



ACEM Position on 3DL European Driving License Directive 2006/126/EC Age, training, testing, equivalences, test vehicles

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ACEM, the Motorcycle Industry in Europe, is the professional body representing the interests and combined skills of 12 manufacturers producing a total of 25 motorcycle and moped brands, and 15 national associations out of 13 European countries. The members of ACEM account for 90% of the production and up to 95% of the European powered two-wheeler (PTW) market, representing a turnover of €10bn and employing over 200.000 people in the EU.

The product range goes from small 50cc town vehicles, up to motorcycles of 1000cc and over. Powered Two Wheelers are being used across Europe for various purposes, but mainly utility commuting and leisure. In Europe of 27 countries, there are approximately 33 million motorcycle riders enjoying the benefits of their mopeds and motorcycles.

Unless otherwise specified in this document on the 3rd driving license directive (3DL; 2006/126/EC), by "PTWs" we refer to all powered two and three wheelers of any type.

<http://www.acem.eu/cms/marketfigures.php>

1. Introduction: **a. PTW Mobility**

PTWs increasingly answer growing urban congestion problems. Market figures over the last few years confirm the higher growth of the urban mobility PTW segments compared to other PTW segments, and indeed compared to other motorised vehicles (in % terms). Cities start to recognise the PTW mobility advantages in and around conurbations (Rome, Barcelona, Paris, London, ...) and PTW being a positive alternative to car use (shorter travelling times, less CO₂, less space occupation when being used on the road and when parked – to the benefit of the user and of the wider community).

Studies confirm the PTW benefit for better urban mobility, higher quality of life and link PTWs to economic prosperity (Prof. Kopp, University Sorbonne: Study on the development of PTW use in Paris, 2009). A recent study by RACC and ACI (Barcelona, Rome, 2009) concluded on the need to develop PTW use to ensure a future of sustainable mobility in and around cities.

b. PTW Safety

PTW users, as recognised by the European Council of Ministers of Transport as Vulnerable Road Users (VRUs), deserve particular attention when it comes to road safety. They do not have passive safety features like cars to absorb crash energy and to reduce the consequences of an accident. European accident statistics demonstrate that motorcycle fatalities are stable to slightly rising, which can be partly attributed to the growth of the number of motorcyclists on European roads in the last few years.



The **MAIDS** (Motorcycle Accident in-Depth Study) study, co-funded by the European Commission, sheds more light on the underlying causes of PTW accidents. Up to date, this is still the most advanced and complete study of its kind available in Europe. MAIDS* shows that human factors (human error) are the most occurring primary cause of accidents (88% of cases), not only by the riders themselves (in 31% of cases), but even more often with other vehicle users who tend to overlook the oncoming motorcycle or misinterpret its distance and speed (in 51% of cases). In fatal accidents, these percentages are inverted, respectively 52% (riders) and 33% (other vehicle users). It is also noteworthy that Other Vehicle drivers who also have a motorcycle license, are much less likely to commit a perception failure of the oncoming motorcycle; than those Other Vehicle Drivers that do not have a motorcycle license.

<http://www.maids-study.eu/>

2. The 3DLD: an opportunity

With its application (from 19 January 2013), the 3DLD could contribute to further enable the mobility contribution of PTWs, while at the same time improve the safety of their Users. Through wise transposition into National legislation (by 19 January 2011), Member States can: encourage progressive access, also through the use of equivalences with car license for lower categories of PTWs, develop training (pre-license; in progressive access; for equivalences), all within a “lifelong learning” approach seeking to improve the attitude of both riders and drivers, to the benefit of improved road safety for all road users, in particular vulnerable road users. The new PTW test, already introduced in most Member States (2DLD), is amongst the most complete and in practice requires most candidates to undergo training prior to the test.

a. Training

Motorcycle Training serves the purpose of acquiring new skills, or to further perfect them, in order to safely operate a PTW (powered two or three wheeler) in a traffic environment. Training Curricula can contain many different aspects, ranging from theoretical knowledge, to practical on-the-bike training. A wide variety of training concepts and content is on offer across Europe. Such training is either freely accessible on a voluntary basis, or mandatory prior to passing the test of the driving license. The requirements and content of such training are neither harmonized nor legislated by the European Union, as this is a national competence and responsibility, hence the diversity (from the very extensive and expensive to virtually non-existent; training not always resulting in fewer accidents; perhaps due to the type of training, not appropriate).

The **Initial Rider Training Project (2005)** was undertaken and developed a concept of harmonized but modular training with the valuable expertise of qualified expert trainers and police trainers. Main partners have been FEMA, FIM, ACEM, IVV and Vägverket. The **Modular approach** is fundamental to this Initial Rider Training concept, as it allows the choice to offer those modules of most relevance (based on safe riding experience and accident knowledge) to novice riders in an effective way, and to add more advanced modules whenever the rider steps up to a higher license category to obtain access to more powerful motorcycles.

