

Committee on the Internal Market and Consumer Protection

Tuesday 30 November 2010

Item 14

**Approval and market surveillance of two- or three-wheel vehicles and
quadricycles**

Presentation of the Commission impact assessment

Exchange of views










**European Commission
Enterprise and Industry**



Introduction

- Scope of the proposal (1)
 - Framework related to (TYPE-) APPROVAL of L-category vehicles
 - Manufacturers can obtain from a national type-approval authority approval for L-category vehicle types, systems, components and separate technical units intended for such vehicles.
 - If it meets the Union technical requirements then the manufacturer can market it EU-wide with no need for further tests or checks. Registration must be granted on simple presentation of a certificate of conformity.
 - L-category vehicles: Light powered two-, three- and four-wheel vehicles

Introduction

- Scope of the proposal (2)

Category & Category Name	Sub category & Sub category name	Example
L1e, light two-wheel vehicle	L1Ae powered cycle	
	L1Be Moped	 
L2e Three-wheel moped		
L3e, motorcycle	A1, A2, A3 < 130 km/h ≥ 130 km/h	 
L4e, motorcycle with side car	-	

Category & Category Name	Sub category & Sub category name	Example
L5e, tricycles	L5Ae Tricycles	
	L5Be Commercial tricycles	

Category & Category Name	Sub category & Sub category name	Example
L6e, Light quadricycle	L6Ae Light on-road quad	
	L6Be Light mini-car	
L7e, Heavy quadricycle	L7Ae Heavy on-road quad	
	L7Be Heavy mini-car	

Identified concerns and objectives

- Identified concerns
 - the complexity of the current legal framework;
 - the level of emissions and its increasing share in total road transport emissions, which are decreasing overall;
 - safety aspects related to type-approval requirements for vehicles;
 - the lack of a legal framework for vehicles fitted with new technologies;
 - the entry of products into the EU market which do not comply with the current type-approval requirements regarding functional vehicle safety and/or environmental protection.
- Main Objective
 - Efficiently and effectively address the above listed issues.

Legal structure

- Anticipated structure regulation on approval of L-category vehicles.
- **Co-decision** act : Regulation
- **Delegated** acts
 - Regulation on environmental and propulsion performance requirements;
 - Regulation on vehicle functional safety requirements;
 - Regulation on vehicle construction requirements.
- **Implementing** act
 - Regulation on administrative requirements

Safety measures

- Safety measures why ?

L-category drivers face a much higher risk of a fatal or serious accident than other drivers. The fatality rate per million kilometres travelled is, on average, **18** times greater than passenger cars, and, in 2006, L-category vehicles accounted for **2%** of distance travelled, but accounted for **16%** of road deaths in the EU-25 (ETSC, 2007). Furthermore, while other vehicle modes have shown significant decreases in fatalities and serious injuries over time, those for L-category vehicles remained static or even slightly increased.

In 2008 **5,520** PTW riders **died** in road accidents. In addition the number of **heavily injured** riders is estimated to be **5.5 to 13 times higher** than the number of fatalities (30,000 – 72,000 riders). The number of **slight injuries**, which is even more difficult to estimate, might be between **12 to 28 times higher** (66,000 – 155,000 riders) in the EU-27.

Safety measures

- Safety: condition of being safe; freedom from danger, risk, or injury.
- Two primary safety fields
 - Accident avoidance
 - Human being
 - **Technical features of the vehicle**
 - The environment in which the vehicle is operated
 - Mitigation of injuries
 - Protection just before / during the crash
 - Protection after the accident



Safety measures

- Obligatory fitting of *Advanced* Brake Systems
 1. No change;
 2. *Anti-lock* Brake Systems on all Powered Two Wheelers (PTWs);
 3. *Anti-lock* Brake Systems and/or Combined Brake Systems on less powerful motorcycles. *Anti-lock* Brake Systems on more powerful motorcycle;
 4. Same as 3 but different threshold to distinguish between less and more powerful motorcycle;
 5. Industry self-regulation.

