles, motorcycles, pedestrians, cars, lorries or public transport. There are other really efficient ways to improve the safety for motorcyclists.

16 OECD, *A Record Decade for Road Safety. International Transport Forum at the OECD publishes road death figures for 33 countries*, p. 7.
17 The Netherlands: *Action plan for improving road safety for motorcyclists. Strategic approach*, 2011.
Spain: *Strategic Plan for the Road Safety of Motorcycles and Mopeds*, 2007.
United Kingdom: *The Government's Motorcycling Strategy*, 2005
Sweden: *Increased safety for motorcycle and moped riders*, 2012