This modular approach fits the 3DLD: it would allow a rider with a lower sub-category license (obtained after an initial test), for example A1, wishing to obtain an A2 license, to concentrate on the additional aspects that had not been covered in the A1 training programme. Modular approach must ensure firstly that existing skills are still present and rewards the rider for the decision to gradually



step up and progressively build experience. The general principle is for training to become more focused on the riders' needs, and to avoid unnecessary duplication of training already taken. With the examiner being the instructor himself, it is also an opportunity to positively build upon the learning experience.

The Initial Rider Trainer module consists of 3 complementary vertical modules of **Theory, Machine Control and Traffic Interface**, and one horizontal module of **e-Coaching**. One of the key conclusions of the IRT project is that hazard awareness and perception is inadequately integrated in the existing training offer. The safety potential of hazard perception training is currently under-used, and is therefore consistently integrated in the various modules of IRT, including an innovative **e-Coaching module** – proposed by Hypermedia Laboratory of the Tampere University – which evaluated the potential of using information technologies within training, and to train the novice rider to perceive traffic hazards and how to react to them in a simulated traffic environment without any risk exposure. State-of the art computer simulations provide new tools to enhance rider skills beyond what has so far been possible, and to accelerate the learning curve of beginner riders – in order to become safer riders.

<http://www.initialridertraining.eu/>

b. ACEM Proposals for 3DL D

In the below proposals, training hours mentioned are the result of the direct involvement of PTW training experts from different horizons. These numbers should be refined in each MS, consulting all the relevant stakeholders, and their introduction may require building training offer capacity first, working towards 3DL D application date, or even a staged introduction in order to avoid creating unjustified costs or bottlenecks in the PTW licensing system.

- **ACEM proposes to implement MANDATORY* pre-license training, for all novice riders** in Europe. This training should be done by candidate riders prior to doing the test to obtain the license, or to obtain an entitlement to ride based on another license category. A more detailed split-up, dependant on the license category, is included in the annexes to this document. In order for such training to be affordable to the applicant, and not represent a barrier to access to motorcycling, the formula of **group training** is most suitable, where for example one instructor trains 2 or 3 novices. This is observed as best practice and is already implemented in various European member States. A trainee-to-trainer ratio widely varies depending on theory lessons in the classroom, machine control on a closed track, traffic interface on the open road and e-Coaching. A group training on-road of 3-to-1 or 2-to-1 could safeguard the affordability and even enhance the attractiveness of the training because of the interaction between the various people. Classical training in larger groups is common practice for theory teaching.
- **ACEM proposes training for progressive access riders**, when stepping up from the A1 light motorcycle to the A2 motorcycle after having gained 2 years of experience, and equally when stepping up from the A2 to the A motorcycle.(cfr Art 7.1.(c)). In its present form, the training requirement in Annex VI ignores the rider's previous training and experience. Nonetheless, the IRT Supervisory Board members, including ACEM, propose a review of Annex VI so that the IRT modular approach can be reflected in future European legislative requirements. The motorcycle industry can agree to the **7 hours training** prescribed in the annex VI of 3DL D, conditional upon some general principles to be observed, such as:



- The progressive access training should be designed to actually enhance motorcycle safety; and not merely be a check in traffic to demonstrate that the rider has the required skills to operate a motorcycle in traffic (to ensure that the rider has actually been riding over the last 2 years after having obtained the license).
 - The progressive access training should not merely be a refreshment course, but include specifically designed modules that address the main causes of accidents involving motorcycles (cfr. MAIDS). Hazard perception training hence needs to be integrated, as well as some information on the benefits of advanced braking systems on motorcycles, which aim to support the rider in critical situations.
 - The progressive access training period of 7 hours can be extended by the trainer, should the trainee show a clear and demonstrable lack of skills in properly operating the motorcycle.
 - The progressive access training should take account of the riders' acquired skills and experiences on the lower category motorcycle. This implies making use of the modular approach as designed under the European IRT project.
 - In order to make training attractive to motorcycle riders, and be a stimulating experience, the training should be conceived in such a way that the trainer is "coaching" the rider, and where the rider can gradually build a personal development curriculum. It is general wisdom that humans tend to learn better when they enjoy the lessons and when they join them with full consent and motivation. Such "coaching concept" would be in line with the latest educational experiences in various disciplines, and as offered in some state-of-the-art motorcycle training courses.
- **ACEM proposes training for riders making use of equivalence options between various license categories, defined in the 3DLD. Of relevance to the motorcycle community are:**
 - B-AM equivalence (cfr Art.6.2.d), allowing car drivers to ride AM mopeds;
 - B-A1 equivalence (cfr Art. 6.3.b), allowing car drivers to ride A1 light motorcycles;
 - B-tricycle A(1) equivalence (cfr Art. 6.3.a), allowing car drivers to ride tricycles as defined under the A1 (max 15 kW) or A category (> 15kW).