Environmental measures

- Identified concerns: high share of hydrocarbons, carbon monoxide and volatile particles emitted by L-category vehicles

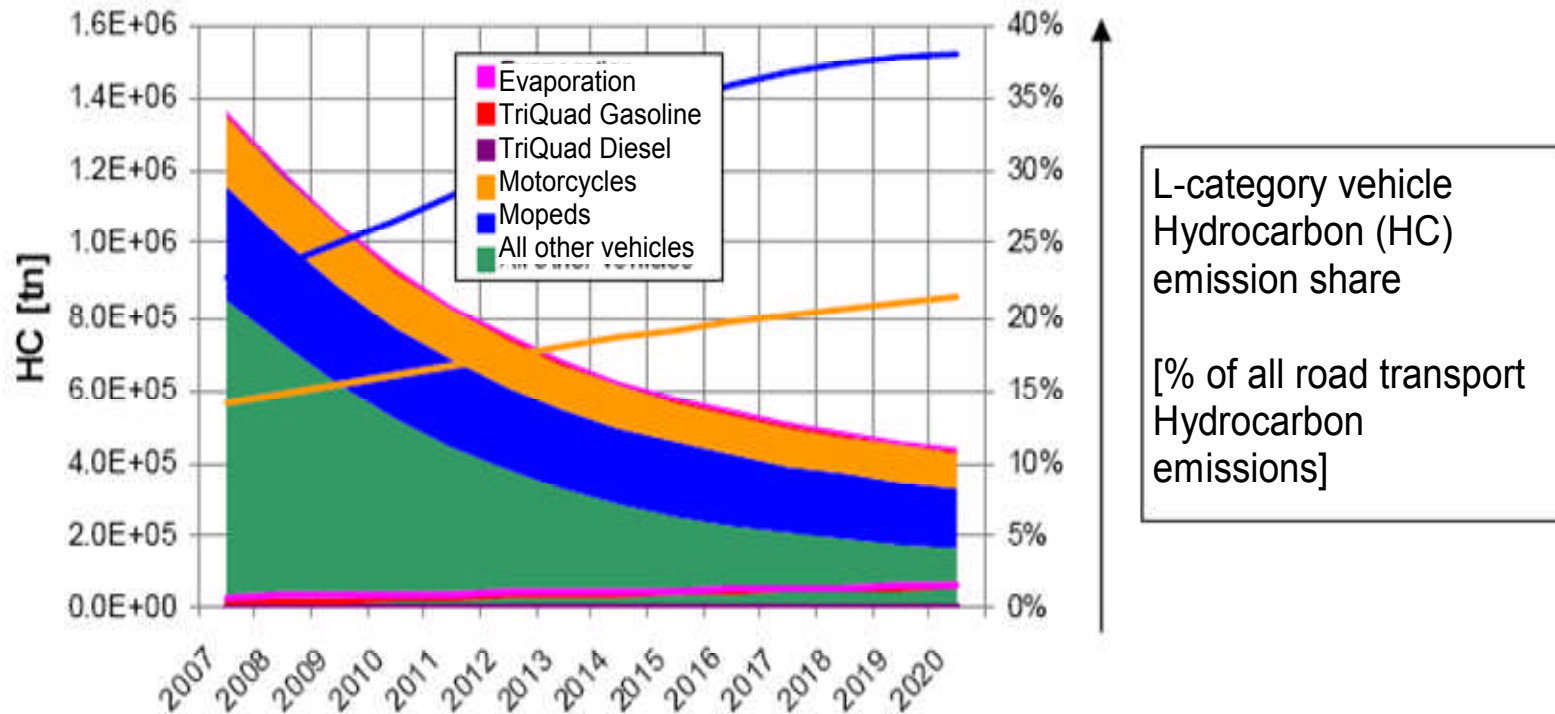


Figure 1: Trend over time of L-category vehicle, absolute and relative share of hydrocarbon emissions if no change in policy.

NB. The “all other vehicles” category includes passenger and delivery cars, trucks and busses. Source: the LAT report
 Primary Y-axis (left): HC = HydroCarbon emissions; 2.0E+05 = 200,000, 1.0E+06 = 1,000,000, 1tn=1000 kg.
 Secondary Y-axis (right): L-category vehicle Hydrocarbon (HC) emission share as % of all road transport Hydrocarbon emissions

Environmental measures

- Vehicle type approval environmental measures, new or revised environmental measures for the type approval of new types of vehicles:
 - Result of assessment, emission steps:
 - Euro 3 (Euro 4 for L3e motorcycles): 2014;
 - Euro 4 (Euro 5 for L3e motorcycles): 2017;
 - Euro 5 (Euro 6 for L3e motorcycles): 2020.
 - Environmental effect study to be conducted in 2016 – 2017 timeframe before taking final decision to mandate Euro 5 step.

Environmental measures

- Vehicle type approval environmental measures, new or revised environmental measures for the type approval of new vehicles.
 - Type approval requirements for CO₂ (green house gas emission) and fuel consumption: Type Approval for CO₂ and fuel consumption, measurement and reporting, vehicle labelling at a later stage;



Environmental measures

- Emission laboratory test cycle
- Vehicle type approval environmental measures, new or revised environmental measures for the type approval of new vehicles.
 - Use of the World Motorcycle Testing Cycle (WMTC) for all L-category vehicle classes
 1. No change;
 2. Use of the stage two World Motorcycle Testing Cycle (WMTC) for all L-category vehicle classes.

Environmental measures

- Vehicle type approval environmental measures, new or revised environmental measures for the type approval of new vehicles.

- Assessed durability requirements

1. No change;

2. Actual durability requirements;

- Powered cycle: 5 000 – 6 000 km;
- 2 & 3 wheel mopeds, light on-road quad: 10 000 – 12 000 km;
- Two-wheel motorcycle, with and without side-car ($v_{\max} < 130$ km/h), tricycle, light & heavy mini-car 18 000 – 30 000 km;
- Two-wheel motorcycle, with and without side-car ($v_{\max} \geq 130$ km/h), tricycle, heavy on-road quad 30 000 – 50 000 km.

3. Actual durability requirements, increased useful life.



Vehicle construction measures

- On Board Diagnostic (OBD) systems **and** access to repair information
 1. No change (No introduction of OBD systems and/or access to repair information);
 2. Application of OBD systems and access to repair and maintenance provisions equivalent to passenger cars;
 3. Use of Best Available Technology (OBD phase 1), standardised for all L-category vehicle classes. Access to repair and maintenance provisions, similar as for passenger cars.

Examples of features addressed by this Regulation

- The proposal for the codecision Regulation includes among others the following features (1):
 - Market surveillance;
 - Obligatory fitting of Advanced Brake Systems;
 - Abandon 74 kW power restriction;
 - Anti-tampering measures;
 - Re-categorisation;

Examples of features addressed by this Regulation

- The proposal for the codecision Regulation includes among others the following features (2):
 - Mandatory introduction of a simple on-board diagnostic stage I;
 - Access to repair and maintenance information;
 - New emission steps Euro 3, Euro 4, Euro 5 (and Euro 6 for L3e motorcycles only);
 - All L-category vehicle categories using one single emission laboratory test cycle (revised WMTC);
 - Mandatory fitting of Automatic Headlamp On feature.

More information ?

http://ec.europa.eu/enterprise/sectors/automotive/documents/proposals/index_en.htm

THANK YOU FOR YOUR ATTENTION !

Contact: Secretariat DG ENTR, automotive unit D.5

T: +32 (2) 29 91976 or (2) 29 53298

E-mail: entr-automotive-industry@ec.europa.eu

Committee on the Internal Market and Consumer Protection

Tuesday 30 November 2010

Item 14 BACK UP SLIDES DETAILS IMPACT ASSESSMENT

**Approval and market surveillance of two- or three-wheel vehicles and
quadricycles**

Presentation of the Commission impact assessment

Exchange of views



**European Commission
Enterprise and Industry**

Impact Assessment

- Essential questions after pros and cons of policy options listed when developing measures:
 - How to be effective in achieving the objective ?
 - effectiveness: doing "right" things, i.e. setting right targets to achieve an overall goal (the effect)
 - How to be efficient in achieving the objective ?
 - efficiency: doing things in the most economical way (good input to output ratio, time = money)
 - Coherence of the option with overarching EU objectives, strategies and priorities
 - Consideration of potential (undesirable) side effects.