In each of these cases, B license holders for cars are entitled to ride vehicles that fit under the definitions of the motorcycle categories. These equivalences are accepted in various Member States and can be considered best practice. They are based on the experience that the car driver has gained while passing the tests (and often training) and the subsequent years of real traffic experience. Also, the equivalence options serve the main purpose of enhancing everyday mobility of citizens. The access to a powered two or three wheeler greatly enhances the mobility options for citizens. B-AM and B-A1 users mostly use these low-powered energy-efficient vehicles for the daily commute to work, reducing congestion. Equivalence riders also become safer car drivers, as MAIDS shows they pay more attention to vulnerable road users in traffic when being behind the car steering wheel.

Having car-driving experience provides equivalence riders significant knowledge on traffic rules and real traffic experience. However, as the operation of these motorcycle category vehicles requires different skills than those to operate a car, ACEM voluntarily proposes to introduce training for the equivalence riders only for those specific points where differences can be observed. These include difference in controls between the two vehicle types and when and in as far as there is a difference, that the operation of these specific controls be learned in a practical training with braking maneuvers and evasion maneuvers; hazard perception training, which can efficiently and safely be trained by means of e-Coaching tools, developing awareness and a more defensive riding style.



- **ACEM proposes access ages** to follow straight from traffic safety school education, using the opportunity provided by low-powered PTW categories (AM 14; A1 16) as a first interaction in motorised traffic, enabling the User to acquire fundamental knowledge through training and testing. This experience is valuable in the context of accessing in a safer way other PTW categories as well as in view of the car license, as it will enable the User with further awareness about the presence in traffic and the dynamics of vulnerable road users.
- **ACEM demands revision of test vehicles** since the mention of a cylinder capacity does not add any element to the test, but simply restricts in an artificial way the availability of machines, it should be removed.

The table below summarizes the various 3DLD situations, minimum access ages and the training concepts proposed by ACEM:

3DLD SITUATION	3DLD requirement	ACEM proposal	Further details of ACEM proposal
Novice riders to obtain a motorcycle driving license of any category, min. access ages	Testing (Training is a national competence)	Compulsory Training , prior to testing:	Modular IRT approach; safety focused; hazard perception training; e-Coaching; 3-1 ratio pupil-instructor
AM: 14 years of age		AM: 7 hours	
A1: 16 years of age		A1: 15 hours	
A2: 18 years of age		A2: 20 hours	
A : 24 years of age		A : 24 hours	
Progressive access riders with lower category experience (A1 to A2; A2 to A)	Testing or Training	Training , instead of testing: 7 hours (as in Annex VI of 2006/126/EC)	More hours if decided by instructor; modular IRT approach (not repeating what was trained before); same as above
Novice riders in the equivalence options, with car experience (B-A1; B-AM; B-tricycle)	None	Compulsory Training: B/AM: 4 hours B/A1: 7 hours B/P3W: 0-7 hours, dependant on human machine interface	Based on IRT modules; training on PTW controls (if different from car) and resulting braking/evasion manoeuvres; e-Coaching

3. Conclusion

The motorcycle industry in Europe, represented by ACEM, principally supports the 3DLD PTW access provisions. ACEM encourages the User to undergo a lifelong learning process, as a continuation of road safety school education, with minimum access ages enabling to build up knowledge and experience on lower PTW categories, in view of accessing higher PTW categories (and the car) in a safer way. ACEM proposes the provision of motorcycle training to beginner riders, and to progressive access riders, as training provides a tool to increase rider knowledge and experience, with the ultimate target to enhance motorcycle safety. Making European roads safer for motorcycle riders and other traffic participants is a key objective for ACEM members. Safer motorcycling -by means of training- however requires that best-practice and latest traffic educational concepts be implemented. The industry supports training concepts that have proven to work. The modular concept – as developed by the EC-funded Initial Rider Training Project (IRT) – is proposed to be the basis of motorcycle training within the various countries in Europe. The modular approach allows riders to progressively further build on already acquired knowledge and skills and effectively focus on new skills of relevance to the new license that the rider wants to obtain. Such rider-centric



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training or coaching is at the basis of lifelong learning and also rewards the riders for their past and future training achievements, offering a stimulating package of new experiences. This new motorcycle training concept also incorporates hazard awareness and hazard perception training, and the innovative module of e-Coaching, which makes use of the latest technology and educational principles, to effectively acquire hazard perception and hazard avoidance skills in a safe way.