Introduction

- Vehicles not in the scope of the proposal (5)



- maximum design speed not exceeding 6 km/h;
- exclusively intended for use by the physically handicapped;
- exclusively intended for pedestrian control;
- exclusively intended for use in competition under on-road or off-road conditions;
- exclusively intended for use by the armed forces, law enforcement agencies, civil defence services, fire brigades or public-works bodies;
- agricultural or forestry vehicles, machines, motor vehicles
- primarily intended for off-road use and designed to travel on unpaved surfaces;
- light powered cycles with pedal assistance;
- self-balancing machines;
- vehicles not equipped with at least one seating position.



Why Market Surveillance?

- Commission strategic objective for 2010 and beyond:

A NEW STRATEGY FOR THE SINGLE MARKET AT THE SERVICE OF EUROPE'S ECONOMY AND SOCIETY

- **2009: Political Guidelines of President Barroso** call for
 - a major analysis of the **"missing links"** in the internal market
 - a major package of **measures to re-launch the single market** in time for the 20th anniversary of the 1992 project
- **2010: Monti report on a new strategy for the single market:**
 - To maintain a dynamic and expanding single market for goods:
 - the **goods package** adopted in 2008 must be fully implemented,
 - Special attention to mutual recognition and **market surveillance**,
 - principles of the **New Legislative Framework (NLF) to be extended to other areas of product legislation**
 - **COM(2010) 608 final/2: Towards a Single Market Act & COM(2010) 614: on Integrated Industrial Policy**
 - multiannual action plan to develop a **European market surveillance**.



Market surveillance

- Main objectives
 - **Reinforce** national market surveillance
 - Ensure a **more coherent** level of intervention and controls throughout EU
 - Ensuring **equal action** against non-compliant products in EU = ensuring **equal conditions** for economic operators
 - **Protect** fair economic operators **against unfair competition** from operators ignoring or by-passing the rules of the game
 - **Protect** safety and environment
 - Restore **confidence** in EU legislation

Market surveillance

- NLF – 2 complementary instruments

REGULATION 765/2008/EC

- Accreditation
- Market surveillance
 - EU internal
 - imported products
- **CE** General principles [not directly relevant for automotive approval legislation]
- Financing
- Directly applicable (from 1 January 2010)

DECISION 768/2008/EC

- common elements of product legislation (obligations of economic operators, definitions, etc)
- toolbox for future legislation or amending existing legislation
- no immediate effects for individuals or Member States if not included in sector specific legislation
- relevant tools incorporated in proposal for type-approval of L-category vehicles

Market surveillance

- New obligations arising from Regulation 765/2008/EC
- MS have to inform other MS and Commission on **competent authorities and market surveillance programmes** (general or sectoral)
- **!! MS have to take measures** against **non compliant products** (Article 16.2 and 20)
- **!! MS have to inform** Commission and other MS on **measures** taken **against non-compliant products** (Art 22 and 23)
- **!! Cooperation:** MS to **participate in European co-operation** activities (Art 24.1) and provide **mutual assistance** (Art 24.2)

Market surveillance

- Regulation 765/2008/EC: obligations on restrictive measures
 - Non-compliant product found
↓
 - Take action
 - withdrawal, recall, prohibition of marketing or other restrictive measure
↓
 - Inform Commission and other MS
 - serious cases: RAPEX
 - other cases: Art 23
 - Safeguard clause?
- RApid information EXchange for **serious cases** of non-compliance (= products presenting a serious risk)

Market surveillance

- Decision 768/2008/EC: relevant tools for L-category legislation (2)
- Responsibilities of and co-operation between national authorities involved in enforcement of the legislation (type-approval, market surveillance, and border control)
- Criteria for the designation, monitoring and quality of technical services
- Safeguard procedures and recall of vehicles
- Procedures for ensuring conformity of production

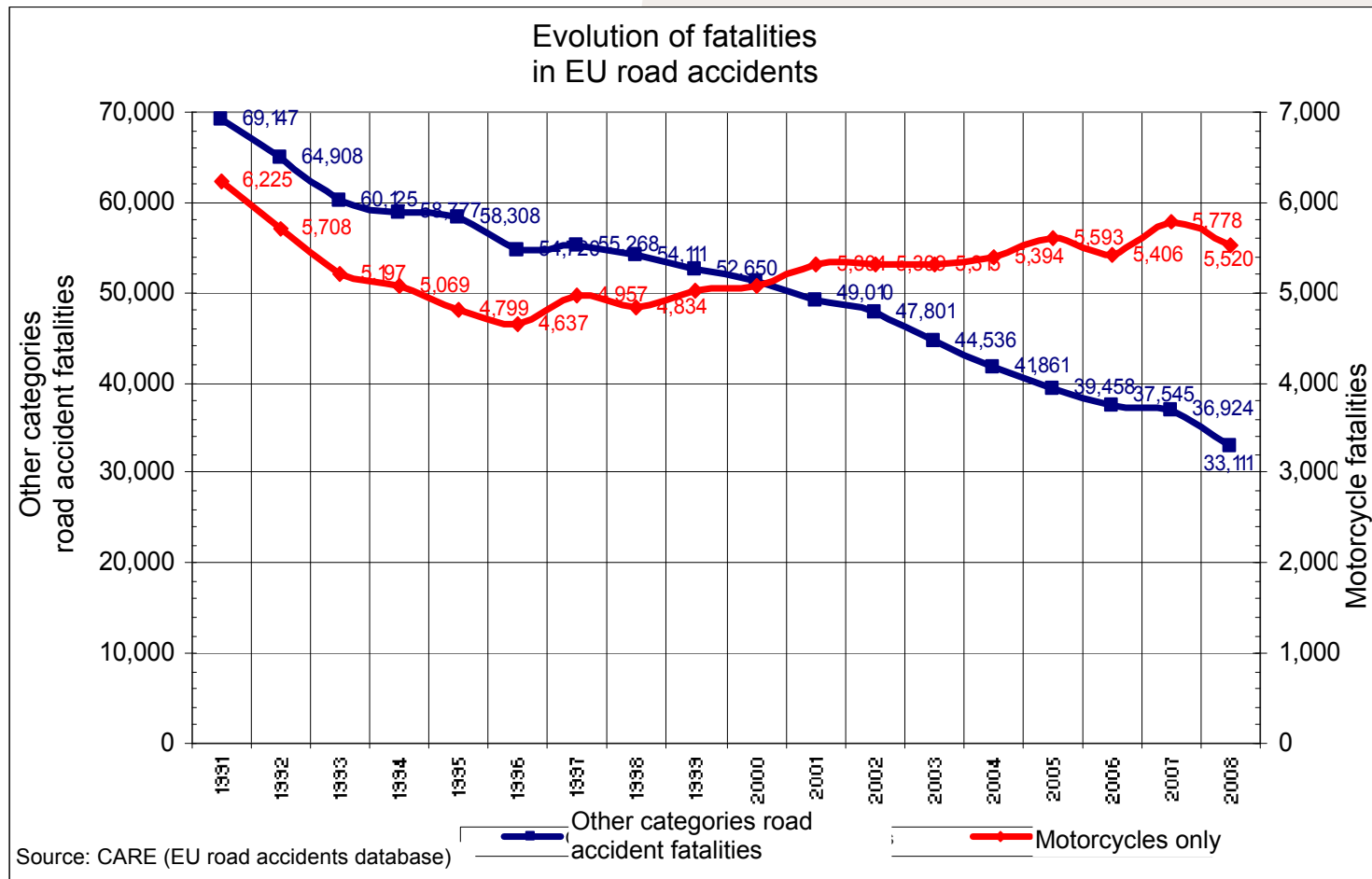


Market surveillance

- Market surveillance in L-category vehicle type-approval Regulation
- Provide sectoral contribution to strategic objective for the **re-launch of the single market**.
- **Address** major **concerns** reported by European industry regarding **non-compliant products** placed on the EU market (originating from Far East).
- **Respond to EU Member States request** in Technical Committee for Motor Vehicles **to complement type approval with market surveillance**.

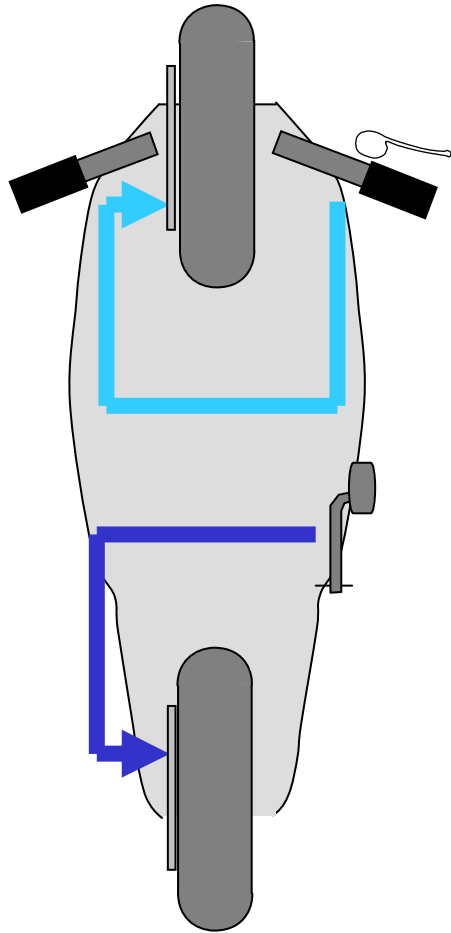
Safety measures

- Safety measures why ?

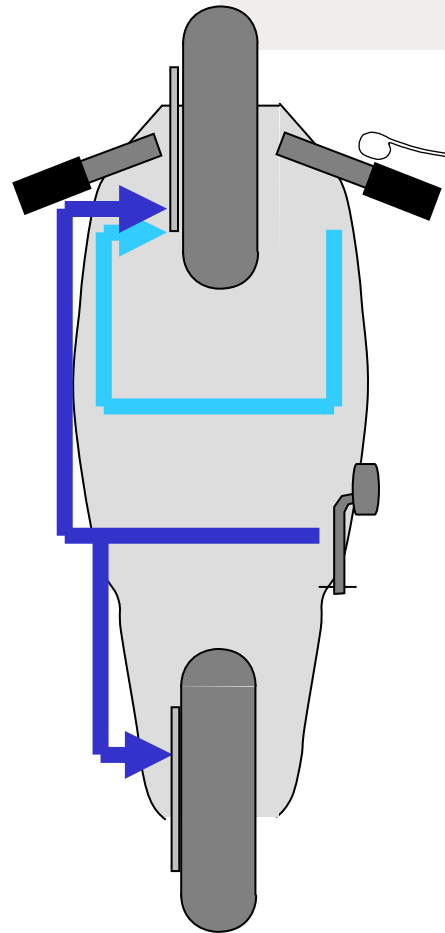


Safety measures

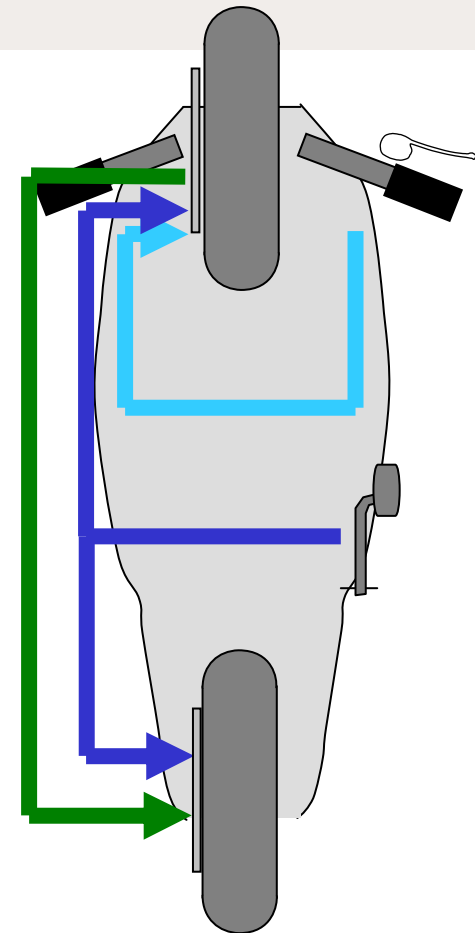
- **Basic Hydraulic Braking Systems & Combined Brake System (CBS)**



Conventional brakes: hydraulic (or mechanical) actuation of calipers



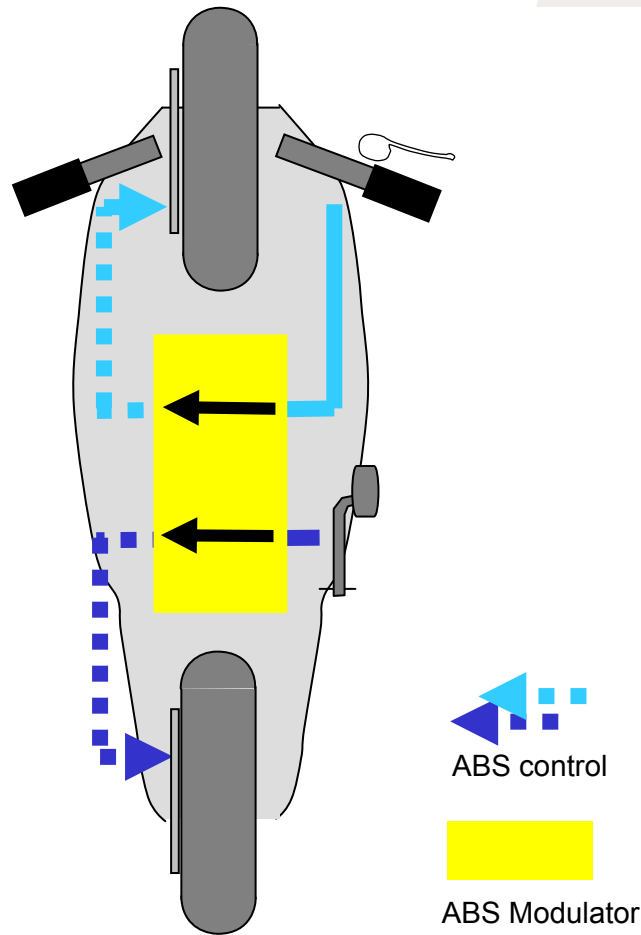
Single Combined Brake System (CBS): rear brake actuation brakes both wheels



Dual Combined Brake System (CBS): Rear and front brake actuation brakes both wheels

Safety measures

Anti-lock Braking System (ABS)



Double channel ABS:
Anti-lock function activated
on front and rear brakes.

*Anti-lock function:
Prevention of wheel-lock,
to preserve stability and
allow the use of full brake power.*



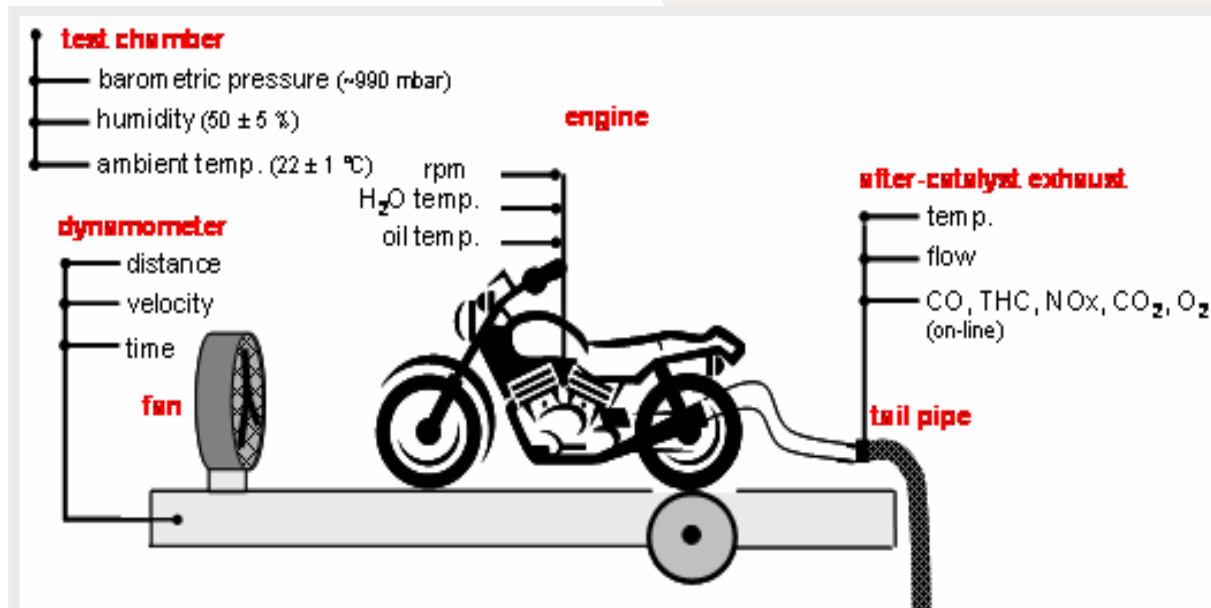
Safety measures

- Advanced Brake Systems
 - See for yourself why preferably an *Anti-lock* Brake System must be fitted on powered two-wheelers:
 - **Emergency braking with an ABS-equipped motorcycle**
<http://www.youtube.com/watch?v=3d6iu-1Wfxw>
 - **ABS vs. No ABS**
<http://www.youtube.com/watch?v=-Zv3SacI7JQ&NR=1>
 - **ABS en acción**
<http://www.youtube.com/watch?v=SljQ8krM5SI&NR=1>
- Automatic headlamp On for all L-category vehicles

Environmental measures

- **Emission laboratory tests**

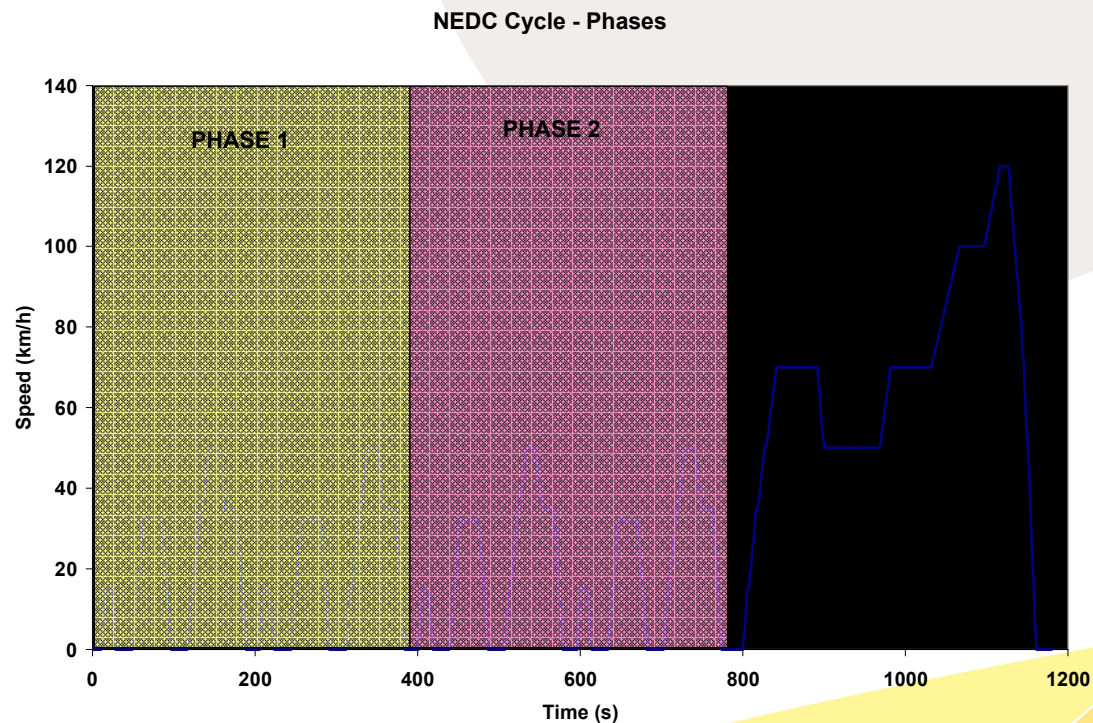
- The exhaust gas will be collected in plastic bags and analysed after the test is finished.
- The test result for the poisonous constituents (THC, CO, NOx and PM) is expressed in **milligrams per driven kilometre**.
- This represents the amount in grams of pollutants, emitted in average by the vehicle when driving 1000 m.



Environmental measures

Overview current used emission test cycles for vehicle Type Approval - proliferation

- Current used test cycle for passenger cars, categories M1, M2, M3 and utility vehicles N1, N2, N3.
- From the smallest to the biggest model passenger car and utility vehicles, only one single emission test cycle is used: **New European Drive Cycle**



Environmental measures

- **L-category vehicle long term proposal**
- **NEW:** Every L-category vehicle class type approved with **only one single world harmonised test cycle** starting from 2020: **WMTC**

